Information document on UNESCO's main activities in the Mediterranean, prepared for the Venice Seminar on Economic, Scientific and Cultural Co-operation in the Mediterranean within the framework of the results of the Valletta meeting in accordance with the Conclusion of the Madrid Meeting of Representatives of the Participating States of the CSCE.

(16-26 October 1984)
## CONTENTS

**INTRODUCTION**  
1 - 13

**ECONOMIC CO-OPERATION**

- Environmental Programmes and Activities  
  14 - 15
- Marine Sciences  
  16 - 18
- Pollution  
  19 - 23
- Cartography  
  24 - 28
- Relationships with the International Council for Scientific Exploration in the Mediterranean (ICSEM)  
  29 - 30
- The Mediterranean Alpine Experiment (MEDALPEX)  
  31 - 34
- Other Specific Activities  
  35 - 37

Energy  
38 - 41

- Agricultural education and education in rural areas  
  42 - 44
- Telecommunications  
  45 - 47
- Action on behalf of Migrant Workers and their families  
  48 - 54

**SCIENTIFIC CO-OPERATION**

- Introduction  
  55 - 57
- Ecology  
  58 - 65
- Man and the Biosphere (MAB)  
  58 - 65

Water Resources  
66 - 73

- International Hydrological Programme (IHP)  
  66 - 73
- Co-operation With UNEP in the Mediterranean region  
  74
- Follow-up of the Recommendations of the Conference of Ministers in Arab States responsible for the Application of Science and Technology to Development (CASTARAB) and the UN Water Conference  
  75
- Exchange of information  
  77
- Training  
  78 - 79
- Major Interregional Project on Research and Training leading to the Integrated Management of Coastal Systems (COMAR)  
  80 - 82
- Interdisciplinary Activities  
  83 - 96

**ENVIRONMENTAL EDUCATION**  
97 - 99

Geology and Seismology  

- International Geological Co-operation Programme  
  100 - 164
- Mapping of the Seismicity of the Mediterranean area  
  105
- Seismology in the Balkan Region 106 - 109
- Programme for assessment and mitigation of Earthquakes in the Arab States (PAMERAR) 110
- Seismic Risk mitigation programme in the Ibero-Magreb area 111

CULTURAL CO-OPERATION

The protection and preservation of the cultural and historic heritage

- International campaigns for safeguarding the Mediterranean heritage 112 - 113
- Training 114 - 118
- Intercultural education and teaching relating to the cultural heritage of the Mediterranean 119 - 123
- Tourism 124
- Education by radio and television 125 - 132
- Films 133 - 134
- Intercultural relations in the Mediterranean 135 - 142
- International conventions on the recognition of studies, diplomas and degrees in higher education relating to the Mediterranean States 143 - 149

ANNEX

Medium-Term Plan
INTRODUCTION

1. In reply to the invitation of the Government of Italy, in accordance with the Concluding Document of the Madrid Meeting of Representatives of the Participating States of the Conference on Security and Co-operation in Europe, to the Venice Seminar on Economic, Scientific and Cultural Co-operation in the Mediterranean, the Director-General of Unesco submits for the attention of delegations of participating States the present document on the Unesco contribution to the promotion of co-operation in the Mediterranean region.

2. 22 C/Resolution 15.4 on European Co-operation, adopted by the General Conference at its twenty-second session (25 October to 29 November 1983), invited the Director-General inter alia to 'take part in ... the Seminar on Economic, Scientific and Cultural Co-operation in the Mediterranean to take place in Venice in October 1984, within the framework of the Valletta Meeting of Experts and in conformity with the wishes of the Member States participating in the CSCE'.

3. In conformity with the chapter on Questions Relating to Security and Co-operation in the Mediterranean of the Concluding Document of the Madrid Meeting, this report covers only those sectors listed in the report of the Valletta Meeting which fall within Unesco’s fields of competence.

4. References in this document to activities undertaken before and since the meeting in Valletta in 1979 are included to assist the reader to place them within the context of the evolutionary nature of many of Unesco’s programmes. It should also be noted that the nature of these programmes — many of them are interdisciplinary — and their implementation does not necessarily and fully correspond to the topics which each of three study groups is called upon to consider.

5. However to facilitate the work of these study groups the contents of this document have been presented, as far as possible, to coincide with the three chapters of the Valletta report, under the headings Economy, Science and Culture.

6. In the list of regions defined for the execution of Unesco activities of a regional nature, there is no specific Mediterranean region. The activities which the Organization undertakes in this area constitute, either 'subregional' activities in the 'Europe' region or the region of Arab States, or interregional when the Member States taking part belong to the two regions.

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(1) According to the decisions adopted by the General Conference defining the regions with a view to the execution by the Organization of regional activities are the following:

EUROPE: Albania, Austria, Belgium, Bulgaria, Byelorussian Soviet Socialist Republic, Canada, Cyprus, Czechoslovakia, Denmark, Finland, France, German Democratic Republic, Federal Republic of Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Luxembourg, Malta, Monaco, Netherlands, Norway, Poland, Portugal, Romania, San Marino, Spain, Sweden, Switzerland, Turkey, Ukrainian Soviet Socialist Republic, Union of Soviet Socialist Republics, United Kingdom of Great Britain and Northern Ireland, United States of America, Yugoslavia.

ARAB STATES: Algeria, Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Malta, Mauritania, Morocco, Oman, Qatar, Saudi Arabia, Socialist People’s Libyan Arab Jamahiriya, Somalia, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates, Yemen, Democratic Yemen.

Membership of these groupings is not mutually exclusive, one country can be admitted to more than one region e.g. Malta belongs to both the Europe and Arab States regions; Turkey and the Union of Soviet Socialist Republics to the Europe and Asia and Pacific regions.
7. However the activities in which Unesco is engaged in this region have been increasing in both number and scope. It is a significant fact that the region of the Mediterranean was one of the first areas for the development of international scientific co-operation.

8. Unesco’s major scientific programmes of international co-operation provide an important framework in which Mediterranean co-operation finds an appropriate place. The following are world-wide programmes of scientific co-operation, in the chronological order in which they were set up by Unesco:

- Intergovernmental Oceanographic Commission (IOC) - 1960
- Man and the Biosphere (MAB) - 1970
- International Geological Correlation Programme (IGCP) - 1972
- International Hydrological Programme (IHP) - 1975

9. It should also be noted that many of Unesco’s activities are carried out in co-operation with the United Nations and its various agencies, the Specialized Agencies of the United Nations system as well as with intergovernmental organizations with which Unesco has concluded co-operation agreements. Non-governmental organizations which have consultative status with Unesco also co-operate in the execution of programmes within their area of competence.

10. Unesco, in addition to its own activities, encourages and supports initiatives undertaken by Member States and their National Commissions for Unesco at the sub-regional, regional or interregional levels within its fields of competence. In particular, such activities may receive the intellectual and technical support of the Organization, as well as financial support through its Participation Programme. Broad lines of co-operation are generally set out in the recommendations of such meetings, some of which are latest incorporated in the regular programme and budget which is approved by the General Conference at its biennial sessions.

11. Unesco’s Programme and Budget for 1984-1985, prepared in consultation with the Member States, were approved by the General Conference at its twenty-second session held in October-November 1983. Preparation, through consultation with Member States for the next programming cycle (1986-1987) has already begun and the Executive Board at its 120th session (26 September - 19 October 1984) will consider the preliminary report by the Director-General on the results of this consultation.

12. The Resolution on European Co-operation adopted by the General Conference at its twenty-second session and referred to above (paragraph 2) requested Member States of the European region, inter alia, "To make suggestions and proposals to the Director-General, at the appropriate time for new pertinent activities to be included in the Draft Programme and Budget for 1986-1987."

13. The Director-General of Unesco will therefore be prepared to consider for inclusion in the Organization’s Draft Programme and Budget for 1986 - 1987 suggestions and proposals concerning co-operation in the Mediterranean area that Member States participating at this Seminar may wish to submit to him.

ECONOMIC CO-OPERATION

Environmental Programmes and Activities

14. This chapter dealing mainly with activities in the domain of Marine Sciences, aims at giving information on the framework in which co-operation and research are carried out for a better knowledge and understanding of the Mediterranean Sea. These programmes integrated as they are with other intergovernmental programmes also contribute to the co-operation aiming at the reduction of pollution in this sea.
15. In view of the interdisciplinary nature of most of Unesco's programmes this chapter must be considered in conjunction with that on activities related to the Mediterranean ecosystem included under the heading "Science".

Marine Sciences

16. The main functions of the Unesco activities in marine science are:

(i) The global promotion of marine science, and
(ii) particularly the promotion of marine science in developing countries (i.e. the development of marine science in these countries). The marine science programme of the Division of Marine Sciences is characterized by close collaboration with the international non-governmental scientific community to develop research programmes which simultaneously link scientists in industrializing and industrialized countries, and are particularly relevant to the former. The development of marine science manpower and infrastructure is combined with these research programmes to form the basis for strengthening marine science in countries developing their capabilities in this field. The activities of the Division in co-operation with the Unesco Regional Office for Science and Technology in the Arab States (ROSTAS) contribute directly or indirectly to the promotion of marine sciences in the Mediterranean region.

17. During 1981-1983 in the region of the Mediterranean, several scientific meetings to promote research in the region were organized such as the Mabahiss/John Murray International Symposium on Marine Science of the North-West Indian Ocean and Adjacent Waters (with Egypt, U.K. and IOC, Alexandria, 1983) (see below). Other meetings concerned marine research in the Red Sea and the Mediterranean Sea. Assistance was provided to institutions in about ten countries such as in the form of architectural advice for the construction of their marine scientific institutions and ships. Some training courses were supported and a number of young scientists were assisted with travel and study grants. Visiting lecturers and scientists from outside the region were sent, upon request, to several national institutions. Unesco collaborated during the period with sub-regional organizations working on the marine environment on several joint activities. Extra-budgetary development projects were executed in four countries. Co-operation with the European Association of Ichthyology has culminated in the three volumes "Fishes of the Northeastern Atlantic and Mediterranean" (Volume 1 in press).

18. During 1984-1985, co-operative activities carried out in this region will aim to improve the quality of training and research, and will be carried out in close co-operation with regional organizations. A survey of Arab specialist personnel will be conducted, and a study made of ways of overcoming the most serious deficiencies in certain oceanographic disciplines. This study will be examined at a meeting of representatives of Arab universities offering marine science courses. A training course on the application of remote sensing in oceanography will be organized. Research on marine science in the Mediterranean will be encouraged through exchanges of specialists, particularly in the fields of ecosystems modelling and studies, and physical oceanographic processes. Encouragement will be given to the participation of regional specialists in international and regional meetings, particularly those of the International Council for the Scientific Exploration of the Mediterranean (ICSEM).

Pollution

19. Since 1975, the Intergovernmental Oceanographic Commission (IOC) has collaborated with UNEP in the implementation of its Action Plan for the Mediterranean, notably the programme for research and monitoring of pollution (MEDPOL). The initial pilot
phase comprised two projects: monitoring of oil and petroleum hydrocarbons and coastal transport of pollutants. These projects, which included inter alia training, technical assistance, collection of scientific data and arranging scientific meetings, were terminated by the completion of the Pilot Phase in 1981. That year, the contracting parties of the Barcelona Convention endorsed a long-term pollution monitoring and research programme in which IOC is actively involved, also on behalf of Unesco's Marine Sciences Division, in the implementation of about 30 research projects funded through the Action Plan. In addition, the programme envisages regular intercalibration exercises for analysis of petroleum hydrocarbon pollution and ocean surface micro-layer and beach tar-pollution sampling exercises. Further, IOC is undertaking this year to prepare reviews on the status of oil pollution and on research on dynamic processes affecting the behaviour and fate of pollutants in the Mediterranean Sea. Considerable work has been done on method development under the IOC programme on the Global Investigation of Pollutants in the Marine Environment (GIPME), which helps to ensure the quality of the data generated under MEDPOL.

20. IOC is co-sponsoring, with ICSEM and UNEP, the regular workshops on Marine Pollution in the Mediterranean, to be held this year in Lucerne from 11-13 October.

21. The IOC programme for GIPME was created in response to Recommendation 90 of the United Nations Conference on the Human Environment (Stockholm, 5-16 June 1972). The overall objective of GIPME is to provide a global assessment of marine pollution. It is envisaged that this goal will be realized through regional monitoring activities which, when considered as a whole, represent the Marine Pollution Monitoring System (MARPOLMON) and constitute a marine chemical component of the Global Environment Monitoring System (GEMS). When information arising from such regional monitoring activities are combined with a current understanding of marine chemical processes, predictive capability will result for assessing the consequences of an environmental insult. These regional activities are seen to be related and comparable to one another through the use of tested and standardized methods incorporating intercalibration activities and open-ocean baselines for pollutants under scrutiny. This latter aspect of MARPOLMON is also a direct response to Recommendation 91 of the Stockholm Conference.

22. In the framework of its work under GIPME, which is a global programme, several activities are co-ordinated with, or of direct or indirect benefit to the Mediterranean region. Under the guidance of the GIPME Group of Experts in Methods, Standards and Intercalibration (GEMS), in the global framework of MARPOLMON, and in collaboration with the International Council for the Exploration of the Sea (ICES), twelve Mediterranean laboratories participated during 1983 in an intercalibration exercise for petroleum hydrocarbons in mussel tissue in Bermuda. Other activities the result of which will be of relevance to MEDPOL are:

1. Training workshops on: The Use of Marine Organisms in MARPOLMON, Phase II: The Analysis of Organochlorines and Petroleum Hydrocarbons in Biota; Monitoring of Selected Trace Metals in Biota, Sediments and Seawater; Riverine Inputs to the Marine Environment; Monitoring of Individual Hydrocarbons and Organochlorine Insecticides in Sediments and Biota; the Determination of PCB in Open Ocean Waters, including a first baseline survey.

2. Design of a Strategy Manuel for the Use of Marine Sediments in Pollution.

4. Review and development of manuals describing standard methods for use in both MARPOLMON and the Regional Sea Programmes. Efforts in this context are being made to develop a Manual for Quantification of Individual PCB's in Biota, Sediments and Water.

23. With a view to addressing the environmental problems facing coastal and island Member States and recognizing that monitoring is often confined to the immediate near-shore area, the IOC Working Committee for GIPME at its recent session advised on mechanisms for ensuring the quality of measurements made in the coastal zone and on the methodology foreseen to facilitate trend analysis in such highly dynamic environments. It is envisaged that GEMSI will address this topic in assisting with the Regional Implementation of MARPOLMON.

Cartography

24. The International Bathymetric Chart of the Mediterranean (IBCM) has been prepared under the auspices of the IOC. An international group of scientists specializing in morphological charting of the sea-floor prepared and contoured 91 plotting sheets (scale 1:250,000), using the latest data available. These plotting sheets, which are archived in the International Hydrographic Bureau in Monaco (World Data Centre for Bathymetry), form the basis for the chart series.

25. The coastline and land topography have been compiled from national topographical maps of the countries of the region. Land and bottom relief have been contoured at 200m intervals, with closer spacing where the bottom topography warrants.

26. The Chart consists of 10 sheets on Mercator projection at a scale of 1:1,000,000 at 38° N. The nomenclature of ocean bottom features follows the guidelines prepared for the General Bathymetric Chart of the Oceans (GEBCO).

27. Cartographic editing and printing were carried out by the Main Department of Navigation and Oceanography of the USSR Ministry of Defence.

28. Six additional maps showing certain marine geological and geophysical parameters (magnetics, gravity, seismicity, recent sedimentation, Messinian and Plioquaternary), using the IBCM as the base, are being prepared by an international group of scientists known as the IBCM Disciplinary Group on Overlay Sheets in Geology and Geophysics. The Group held its Fourth Session in Paris, 14-16 December 1983, and will meet again at the time of the next session of the ICSEM Assembly in Lucerne in October 1984, at which time some of the overlay sheets, now nearing completion, will be displayed.

Relationships with the International Council for Scientific Exploration in the Mediterranean (ICSEM)

29. A Memorandum of Understanding was signed in May 1984 by ICSEM and IOC to define the field of application and modalities of co-operation between the two organizations relating to co-ordination and promotion of oceanographic research programmes in the Mediterranean. Under the general umbrella of this agreement, some specific projects, be they joint or co-operative, will be worked out.

30. The Operational Unit, which is a joint ICSEM-IOC body, also supported by the secondment of an expert from the USSR, will continue to work mainly for the IBCM (see Cartography) and, if sufficiently strengthened, may become the nucleus for enlarged co-operation between the two organizations.
The Mediterranean Alpine Experiment (MEDALPEX)

31. Within the general framework of the Global Atmospheric Research Programme (GARP) of the World Meteorological Organization (WMO), the Alpine Experiment (ALPEX) took place from 1 September 1981 to 30 September 1982, with a Special Observing Period (SOP) from 15 February to 30 April 1982. ALPEX addressed the critical problem of airflow over and around mountain complexes and its effects on the global, regional and local weather. Among the possible sites for this experiment, the Alps were selected because (i) they produce most of the severe weather phenomena encountered in other mountain areas of the world, (ii) they have already a long record of meteorological observations, and (iii) the weather effects of the Alps are of vital importance to the European countries surrounding them.

32. The IOC Executive Council at its fifth session (Venice, 3-8 March 1975) decided through Resolution EC-V.4 that oceanographers should become engaged in this study. The IOC Assembly at its eleventh session (Paris, 15 October - 3 November 1979) decided through Resolution X1-2 to support the development of an oceanographic programme in the Mediterranean Sea during ALPEX. An oceanographic programme for the Mediterranean Alpine Experiment (MEDALPEX) was therefore designed after four planning meetings (Paris, February, 1980, September 1980, February 1981 and October 1981) "to understand the effect of wind forcing on the dynamics of the western part of the Mediterranean". Particular scientific objectives were to study:

(i) interrelationship between the general circulation and mesoscale eddies;
(ii) offshore dynamic response mechanisms under severe weather conditions;
(iii) storm surges and coastal piling-up.

33. The implementation of the MEDALPEX oceanographic programme was based upon national contributions by Belgium, France, Italy, Monaco, Spain, USSR, and Yugoslavia, through an observational network consisting of tide gauges, current meters, oceanographic cruises, expendable bathythermographs (XBT), drifting buoys, etc. Telecommunications were arranged to enable relevant information to be exchanged in a timely fashion between ships at sea and the ALPEX Operations Centre established in Geneva. A responsible National Oceanographic Data Center (RNOCD) for MEDALPEX was established at the Oceanographic Data Center of the USSR and was responsible for all oceanographic data gathered during the experiment, except those relating to sea level for which the Permanent Service for Mean Sea Level (PSMSL) established since 1933 at the Institute of Oceanographic Sciences of the U.K. was responsible.

34. The Scientific Conference on the results of ALPEX (including MEDALPEX) will be held in Venice from 14 to 23 October 1985.

Other specific activities

35. (i) Marine Biological Reference Collections in the Arab Countries of the Mediterranean. The project started in 1977 with the visit of two Unesco consultants to Algeria, Libya, Tunisia and Egypt. In 1978, a meeting was held in Tunis, Tunisia. Subsequently, a team visited the four Arab Mediterranean countries in 1982 to provide follow-up advice and initiate further activities. Study grants were offered to a number of candidates from Arab Mediterranean countries to pursue research and development in marine biological reference collections in Europe, particularly with the British and French Natural History Museums. The following publications have been produced under the project:

- Organization of Marine Biological Reference Collections in the Mediterranean Arab Countries; and
- Guidelines for Marine Biological Reference Collections.

Several Arab scientists from Algeria, Libya, Tunisia, Egypt and Morocco, are involved in activities relating to the development of marine biological reference collections, the majority from universities, research institutions and government ministries in those countries.

36. (ii) The Mabahiss/Jo'n Murray International Symposium, Alexandria, 3 to 7 September 1983. Activities were supported to commemorate the 50th Anniversary of the John Murray Expedition in the Indian Ocean, which was undertaken on the Egyptian research vessel Mabahiss in 1933-1934. The Mabahiss/John Murray International Symposium "Marine Science of the North-West Indian Ocean and Adjacent Waters" was convened by the University of Alexandria, from 3 to 7 September 1983, and was co-sponsored by the Egyptian Academy of Scientific Research and Technology, the United Kingdom, Unesco and IOC. The Symposium was attended by one hundred participants from Canada, Egypt, France, the Federal Republic of Germany, Greece, India, Iraq, Kuwait, Monaco, Norway, Pakistan, Qatar, Saudi Arabia, Sudan, Turkey, the United Kingdom and the United States of America, and by representatives of Unesco, IOC, FAO and the Saudi-Sudanese Red Sea Joint Commission. The Symposium included a special roundtable, the purpose of which was to identify gaps in the knowledge of the oceanography of the region and to make suggestions for initiating future international and regional co-operation to fill in those gaps. Unesco has provided assistance to Egypt to promote the restoration of the Mabahiss as a museum, and is translating a volume dealing with the voyage, the narrative of the voyage and a popular account by an Arab scientist who participated.

37. (iii) On-board training opportunities have been offered by the USSR on its research vessels plying the Mediterranean to oceanographers of developing countries in the region. The last one offered to two trainees the possibility of participating in a cruise between Casablanca and Piraeus through Livorno (Leghorn) and Naples from 7 May to 15 June 1984 on board R/V Academician Petrovsky.

Energy

38. Since 1973 Unesco has been providing support to a post-graduate solar energy course in Perpignan (France). This course is organized for the benefit of developing countries and the Mediterranean region. Unesco will continue to support this course in 1984-1985.

39. The European Solar Energy Network has been established with Unesco's financial and moral support. Two working group meetings on solar water heating and solar drying have been organized by Unesco respectively in Belgrade, Yugoslavia, in April 1984 and in Perpignan, France, in June 1984. These meetings were attended by specialists from European Mediterranean countries.

40. Unesco's support to this network will be continued in 1985.

Agricultural education and education in rural areas

41. Under contract with Unesco, a special study on the possibility of establishing a co-operative energy research programme in the Mediterranean region is being carried out by the International Centre for Heat and Mass Transfer, Belgrade, Yugoslavia.

42. Under the programme for integrated rural development and higher agricultural education, Unesco maintains close co-operative links with the International Centre for Advanced Mediterranean Agronomic Studies, set up under the auspices of OECD and the Council of Europe by France, Greece, Italy, Portugal, Spain, Turkey and Yugoslavia, with four associate members: Egypt, Lebanon, Morocco and Tunisia.
43. The Centre's four institutes, in Bari (Italy), Khania (Greece), Montpellier (France) and Zaragoza (Spain), are post-graduate research and training centres dealing with agricultural and rural development, water management, country planning and the environment, and fruit and vegetable production.

44. Unesco co-operates with the Centre, in particular the Montpellier Institute, in carrying out its programme for the training and management of human resources for integrated rural development. This co-operation takes the form of meetings and seminars for specialists in rural and community development, the training of agricultural teachers and informal consultations.

**Telecommunications**

45. Under the International Programme for the Development of Communication (IPDC), the International Telecommunication Union (ITU) has submitted various projects relating to telecommunications. In addition, ITU has offered to co-operate with Unesco by providing technical advice for any project with a telecommunications component.

46. With IPDC financing, it has been possible to set up, at ITU Headquarters, a department of socio-economic studies for rural communication.

47. A joint study by ITU and Unesco on telecommunication tariffs will be published shortly.

**Action on behalf of migrant workers and their families**

48. Unesco is continuing and widening its action to promote the right to education of migrant workers and their families in Member States, including those in the Mediterranean Basin, and to encourage respect for the cultural identity and cohesion of the migrant family, by encouraging bilateral co-operation particularly between countries of emigration and immigration.

49. Activities foreseen in the approved Programme and Budget for 1984/1985 include measures to be taken both nationally and internationally. By creating public awareness, they aim at contributing to the development of educational facilities for migrant workers and their families.

50. Unesco will facilitate bilateral or multilateral consultations between countries of origin and host countries with a view to the carrying out of joint projects for the mutual recognition of degrees and diplomas\(^{(1)}\). Non-governmental organizations migrant workers' associations, universities and research institutions in both countries of emigration and immigration will be encouraged and supported to take concerted action to help promote the measure of a social or educational nature designed to develop educational activities on behalf of migrant workers and their families, with special reference to second generation of migrants with a view to enabling them to undertake and pursue normal studies in the educational institutions of the host country and at the same time to have an opportunity of learning their mother tongue and assimilating the cultural values of their country of origin.

51. The current activities seek to intensify those already undertaken on behalf of migrant workers and their families in previous programmes, whose objective was the continuing effort to promote equality of educational opportunity and the recognition and preservation of the cultural identity of migrant workers and their families and their integration in the society in which they live. Teacher training

\(^{(1)}\) See also Chapter entitled "Culture"
courses in the use of the mother tongue and knowledge of the cultural values of the culture of origin have always been a concern of the Organization and activities to enhance these are combined in its programmes; attention is always given to the dissemination of information, and creating greater awareness concerning this question.

52. Interdisciplinary studies to analyse the courses of educational retardation and failure among the children of migrant workers were discussed at an expert meeting on "The Planning and Administration of the Education of Migrant Workers and their Families" convened by Unesco in 1976.

53. The series of exchange programmes of educators of migrant workers in 1978-1981 and now those of students between the host country and home country, emphasize Unesco's concern about familiarizing both countries of origin and receiving countries with one another's cultural and social background.

54. The preparation of teaching materials consonant with the cultural needs of the interests of migrants is foreseen through assistance to organizations to produce educational materials (books, films, etc.). This activity aims at cultural identity of migrant workers and their families and to familiarize them with the culture of the host country.

SCIENTIFIC CO-OPERATION

Introduction

55. The geographical region of the Mediterranean was one of the first areas for the development of international scientific co-operation for Unesco.

56. The idea of a programme for the study and development of the arid zones was adopted at the third session of the General Conference, held in Beirut in 1948.

57. The first session of the Advisory Committee on Arid Zone Research was held in Algiers in 1951. The first international symposium on arid zone hydrology was held in Ankara in 1952, and this important scientific meeting was followed by many others, such as the symposium on plant ecology, held in Montpellier in 1953, the 1954 Beirut symposium on the conservation and protection of nature in the Near East, the 1959 Madrid symposium on plant-water relationships, the 1961 Rome symposium on changes of climate, the 1962 Heraklion symposium on the utilization of land with a Mediterranean-type arid climate, and the 1962 Montpellier symposium on the methodology of plant ecophysiology. In 1963, after more than four years' work, Unesco, in co-operation with FAO, published the Bioclimatic map of the Mediterranean zone, on a scale of 1/5,000,000 accompanied by similar maps of other regions of the world having a Mediterranean-type climate (California, South Australia, South Africa, Chile). This first map was followed in 1969 by a Map of the vegetation of the Mediterranean region, which still provides the best basis for assessing ecological conditions in this region.

Man and the Biosphere (MAB)

58. Today, continuing on the lines of these already long-standing activities, one of the programmes in which this Mediterranean dimension of Unesco's action is to be found on a growing scale is the Interdisciplinary research programme on Man and the Biosphere (MAB). At the global level, developed and developing countries participate actively in the MAB programme, launched in 1971. It is carried out in close collaboration with other United Nations institutions concerned (UNEP, FAO, WHO, ILO), and with ICSU and IUCN.
59. The following countries bordering the Mediterranean have set up MAB National Committees: Algeria, Egypt, France, Greece, Italy, Malta, Morocco, Spain, Syrian Arab Republic, Tunisia, Turkey and Yugoslavia.

60. With assistance from the International Secretariat for Unesco's MAB Programme, these countries have agreed to make the Mediterranean region one of specific cooperation under the Programme. This covers 14 major research areas (international projects) chosen by the International Co-ordinating Council of the MAB Programme, and four of these areas are of very great importance to the Mediterranean region:

(a) ecological effects of different land uses and management practices on temperate and Mediterranean forest landscapes (Project 2);

(b) impact of human activities and land use practices on grazing lands, savanna and grassland (from temperate to arid areas) (Project 3);

(c) ecology and rational use of island ecosystems (Project 7);

(d) ecological aspects of urban systems, with particular emphasis on energy utilization (Project II).

61. To promote this cooperation, several intraregional meetings attended by some or all of the countries bordering the Mediterranean have been held on the initiative of the MAB International Secretariat. Examples are:

- Regional meetings on the establishment of co-operative programmes of interdisciplinary ecological research, training and rangeland management for arid and semi-arid zones of Northern Africa (Sfax, 3-12 April 1975 - MAB Report No. 30).

- Regional meeting on integrated ecological research and conservation activities in the northern Mediterranean countries (Potenza, 27-31 October 1975 - MAB Report No. 36).

- Regional meeting on integrated ecological research and training needs in North East Africa and the Near and Middle East, with emphasis on the ecological effects of irrigation derived from large river basins (Alexandria, 24-27 February 1976 - MAB report No. 40).


- Workshop on biosphere reserves in the Mediterranean region: development of a conceptual basis and a plan for the establishment of a regional network (Side, Turkey, 6-11 June 1977 - MAB Report No. 45).

- Seminar on the perception of Mediterranean landscapes and land development, particularly in littoral regions (Djerba, 28-30 November 1977).

- Seminar on protection against erosion and integrated land management of drainage basins (Morocco, September 1978 - organized by the Moroccan MAB National Committee).

62. The MAB-Mediterranean Scientific Conference, held in Montpellier in 1976, discussed 11 major problems linked to various MAB themes and regarded as important for the Mediterranean region:
- fire in Mediterranean ecosystems;
- grazing in forest and marginal areas;
- rangeland in arid and semi-arid areas;
- deltaic zones and irrigation problems;
- problems concerning drainage basins and protection against erosion;
- impacts of pollution on different natural environments;
- impacts of tourism on coastal regions;
- conservation of biological resources and creation of biospheric reserves;
- methodology and modelling;
- training;
- information.

63. The MAB Programme has also organized other regional activities relating to these themes, in addition to the above-mentioned meetings. The most important have been:

(a) a technical consultation organized by Unesco, FAO and UNEP in St. Maximin in May 1977, on forest fires in the Mediterranean region;

(b) exchange of French and Italian animal husbandry experts and foresters between the two countries to study various projects in connection with forest grazing (1977 and 1978);

(c) a travelling mission in the deltas of the Nile, the Po, the Rhone and the Danube to develop regional co-operation in research, training and exchanges of information between groups of researchers working on these aquatic ecosystems (June 1975). The first mission was followed by other bilateral ones, chiefly concerned with the deltas of the Nile and the Rhone (1978);

(d) meeting of a group of experts from Algeria, Egypt, France, Italy and Turkey on the impact of pollutants on Mediterranean environments (Paris, March 1978). A questionnaire was sent to all the MAB committees of the countries bordering the Mediterranean to identify research considered to be of a preparatory nature for these countries as a whole;

(e) preparation by the French MAB Committee, at the request of Unesco, of a summary report on nitrogenous effluents in Mediterranean continental waters (end of 1977);

(f) Unesco MAB/Council of Europe Symposium on biogenetic reserves and biosphere reserves in the context of humid zones (Camarque, October 1978);

(g) theoretical course on mosquito control held in Montpellier, September/ October 1977 with the assistance of Unesco-MAB and the French National Commission for Unesco;

(h) reference should also be made to the post-graduate courses for the study and management of natural environments, organized by the French Délégation Générale à la Recherche Scientifique et Technique and the French National Commission for Unesco. These courses provide interdisciplinary instruction in the ecological sciences for students or specialists from various countries, especially French-speaking developing countries.

64. Under the MAB Programme, Unesco supports the proposal by the French authorities to confer regional responsibilities on the Ecothèque Méditerranéenne (ECOMED) of the French Centre National de Recherches Scientifiques (CNRS) located in Montpellier, France. This proposal is also based on a recommendation by the above-mentioned MAB-Mediterranean Scientific Conference and on a resolution by the Governing Council of
UNEP. The purpose of converting ECOMED into a genuinely regional ecological information centre is to enable all the countries bordering the Mediterranean to have easy access to the ECOMED data bank; to organize a training programme for specialists throughout the region; and to provide technical assistance to countries wishing to run national and ecological information centres. An operational and financial project has been submitted by Unesco to UNEP and UNDP.

65. Lastly, Unesco-MAB is collaborating with the intergovernmental "Blue Plan", recently adopted under the auspices of UNEP by the countries bordering the Mediterranean. The work of MAB thus provides information as well as matter for consideration and experiment, essential to the success of the Blue Plan.

Water Resources

A. International Hydrological Programme (IHP)

66. Studies of an ecological nature under the MAB Programme are not the only kind which are fruitfully carried out in the context of Mediterranean co-operation. Other scientific fields and other common problems are the subject of similar co-operation. Cases in point are hydrology and the study of the national management of water resources, particularly under the International Hydrological Programme (IHP).

67. National Committees for the IHP: The number of officially established IHP National Committees in Mediterranean countries as of 1 August 1984 was 13 (Algeria, Cyprus, Egypt, France, Greece, Israel, Italy, Morocco, Spain, Syria, Tunisia, Turkey, Yugoslavia). Four additional countries (Albania, Malta, Lebanon, Libya) have designated national focal points for the IHP pending official establishment of the respective national committees.

68. Arab Regional Committee for the IHP: Following Recommendation No. 7 of the Conference of Ministers in Arab States Responsible for the Application of Science and Technology to Development (CASTARAB, Rabat, 1976), the Arab Regional Committee for the International Hydrological Programme (IHP) was established, the secretariat of which is provided by the Arab Educational, Cultural and Scientific Organization (ALECSO).

69. This Committee facilitates the co-ordination of efforts of Arab countries in regional and subregional activities including the Mediterranean.

Meeting of National Committees of Mediterranean Countries: A meeting of the IHP National Committees of the countries bordering the Mediterranean was convened in Rome in October 1978 by the Italian National Committee for the IHP. The meeting worked out a series of proposals for co-ordinated action by the Mediterranean countries on problems relating to the water balance of the Mediterranean basin; the study of hydrological regimes in the Mediterranean; assessment of the discharge of dissolved and particulate substances to the Mediterranean; water resources in coastal areas; utilization of karst aquifers; inventory of surface and underground saline waters; and the training of specialists and technicians in water sciences. The recommendations of this meeting are gradually being executed within the framework of UNEP and UNDP regional activities.

70. Within the framework of regional co-operation, two major regional meetings were held. These were: (i) the IHP Arab Committee, organized by ALECSO with the participation of Unesco and 13 Arab countries, which was held in Tunis from 23 to 26 March 1983, and (ii) the regional meeting on water resources for the Arab countries, organized by Unesco with the participation of ALECSO, ACSAD and 12 Arab countries,
held in Paris from 21 to 28 November 1983. At the latter meeting, three main subjects were discussed: water resources assessment, the major regional project, and the hydrogeological map in the Arab countries. Twenty-seven country reports on water resources assessment were presented and discussed. During 1984, Unesco will edit and publish two regional documents: one on water resources assessment, and the other on the institutions, organizations and manpower dealing with the water sciences in the Arab region.

71. In the framework of the second and third phases of the IHP, the IHP National Committee of France is preparing an inventory of coastal karstic aquifers in the Mediterranean region.

72. Unesco sponsors six international post-graduate courses in hydrology and water resources in the Mediterranean region.

73. In October 1982, Unesco supported the "International Symposium on hydrological aspects of water supply and waste water disposal in coastal urban areas and tourist sites in the Mediterranean Area", convened by the IHP National Committee of Cyprus.

B. Co-operation with the United Nations Environment Programme (UNEP) in the Mediterranean Region

74. Discharge of pollutants through rivers into the Mediterranean: In 1976-1977, Unesco prepared for UNEP an assessment of the pollutants transported from land-based sources through rivers to the Mediterranean.

C. Follow-up of the Recommendations of the Conference of Ministers in Arab States Responsible for the Application of Science and Technology to Development (CASTARAB) and the United Nations Water Conference

75. In accordance with a recommendation of CASTARAB (Recommendation No. 10), Unesco is executing the Major Regional Project on the Rational Utilization and Conservation of Water Resources in Rural Areas of the Arab States with Emphasis on Traditional Water Works. The project is being implemented by Unesco and ACSAD, working in close co-operation. Inventory reports on traditional water works have been received from 13 Arab countries (Algeria, Egypt, Iraq, Lebanon, Libya, Morocco, Oman, Qatar, Sudan, Syria, Tunisia, United Arab Emirates and People's Democratic Republic of Yemen). Inventory reports from Jordan and Yemen Republic are in preparation. Unesco, in collaboration with the Arab Centre for the Studies of Arid Zones and Dry Land (ACSAD), convened a meeting for an Arab working group which was held in Paris, in June 1983. The working group which was composed of experts from Syria, Egypt, Tunisia and Morocco as well as ACSAD and Unesco worked out an analysis and evaluation of all traditional water systems in the light of the country inventory reports. The regional report, as prepared by the Arab working group, is being edited in collaboration with ACSAD.

76. Preparation of the hydrogeological map of the Arab States region: Unesco shares its technical experience with ACSAD in the preparation of hydrogeological maps of Arab countries and their legends.

D. Exchange of information

77. Unesco will assist ALECSO, by providing the advisory services of a hydrological terminology specialist, in the translation into Arabic of the terms used in the International Glossary of Hydrology (Unesco/WMO publication) and the International Glossary of Hydrogeology (Unesco, Technical Documents in Hydrology, 1978; document SC-77/W5/71). This action is essential to enable standardization of hydrological terminology in Arab countries.
E. Training

78. In the field of education and training on water sciences, three courses were organized. The first course was organized for technician collaboration with ACSAD and was held in Damascus for a period of three weeks (December 1982). It was attended by 14 participants from 7 Arab countries. The course lecture notes have been edited and published. The second course was at post-graduate level in arid and semi-arid zone hydrology and was organized by UNESCO in collaboration with Ain-Shams University in Cairo (May - June 1983).

79. The third course was organized within the framework of the major regional project on the rational utilization and conservation of water resources in rural areas. It was sponsored by UNESCO in collaboration with the Tunisian government and was held in Tunis for two weeks (October 1983). The course was attended by 17 participants from 5 Arab countries and 10 African countries. The lecture notes of courses delivered during these last four years are being compiled and edited and will be published in early 1985.

F. Major Interregional Project on Research and Training leading to the Integrated Management of Coastal Systems (COMAR)

80. The primary instrument for carrying out UNESCO's marine coastal zone activities is the Major Interregional Project on Research and Training leading to the Integrated Management of Coastal Systems (COMAR). COMAR was formally established as a part of the programme of the Division of Marine Sciences at the twenty-first session of the UNESCO General Conference (November 1980). The project consists of global and regional components. The project is interdisciplinary and has been developed through extensive co-operation with the scientific community. Particular support has been given to research in coastal lagoons and lakes of the North African region, as well as general support to modelling of the Mediterranean ecosystems, which brought together scientists from the Arab and European Mediterranean countries.

In the Mediterranean, 53 scientists participated in two workshops, dealing with lake eutrophication and the quantitative analysis and simulation of the Mediterranean coastal ecosystem, while a review of scientific literature on coastal lagoons was done. In Europe, an international research project on the lagoon of Venice has been prepared.

81. (i) Coastal lagoons of the Southern Mediterranean. Due to the great vulnerability of the coastal zone and its sensitivity to man-made effects, particularly industrial and urban pollution, and to the high productivity of most coastal lagoons and lakes in the South-Mediterranean, special attention was given to this problem and support through the exchange of expertise and personnel among countries involved was considered. As a result, the following activities were carried out:

(a) Workshop on Eutrophication with Application to Lake Tunis and Adjacent Coastal Waters, Tunis, 6-16 September 1982.

(b) Training Course on Biomass and Primary Productivity Measurements in Coastal Waters, Alexandria, Egypt, 22 January to 11 February 1983. Subsequent training of two candidates from Egypt and Tunis at the International Agency for 14C determination and the Marine Pollution Laboratory of the National Agency of Environmental Protection (Denmark).

(c) Preparation of a Bibliographical List on Coastal Lagoons and Salt Marshes along the Southern Mediterranean Coast.
82. (ii) Modelling of the Mediterranean Ecosystem. This scientific activity was supported at the request of many marine scientists in the Mediterranean, since ecosystem modelling is considered a useful tool for the assessment of the inter-relationship of the complex ecosystem and the man-made effects on the ecosystem which, in turn, may lead to a better understanding and management of the ecosystem. Workshop on Quantitative Analysis and Simulation of Mediterranean Coastal Ecosystems—the Gulf of Naples, A Case-Study, Ischia (Naples), 28 March to 10 April 1981. Further training was given, either on an individual basis or through participation in a Training Course on Application of Mathematical Models in Management of Aquatic Ecosystems, Dubrovnik, 27 September to 8 October, 1982.

Interdisciplinary activities

83. Within the framework of the Man and Biosphere Programme (MAB), MAB Project 5 and MAB Project 7, a case-study was developed on a typical Mediterranean coastal area of about 50 km long on the northern coast of Sicily, where there were conflicting demands on available resources by heavy industry, mass tourism, specialized agriculture and urbanization. This was accompanied by the usual abandonment of, and migration from the traditional mountain areas of the hinterland, together with environmental problems such as soil erosion, pollution of the shorcs, etc. Three seminars dedicated to managers of the public sectors of Mediterranean countries were on held this theme in 1978, 1980 and 1981. A specific training tool, a micro-computer-aided simulation exercise with appropriate audio-visual material, was made available in 1982 for further training exercises. The use of this exercise is not restricted to Mediterranean coastal areas.

84. Moreover, three interdisciplinary regional training seminars for young postgraduate researchers based on forest analysis were held respectively in Kassandra (1983) and Skopelos (Greece, 1982) and Kerkennah (Tunisia) (1984). Mediterranean forest management, eco-development and tourism were the themes of these seminars. A simulation game on the integrated management of the island of Kerkennah was also developed for training purposes in 1984.

85. Between 1978 and 1982, interdisciplinary studies and exercises on integrated management of smaller Mediterranean islands were conducted in co-operation with the MAB programme in the islands of Skiathos and Skopelos (Greece); Gozo (Malta); Salina (Italy) and Kerkennah (Tunisia). These studies were published in 1982. The aim of the project was first to assess the social, economic and environmental conditions for a balanced development of such ecosystems, taking into account their inherent fragility and their marginality in relation to the overall decision-making process of the countries to which they belong. Providing valid information to local and national decision-makers for the solution of problems related to the management of the human environment was the second target of the project.

86. In 1984, Spain with the island of Formentera (Balearics), and France, with Port-Cros (the island's National Park) have joined this activity.

87. A computer-based multisectoral model of the island of Gozo was developed and its programming got underway in 1984. This software will facilitate the production of alternative scenarios of development, not only for the island of Gozo but also for other insular situations elsewhere in the world. Training of local decision-makers to use the model begins in 1984.

88. Another type of activity stemming from the above project is the establishment this year, in a certain number of smaller islands, of a network of multi-disciplinary experimental stations serving as basic infrastructures. These stations are run by local authorities for the implementation, in the islands, of research or field experiments concerning the development of the islands. Such experiments are
to develop appropriate technologies in renewable energy production, specialized agriculture, use and disposal of waste, experiments with small desalination plants, aquaculture, etc. In Greece, two stations are already functioning on Skopelos and Skiathos islands.

89. The establishment is envisaged in 1984-1985 of a network of co-operating institutions and countries working on the problems of smaller islands. Atlantic islands of France, Portugal and Spain may also be added to the Mediterranean network, taking into account the similar basic problems.

90. Following a request from the Greek Government for Unesco co-operation in carrying out the "Khalki: Island of Friendship and Peace" project, Unesco is planning to send an intersectoral mission to assist the Government in bringing about the balanced ecodevelopment of the island for the benefit of its inhabitants and as an example of the kind of development that other small islands could follow.

91. A regional symposium on modelling techniques and development planning was held in Rabat (Morocco) from 25 to 28 October 1982 to examine ways of integrating socio-cultural and environmental factors in development modelling and planning. Two of the national case studies submitted to the symposium related to Arab countries of the Mediterranean area Egypt and Morocco. Both of these studies explained the modelling and planning methods employed, placing them in the context of the national constraints specific to each country and endeavouring to trace their limitations. Following these critical analyses of current planning methods, suggestions were made for improving the planning models now in use. The results of the discussions at the Rabat symposium have been published under the title: "Modelling Techniques and Development Planning in the Arab Region".

92. In agreement with the Tunisian Government, Unesco's Intersectoral Committee on Human Settlements has undertaken an essentially interdisciplinary pilot project whose purpose is to create a village (Skhirat) following an endogenous, integrated and participatory approach to rural development. One of its aims is to show how local populations can work to improve the quality of their life at low cost, using local materials and suitably adapted traditional techniques. The villagers were associated with the design of the project from the outset and should continue to take an active part in its implementation, which should enable them subsequently to manage the project themselves and to continue the work of development.

93. The initial phase of the project (the feasibility study) was carried out in 1983 and is now complete. At the present time, Unesco is seeking extra-budgetary resources for the operational phase. The village so established will serve as a pilot demonstration project which it is expected will be duplicated elsewhere.

94. The participation of the local population and authorities in the activities are seen as a priority in order to achieve the best results. The research and experimental projects may be conducted by interested national or international bodies.

95. With Unesco's encouragement and support, the European Centre for Co-ordination of Research and Documentation in the Social Sciences (the Vienna Centre), with which Unesco regularly co-operates, is launching a series of projects centred on the Mediterranean zone.

One of the projects in this series, begun in 1984, concerns "Water and men in the countries of the Mediterranean and the Black Sea". This first project focuses on three research themes:

- Water today and tomorrow;
- Water and history;
- Water and popular culture.
These three themes should enable all those working in the social and human sciences to take part in the programme and to make good the frequent lack of social science information in technical studies on water and its uses. A round table was held in this connection in Dubrovnik from 10 to 12 June 1984 to discuss the organization of the various national networks, to make working arrangements and arrangements for the circulation of information about links between networks, and to organize research.

96. The round table has already prepared a timetable of meetings up to 1986.

ENVIRONMENTAL EDUCATION

97. The holding of the Intergovernmental Conference on Environmental Education in Tbilisi (October 1977) gave a new impetus to the various aspects of environmental education. The aim of the programme on Environmental Education and Information adopted by the General Conference at its twenty-second session (October - November 1983) is to promote a general awareness of the causes and consequences for man, society and the world community of environmental problems. In collaboration with UNEP, through formal and non-formal education programmes, it aims at developing individual and collective ethics, standards and behaviour patterns likely to contribute to the protection and improvement of the environment. This will be done through the production and dissemination of experimental teaching material, exchange of information on pedagogical experimentation and training of personnel.

98. The Mediterranean area, with its environmental similarities and affinities would be particularly suited for regional and interregional co-operation in this domain.

99. A seminar on "Energy and Environmental Education in Europe" was held in Monte Carlo during March 1981. It was organized by the International Council of Associations for Science Education with technical and financial assistance from Unesco. Particular emphasis was placed on environmental problems in the Mediterranean and on energy resources and needs of the region. Consideration was given to ways of bringing such issues into school curricula, especially in relation to science education, through the establishment of better mechanisms for sharing information about curriculum development in science education and environmental education among Mediterranean countries.

Geology and Seismology

International Geological Co-operation Programme (IGCP)

100. Geology provides another very important aspect of co-operation in the Mediterranean, mostly promoted by Unesco as part of the IGCP.

101. From an intergovernmental viewpoint, international co-operation in geological research is increasingly important as a means of helping to solve economic and social problems that are becoming increasingly serious.

102. IGCP helps to fill a long-recognized need for a more effective instrument to mobilize worldwide geological expertise in the study of geological phenomena that transcend national boundaries.

103. Among other things, Unesco is organizing through IGCP a study of geotectonic evolution and metallogeny in the Eastern Mediterranean, correlation of Pre-Variscan and Variscan events of the Alpine-Mediterranean mountain belts, as well as the stratigraphic correlation with Tethys, the ancestor of the Mediterranean during the Neogene. Similarly, as regards seismology, the Mediterranean area, where to
express the position very simply the African tectonic plate encounters the Eurasian plates, is an area of outstanding seismic intensity marked by quite frequent and serious earthquakes. Very useful co-operation has been established under the auspices of Unesco for a study of the probable localization of earthquakes and the prevention of their consequences.

104. There are 48 ongoing IGCP projects, a number of them dealing with problems of interest to Mediterranean countries.

Mapping of seismicity of the Mediterranean

105. This map is being prepared by the European Mediterranean Seismological Center (Strasbourg) under the sponsorship of Unesco.

Seismology in the Balkan region

106. Unesco has recently completed the execution of a Unesco/UNDP project on Earthquake Risk Reduction in the Balkan Region, which is one of the world's particularly active seismic zones.

107. The long-term objectives of this project were to:

- ensure continuous co-operation in research and training by the establishment of a network of institutions in the region, which will be specialized in the complementary fields of seismology, engineering seismology and earthquake engineering;

- assist governments in the Balkan region and neighbouring countries to establish a regional network of seismic stations with computerized communications for rapid data transmission and analysis;

- develop the basis for physical planning and building in order to protect existing and future developments in case of earthquake.

This project was the culmination of a series of national and regional projects carried out by Unesco and other United Nations agencies since 1970.

108. Before the completion of this project, the participating Member States (Albania, Bulgaria, Greece, Romania, Turkey and Yugoslavia) decided to continue the close and effective collaboration which they had established by the setting up of a Permanent Co-ordinating Committee for Earthquake Risk Reduction in the Balkan Region.

109. The statutes for this Committee have been drawn up and they will enter into force when five of the participating countries have notified Unesco of their acceptance.

PAMERAR project

110. Establishment of a seismic network and related activities in Arab States is being implemented under the project "Programme for Assessment and Mitigation of Earthquakes in the Arab States (PAMERAR)". The executing bodies are the individual governments of the countries involved. At present, participation in this programme is confined to Algeria. Unesco's role is to give advice through various measures to the Member States for its implementation.
Seismic risk mitigation programme in the Ibero-Magreb area

111. A project proposal with the above title was submitted to UNDP in 1981 based on discussions at four working group meetings on the seismicity of the Ibero-Magreb region organized by Unesco. The last meeting was held in Tunis on 7-9 September 1981. For various reasons it has not been possible to implement this project.

CULTURAL CO-OPERATION

Protection and preservation of the cultural and historic heritage

A. International campaigns for safeguarding the Mediterranean heritage

112. The Campaign for the safeguarding of Nubia, with which a number of Mediterranean countries were associated, provided an outstanding opportunity for joint international action regarding the cultural heritage. Since then, other campaigns have been launched - 27 in all - a third of which concern Mediterranean sites that are seriously threatened. These are Venice, Carthage, the Acropolis in Athens, the city of Fez, historic buildings and sites in Malta, the cultural heritage of Monte negro, the site of Göreme and the historic quarters and monuments of Istanbul, the creation of museums in Aswan and Cairo, and the archaeological site of Tyre.

113. A complex web of governmental and non-governmental co-operative activities - financial, technical and human in character and international in scope - comes into being around each of the sites that are the object of international campaigns for the safeguarding of the cultural heritage. These campaigns clearly provide an exceptional opportunity for a more active demonstration of intercultural links in the Mediterranean. It is therefore suggested that the Venice seminar might pioneer some fresh approaches, such as:

- the twinning of sites which are similar in nature and share the same conservation problems, which would make it easier to develop a series of activities, exchanges, experiments, training and techniques;
- travelling exhibitions concerning selected sites, including objects, works of art and handicrafts, which would make the Mediterranean peoples better acquainted with the historical and cultural links uniting them;
- pilot projects for the restoration and safeguarding of monuments and sites, which could be launched in close association with various youth organizations that take a highly active part in conservation activities in certain parts of the Mediterranean.

B. Training

114. Unesco's programme for the safeguarding of the cultural heritage obviously concerns the international community as a whole. In certain of these activities, the Mediterranean countries play an extremely important part. Suffice it to recall that, for twenty-four years, Rome has been the headquarters of the International Centre for the Study of the Preservation and the Restoration of Cultural Property (ICCHROM), the main tasks of which are to collect, study and circulate documentation on the conservation and restoration of cultural property; to co-ordinate, stimulate and commission research in this area; to provide advice and recommendations on general or specific topics; and to assist in training research workers and technicians and in raising the standard of restoration work.
115. ICCROM has received exceptionally valuable assistance from the Italian Government which, throughout the Centre's existence, has provided unstinted moral, technical, administrative, financial and diplomatic support. Two specialized institutes, the Istituto Centrale del Restauro at the Faculty of Architecture of Rome University and the Istituto di Patologia del Libro, are an inexhaustible source of information for ICCROM.

116. The list of activities in which the Mediterranean countries have taken part would be too long to cite in full, comprising as it does recovery missions e.g. the tomb of the Punic necropolis of Kairouan, a marble statue in the Cherchell museum in Tunisia; consultative missions or on-site works (in the Göreme valley in Cappadocia); or the various training courses that have been organized on subjects directly relating to the cultural heritage of the Mediterranean (architectural conservation, conservation of wall-paintings the scientific principles of conservation, preventive conservation in museums, the conservation of paper objects, architectural conservation at Rome University, the conservation of stone).

117. In future years, Unesco intends to extend even further its collaboration with ICCROM in order to carry out, within the framework of its second Medium-Term Plan, "systematic action to strengthen the structures, programmes and methods of training of the various categories of scientific and technical personnel required in all fields of the heritage".

118. In addition to ICCROM, ICOM (The International Council of Museums) and ICOMOS (The International Council of Monuments and Sites) are closely associated with the planning and implementation of training activities, particularly as regards the preparation of standards and model training programmes in such areas as architectural conservation, the planning and management of conservation projects, the organization of museums and the planning of exhibitions, taking into account specific local conditions.

C. Intercultural education and teaching relating to the Mediterranean cultural heritage

119. Under its programme, Unesco could contribute to enhancing the role of education in the appreciation of cultural values so as to promote in this way an intercultural education which would aim to lead the countries bordering on the Mediterranean to know more about each other. Such actions would also help to improve the reception given to migrant workers in host countries.

120. In particular, provision could be made for studying and defining the content and methods of an intercultural curriculum for countries of the Mediterranean, and for organizing a series of training activities on intercultural education in the various Mediterranean countries. Consultation meetings could be contemplated among the countries of the Mediterranean where cultural traditions and historical remains are particularly abundant but not adequately known. The aim of such meetings would be to produce teaching materials to improve education relating to the artistic, cultural and historic heritage, along interdisciplinary lines. These materials could be used for interdisciplinary educational activities in the countries concerned.

121. Additionally, as part of the Associated Schools project, a series of student exchanges between teacher-training colleges in countries north and south of the Mediterranean could be organized, the aim being for the countries to learn more about each other and thus to improve the links between the development of tourism and the presentation of the heritage. These activities could be organized in connection with International Youth Year, with the support of interested Mediterranean countries and non-governmental organizations, such as FIOCES (International Federation of Organizations for School Correspondence and Exchange) or "Youth and the Heritage".
122. Following two meetings on teaching methods for the less widespread languages of Europe (Budapest 1980 and Thessaloniki, 1984), organized under Unesco's auspices, a European regional symposium on education systems and minority languages will be organized in Sitges (Spain) in June 1985 by the International Association for the Study and Promotion of Audio-Visual and Structuro-Global Methods (AIMAV) and the University of Barcelona, with Unesco's help. Special attention will be given at this symposium to languages of the Mediterranean region.

123. Under the programme for the less widely taught languages of Europe, Unesco might establish, during the forthcoming biennium (1986-1987), a subprogramme on Mediterranean languages, provided the General Conference so decides.

D. Tourism

124. As indicated in the Programme and Budget for 1984-1985, under the Major Programme "Communication in the Service of Man" the impact on tourists of images conveyed by the media will be studied in cooperation with the World Tourism Organization. This is complemented by further work on comparative analyses of media reporting on other cultural areas, which has already been successfully carried out in some countries (Austria and Hungary) and could henceforth be undertaken in the Mediterranean region. Given the importance of tourism for both the economic and cultural development of the Mediterranean countries, studies on the role and impact of the media in tourism could be envisaged.

Education by radio and television

125. Co-operation between Unesco and the Mediterranean States in the use of radio and television for adult education and during literacy campaigns would be both desirable and possible. These two fields of action would also help to improve the situation of migrant workers. At the request of these States, Unesco could provide consultant services for the design and production of teaching materials and other audio-visual aids, the preparation of literacy and adult education programmes, teaching methods, the development of the rural press and post-literacy activities.

126. Unesco would also be prepared to advise States of the region and to supply them, as far as possible, with promotional material that would help them to alert national opinion and stimulate them into playing a more active and committed role in the struggle against illiteracy.

127. The Programme of Co-operation in Research and Development for Educational Innovation in South-East Europe (CODIESEE), approved by the Unesco General Conference at its nineteenth session (1976) on the recommendation of the second Conference of Ministers of Education of European Member States (1973), became operational in 1977. CODIESEE is an inter-institutional network composed of educational research centres participating on behalf of their respective countries.

128. Its purpose is to encourage co-operation in research and development work on methods and techniques used in the educational process as a whole, formal and non-formal, and to exchange and circulate among the national and international community information about what the participating institutions have achieved.

129. At the present time six European countries, three of which border on the Mediterranean, belong to the network: Bulgaria, Greece, Hungary, Romania, Turkey and Yugoslavia. Two other countries, Malta and Spain, are associated with CODIESEE, but the network remains open to all Member States of the region. Indeed, several countries that are not members of the network have already taken part in CODIESEE meetings.
130. Under this programme, a conference was held in Budapest in September 1982, organized under UNESCO's auspices with financial assistance from it and UNDP, and jointly sponsored by the Hungarian National Commission for UNESCO and the Hungarian National Centre for Educational Technology. Its purpose was to draw up a programme for an international information system and to make arrangements for the exchange of audio-visual educational material (AVINTER). Provided there are no technical, commercial or legal obstacles, this material could include documents produced by national radio and television companies.

131. The CODIESEE network could be expanded and improved through the participation of other Mediterranean countries.

132. UNESCO is also ready to support the efforts of States in the region to extend the use of radio and television as a major aid to education.

133. UNESCO has started to co-operate with the International Institute for Audio-Visual Communication and Cultural Development (MEDIACULT), the seat of which is in Vienna, particularly on preservation and exchanges of audio-visual material (a study on the awareness of the past in the age of the media). This activity could include the experience and prospects of the Mediterranean countries.

134. Following a meeting organized by UNESCO in Vienna in April 1984, the major international audio-visual organizations such as the International Federation of Film Archives, International Federation of Television Archives, International Association of Archives and the International Film and Television Council, are presently examining an ambitious decennial plan for the preservation of moving images, which should be of particular interest to Mediterranean countries (such as Spain, France, Italy and Egypt) that are important film producers.

Intercultural relations in the Mediterranean

135. The World Conference on Cultural Policies, held in Mexico City in 1982, requested the Director-General in Recommendation No. 169 substantially to expand the Mediterranean cultures programme and, within the limits of available resources, to support initiatives devised to develop cultural co-operation around the Mediterranean basin. The Conference also requested the Director-General to study the possibility of setting up a Regional Office for these cultures.

136. The UNESCO Programme and Budget for 1984-1985 made provision for a pilot project on intercultural relations in the Mediterranean. Under this project, a meeting of experts was held at Hammamet (Tunisia) from 5-8 June 1984 to discuss: "Development of a plan of action for the knowledge and promotion of Mediterranean cultures: fields and methods of study of intercultural relations and communication in the Mediterranean".

137. The meeting noted with satisfaction the creation by the Member States concerned of three specialized Mediterranean centres:

- the Centre Méditerranéen Artifex (creative craftsmen, artists and architects) in France;

- the Community of Mediterranean Universities, in Bari (Italy);

- the Mediterranean University of Valencia (Spain);
138. The Hammamet meeting expressed the hope that other interested Member States would take the initiative of setting up, with Unesco's technical and intellectual assistance, further specialized Mediterranean centres.

139. In this connection, Greece intends to set up a Mediterranean underwater archaeology centre in Athens; Lebanon, a centre to study the influence of Andalusian culture in the Mediterranean area; Morocco, a Mediterranean plastic arts centre and a Mediterranean centre for Andalusian music; Turkey, a Mediterranean centre for architecture and town planning; and Yugoslavia, a Mediterranean cultural heritage centre.

140. This programme will also contribute to the development of methods adapted to Mediterranean cultural co-operation, and to a clearer definition of its fields.

141. At its 117th session (September to November 1983), the Executive Board considered the question of the "establishment of a liaison office for Mediterranean cultures" and approved the principle underlying the proposal. It requested the Director-General to examine all aspects of the matter (programme, administrative and budgetary implications).

142. A consultation with the Member States concerned would indicate whether the establishment of a Unesco liaison office for Mediterranean cultures is feasible.

International Conventions on the Recognition of Studies, Diplomas and Degrees in Higher Education relating to the Mediterranean States

143. Three of the six international conventions adopted in recent years under Unesco's auspices concern the recognition of studies, diplomas and degrees relating to States of the Mediterranean. They take their place in a series of legal instruments which seek to increase the mobility of personnel in higher education by instituting new procedures for the recognition of studies and abilities, taking into consideration the stages of an individual's training and his actual knowledge and experience.

144. The three Conventions are as follows:

- the International Convention on the Recognition of Studies, Diplomas and Degrees in Higher Education in the Arab and European States bordering on the Mediterranean, which was signed in Nice (France) on 16 December 1976 at the conclusion of an International Conference of States and entered into force on 6 March 1978 (ratified by: Algeria, Egypt, Italy, Morocco, Yugoslavia).

- the Regional Convention on the Recognition of Studies, Diplomas and Degrees in Higher Education in the Arab States, which was signed in Paris on 22 December 1978 at the conclusion of an International Conference of States and entered into force on 7 August 1981 (ratified by Algeria, Egypt, Iraq, Libyan Arab Jamahiriya, Jordan, Kuwait, Morocco, Oman, Qatar, United Arab Emirates).

- the Convention on the Recognition of Studies, Diplomas and Degrees concerning Higher Education in the States belonging to the Europe Region, which was signed in Paris on 21 December 1979 at the conclusion of an International Conference of States and entered into force on 19 February 1982 (ratified by: Bulgaria, Byelorussian SSR, Denmark, Finland, German Democratic Republic, Holy See, Hungary, Italy, Malta, Netherlands, Poland, Portugal, San Marino, Spain, Sweden, Ukrainian SSR, USSR, Yugoslavia).
145. The States bordering on the Mediterranean are entitled to sign one or two of the three Conventions.

146. In adopting these Conventions, whose general principles and broad outlines are similar, the Contracting States agreed that their future collaboration should take the form of vigorous and concerted action based, inter alia, on national bilateral, subregional and multilateral machinery that is already in existence or whose creation would seem desirable.

147. Through these Conventions, better use could be made of all available educational resources, while higher educational institutions could be made as widely accessible as possible to students and researchers from other contracting Member States. With the adoption of a terminology and of evaluation criteria that would facilitate application of a system for the comparability of subjects of study and diplomas and degrees, it is felt that the conditions of admission to educational institutions in each country could be harmonized.

148. Committees are responsible for monitoring the application of these Conventions.

149. The Regional Committee for Europe will meet for the second time at the European Centre for Higher Education (CEPES) in Bucharest from 13 to 16 November 1984, and the Regional Committee for the Arab countries will meet at Unesco Headquarters in Paris from 17 to 21 December 1984. The Intergovernmental Committee for the Arab and European States bordering on the Mediterranean will not be constituted until six States have ratified the Convention.
ANNEX

MEDIUM-TERM PLAN (1984-1989)

Unesco's second Medium-Term Plan was adopted by the General Conference at its fourth extraordinary session, held in Paris from 23 November to 3 December 1982.

Presentation of the Plan

The Medium-Term Plan for 1984-1989 was prepared according to the guidelines laid down by the General Conference at its twenty-first session in 21 C/Resolution 100, and after consultation of the Executive Board at its 113th session. It draws very largely on the results of the consultation with Member States, with Associate Members and international governmental and non-governmental organizations, and with many eminent figures, which was carried out in the first quarter of 1981.

While the Medium-Term Plan remains basically a document for guidance, the biennial programmes and budgets are designed to deal primarily with the practical side of the Organization's action.

The Plan is composed of thirteen 'major programmes', which have been selected, on the basis of the experience acquired during the implementation of the first Medium-Term Plan and the guidance provided by consultation with Member States and with governmental and non-governmental international organizations, in such a way as to enable the Organization to make as effective a contribution as possible to the solution of the problems identified. A final chapter is devoted to programme support activities and contains suggestions regarding the directions that they should take in order to implement the Plan.

Foreword

FIRST PART


Resolution 4 XC/1/01

SECOND PART

MAJOR PROGRAMME I. REFLECTION ON WORLD PROBLEMS AND FUTURE-ORIENTED STUDIES

Programme I. 1 Studies and research on world problems
Programme I. 2 International future-oriented study

Resolution 4 XC/2/01

MAJOR PROGRAMME II. EDUCATION FOR ALL

Programme II. 1 Promotion of general access to education;
Programme II. 2 Development and renewal of primary education and
Programme II. 3 intensification of the struggle against illiteracy
Programme II. 4 Democratization of education
Programme II. 5 Adult education
Programme II. 6 Equality of educational opportunity for girls and women
Programme II. 6 Extension and improvement of education in rural areas
Programme II. 6 Promotion of the right to education of particular groups

Resolution 4 XC/2/02
MAJOR PROGRAMME III.  COMMUNICATION IN THE SERVICE OF MAN

Programme III. 1  Studies on communication
Programme III. 2  Free flow and wider and better balanced dissemination of information; increased exchanges of news and programmes
Programme III. 3  The development of communication
Resolution 4 XC/2/03

MAJOR PROGRAMME IV.  THE FORMULATION AND APPLICATION OF EDUCATION POLICIES

Programme IV. 1  Contribution to the formulation and application of education policies and strengthening of national capacities with regard to educational planning, management, administration and economics
Programme IV. 2  The educational sciences and their application to the renewal of the educational process
Programme IV. 3  Policies and methods for the training of educational personnel
Programme IV. 4  Means and infrastructures—information systems, educational facilities and educational industries
Resolution 4 XC/2/04

MAJOR PROGRAMME V.  EDUCATION, TRAINING AND SOCIETY

Programme V. 1  Education, culture and communication
Programme V. 2  Teaching of science and technology
Programme V. 3  Education and the world of work
Programme V. 4  Promotion of physical education and sport
Programme V. 5  Higher education, training and research
Programme V. 6  Action with a view to better integration of training and research activities
Resolution 4 XC/2/05

MAJOR PROGRAMME VI.  THE SCIENCES AND THEIR APPLICATION TO DEVELOPMENT

Programme VI. 1' Research, training and international co-operation in the natural sciences
Programme VI. 2  Research, training and International co-operation in technology and the engineering sciences
Programme VI. 3  Research, training and international co-operation in key areas in science and technology
Programme VI. 4  Research, training and international co-operation in the social and human sciences
Programme VI. 5  Research, training and regional and international co-operation in some key areas in the social and human sciences
Resolution 4 XC/2/06
MAJOR PROGRAMME VII. INFORMATION SYSTEMS AND ACCESS TO KNOWLEDGE

Programme VII. 1 Improvement of access to information: Modern technologies, standardization and interconnection of information systems
Programme VII. 2 Infrastructures, policies and training required for the processing and dissemination of specialized information
Programme VII. 3 Unesco information and documentation systems and services

Resolution 4 XC/2/07

MAJOR PROGRAMME VIII. PRINCIPLES, METHODS AND STRATEGIES OF ACTION FOR DEVELOPMENT

Programme VIII. 1 Study and planning of development
Programme VIII. 2 Co-operation with Member States with a view to identifying priority projects for development
Programme VIII. 3 Implementation of action for development

Resolution 4 XC/2/08

MAJOR PROGRAMME IX. SCIENCE, TECHNOLOGY AND SOCIETY

Programme IX. 1 Study and improvement of the relationship between science, technology and society
Programme IX. 2 Science and technology policies

Resolution 4 XC/2/09

MAJOR PROGRAMME X. THE HUMAN ENVIRONMENT AND TERRESTRIAL AND MARINE RESOURCES

Programme X. 1 The earth’s crust and its mineral and energy resources
Programme X. 2 Natural hazards
Programme X. 3 Water resources
Programme X. 4 The ocean and its resources
Programme X. 5 Management of coastal and island regions
Programme X. 6 Land-use planning and terrestrial resources
Programme X. 7 Urban systems and urbanization
Programme X. 8 The natural heritage
Programme X. 9 Environmental education and information

Resolution 4 XC/2/10

MAJOR PROGRAMME XI. CULTURE AND THE FUTURE

Programme XI. 1 Cultural heritage
Programme XI. 2 Cultural identity and intercultural relations
Programme XI. 3 Creation and creativity
Programme XI. 4 Cultural development and cultural policies

Resolution 4 XC/2/11
MAJOR PROGRAMME XII. THE ELIMINATION OF PREJUDICE, INTOLERANCE, RACISM AND APARTHEID

Programme XII. 1 Studies and research on prejudice, intolerance and racism
Programme XII. 2 Action against prejudice, intolerance and racism in the fields of education, science, culture and communication
Programme XII. 3 The struggle against apartheid

Resolution 4 XC/2/12

MAJOR PROGRAMME XIII. PEACE, INTERNATIONAL UNDERSTANDING, HUMAN RIGHTS AND THE RIGHTS OF PEOPLES

Programme XIII. 1 Maintenance of peace and international understanding
Programme XIII. 2 Respect for human rights
Programme XIII. 3 Education for peace and respect for human rights and the rights of peoples
Programme XIII. 4 Elimination of discrimination based on sex

Resolution 4 XC/2/13

MAJOR PROGRAMME XIV. THE STATUS OF WOMEN

Resolution 4 XC/2/14

CHAPTER XV. PROGRAMME SUPPORT

XV. 1 Copyright
XV. 2 Statistics
XV. 3 Publications
XV. 4 Public information
XV. 5 Conferences and documents
XV. 6 Data processing
XV. 7 Personnel
XV. 8 Headquarters premises
XV. 9 Co-operation with National Commissions
XV. 10 Co-operation with international non-governmental organizations

Resolution 4 XC/2/15

ANNEX

RESOURCE INDICATIONS

Resolution 4 XC/3/01