

South Pacific Bureau for Economic Co-operation





Economic & Social Commission for Asia and the Pacific



# South Pacific Regional Environment Programme

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# REPORT of the CONFERENCE on the HUMAN ENVIRONMENT in the SOUTH PACIFIC

Rarotonga, Cook Islands 8-11 March 1982

including

- SOUTH PACIFIC DECLARATION ON NATURAL RESOURCES AND THE ENVIRONMENT
- ACTION PLAN FOR MANAGING THE NATURAL RESOURCES AND ENVIRONMENT OF THE SOUTH PACIFIC REGION
- THE STATE OF THE ENVIRONMENT IN THE SOUTH PACIFIC

South Pacific Commission Noumea, New Caledonia

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#### II. AGENDA

- Opening of the Conference.
- 2. Election of Chairman, Vice-Chairman and a Drafting Committee.
- 3. Adoption of the Agenda.
- 4. Overview of the State of the Environment in the South Pacific Region.
- 5. Overview of development trends, their environmental consequences and the contribution of environmental management to development.
- 6. Country statements and discussion.
- 7. South Pacific Declaration on Natural Resources and the Environment.
- Action Plan for Managing the Natural Resources and Environment of the South Pacific Region.
- Administrative Arrangements and Financing for the next phase of the South Pacific Regional Environment Programme.
- 10. Work plan for the next phase of the Programme.
- 11. Other business.
- 12. Adoption of the Report.
- 13. Closing of the Conference.

#### IV. SUMMARY OF DISCUSSIONS

## The State of the Environment in the South Pacific

- 11. The Honourable Young Vivian, Secretary-General of the South Pacific Commission, addressed the Conference. He stressed the importance of preserving the traditional care for the environment inherent in the cultures of the Pacific, expressed in local customs and rules of conduct, while seeking to incorporate appropriate features of the cultures of the more economically developed countries. The spiritual heritage also teaches respect for the earth and its productivity, and the concept of stewardship for future generations is deeply ingrained in the culture.
- 12. The State of the Environment report sets out problems, pitfalls and opportunities (Appendix 1). Principles can be recognized, policies developed, and a new ethic created based on the traditional ethic common to all peoples of the Pacific that the earth and the sea are sacred living things which man must nurture and protect.
- 13. The Honourable Dr. G. Gris, Director of the South Pacific Bureau for Economic Co-operation, surveyed development trends and their environmental implications. Agriculture and forestry, both dominant land uses now and in the future, present environmental hazards as well as economic opportunities. Mining and off-shore petroleum development may bring increased wealth, but will require strictly-imposed environmental safeguards. Fish harvesting from the deep sea may pose problems with land bases and processing plants.
- 14. These problems can be avoided through environmental management. This involves formulation of clear government policies on environmental protection and enhancement, setting up effective legislation, and applying it in decisive administrative actions. The whole process depends on adequate knowledge and understanding, and SPREP will contribute greatly to this. The Pacific Ocean unites us in a single regional environment: SPREP could become a fine example of co-operation through regionalism.

## Statements from Participating Countries

15. Delegates from most countries enlarged on their country report or brought forward new topics or new emphasis which had arisen since their reports were prepared.

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- 16. There was widespread concern expressed at proposals to dump large quantities of low level nuclear waste in the Pacific Ocean and to use Pacific Islands for high level waste storage. One delegation suggested that the declaration of waste free zones out to the 200 mile limit would considerably reduce the scope for dumping at sea. Countries limit would considerably reduce the scope for dumping at sea. Countries were also urged to join the London Dumping Convention and to attend the were also urged to review it. A unified expression from over 20 February 1983 meeting to review it. A unified expression from over 20 nations in this region would carry considerable weight in world forums.
- 17. The Conference was reminded of the Convention on the Conservation of Nature in the South Pacific which is deposited in Western Samoa. It has been signed by three countries, but does not come into force until it is ratified by four countries. Australia plans to acceed to the Convention in 1982. It was suggested that this Convention might serve as a regional legal basis for many aspects of environmental management and control.
- 18. Many countries, in indicating their support for SPREP, spoke of the need for retention of cultural identity and urged that strong emphasis should be placed on the human environment. It was widely felt that though it had taken many years to bring SPREP to the stage at which the Conference on the Human Environment in the South Pacific could be held, the preparatory work had been valuable and the documentation which had been prepared was useful and highly relevant.
- 19. Participating countries, with expertise which would be usefu to the programme, expressed willingness to assist with skilled manpowe and resources. It was suggested that the programme was more than co-operative gesture it was an expression of regional solidarity. I was stressed that the programme must be relevant to the needs of the people of the region and that it should not become too complex nor los its "common touch" with the people. It should not become motivated to "science for science's sake".
- Non-governmental organizations expressed their concern about nuclear activities affecting the region. Sources of energy appropriate to the region should be developed and presented to the authorities a more favourable than many sources involving high technology. There we strong advocacy for the provision of information at grassroots leve simply presented, and widely disseminated. The key role of women in the island communities was stressed in that they were largely responsible for the education and care of the family; they were thus immediately affect by any change in the environment. It was pointed out that the church in the islands had a wide coverage at grassroots level and could be effective means of environmental education.

Other agencies of the UN system offered support to UNEP in the implementation of SPREP and stressed the need for continuing liaison to ensure that work was co-ordinated, duplication was avoided, and co-operation used. Such co-operation could opportunities for considerably increase the resources available to the Programme. It was pointed out that the widespread activity of the University of the South Pacific provides a network of professional expertise that could be used in the Programme. Courses available will place increasing emphasis on man and the environment and environmental studies degree programmes are being developed based on a combination of social science and science courses. There is also considerable interest in the area of environmental law. In-service courses on environmental assessment are beginning - the first in November 1982 funded by ESCAP as part of SPREP. It was established that the universities of the region are a substantial internal resource which should be used to the fullest extent possible. ORSTOM is another research organization in the region with expertise highly relevant to SPREP. UNESCO offered to co-operate with SPREP in the fields of coral reef and mangrove ecosystems, and IOC offered West Pac II as a co-ordinating mechanism fo regional research. WHO through its PEPAS and environmental health unit would be able to help in many SPREP activities dealing with environmental health and pollution control, especially in water quality, waste disposal, solid wastes and pesticide control.

### South Pacific Declaration on Natural Resources and the Environment

22. The conference reviewed the draft Declaration proposed by the SPREP Technical Meeting as a statement of regional policy on the environment. A number of revisions and additions were considered and incorporated. Three delegations did not accept the inclusion of paragraph 10 in the Declaration. With these reservations on paragraph 10, the Declaration was adopted by the conference (Annex 1).

# Action Plan for Managing the Natural Resources and Environment of the South Pacific Region

23. The Action Plan was introduced as a guide to the South Pacific Regional Environment Programme for perhaps the next five years. It provides a framework for environmentally-sound planning and management suited to the region. The major components of environmental assessment, environmental management, legal measures and institutional and financial arrangements were then considered in detail and revised.

- 24. Delegates noted the need for information, particularly in areas such as coral reefs, currents, flora and fauna, and nuclear testing, but considered that the collecting and processing of information should not preoccupy the programme to the exclusion of action. The need for balance was emphasized. Assessments must be cost effective and must give priority to areas where projects were planned. Management measures should be audited to determine their effectiveness. It was noted that some sections of the Action Plan were already being implemented.
- 25. After considerable debate about the Pacific Island peoples' fears of nuclear pollution and the appropriate actions to take concerning nuclear waste storage and dumping and the effects of nuclear testing, a resolution on the question of nuclear waste was adopted. (Resolution No.1).
- 26. The Action Plan as revised was adopted by the Conference, with a reservation by France concerning the added paragraph 20.11 (Annex 2).

## Administrative Arrangements and Financing for the next phase of SPREP

- 27. During the discussion on institutional and financial arrangements, the Conference decided that the Governments, through meetings every two years of the South Pacific Forum and South Pacific Conference, should make policy decisions concerning all substantive and financial matters related to the Action Plan.
- 28. The SPC, as the host organization for the SPREP Secretariat, should be responsible to the participating governments and administrations for the overall technical co-ordination and continuous supervision of the implementation of the Action Plan. This function would be carried out under the guidance of a Co-ordinating Group consisting of representatives of UNEP, ESCAP, SPC and SPEC with the representative of SPEC as Chairman.
- 29. The Co-ordinating Group:
  - a) would function much like the present group for the first phase of SPREP;
  - b) would rely on its secretariat to prepare proposals for its consideration in accordance with the Action Plan;
  - c) would normally meet twice a year to review, assess, and update the programme, and
  - d) would be open to governments and administrations participating in the programme who wished to attend the Group Meeting.

- 30. The establishment of the SPREP Secretariat should be as follows:
  - Regional Co-ordinator,
  - Scientific Assistant,
  - Administrative Assistant,
  - Secretary-typist.
- 31. The terms of reference for the Regional Co-ordinator should include the following functions:
  - a) to formulate project documents for specific activities agreed upon as part of the programme;
  - b) to negotiate and co-ordinate the execution of projects through international and regional organizations;
  - c) to collect, collate and prepare a first analysis of results achieved through the programme activities and disseminate information arising therefrom;
  - d) to organize expert meetings to be held in connection with the programme including the preparation of reports and other documents;
  - e) to keep the participating governments regularly informed of the progress achieved in carrying out the work, the results achieved and problems encountered.
- 32. SPREP Secretariat should:
  - a) serve as a referral centre providing information, identifying experts and institutions to aid participating states, and otherwise assist in solving specific environmental problems;
  - b) facilitate information exchange and co-operation among those experts and institutions; and.
  - c) use regional expertise and services where possible.
- 33. In order to achieve sufficient and well co-ordinated ro-operation at both the national and the regional levels, a national focal point should be designated at a high level in each of the participating states to deal with all matters concerning the implementation of the Action Plan, such focal point having the following roles:
  - a) to act as the official channel of communication between the secretariat and the administration of the countries and territories;

- b) to co-ordinate, as appropriate, the participation of national institutions and agencies in the agreed programme;
- c) to consult with all relevant organizations in the national governments on the activities and progress achieved in implementing the Action Plan.
- 34. The Conference emphasized that national and regional institutions (such as research centres, laboratories, government services, universities) should provide the basis for carrying out the technical work of the Action Plan activities.
- 35. It recognized that the participation of the international organizations in the programme, in particular those belonging to the United Nations system, can greatly assist the implementation of the Action Plan, and, therefore, their technical and managerial support for specific projects should be solicited.
- 36. The Conference adopted a resolution (Resolution No.2) expressing appreciation for UNEP's role in supporting the development of the South Pacific Regional Environment Programme as part of its Regional Seas Programme.
- 37. The representative of UNEP reminded the Conference that:
  - a) UNEP's financial contribution to SPREP will depend on receipt of governments' contributions to the UN Environmental Fund in the 1982-1983 biennum;
  - b) for 1982, UNEP would be agreeable to having part of its contribution to the programme being utilized for co-ordination purposes, but, from 1983 onwards, UNEP would wish to see a substantial decrease in its contribution being utilized to meet co-ordination costs; the intention being that eventually all UNEP funds for the programme would be used to meet project costs;
  - c) the proposed UNEP contribution of US\$ 200,000 for 1983 was subject to the approval of its Governing Council.
- 38. France, New Zealand and Australia expressed their willingness to give every support at the UNEP Governing Council, to SPREP as part of the Regional Seas Programme.
- 39. The Conference decided that, taking into account the various financial arrangements as reported above, the indicative budget of SPREP for the 1982-1983 would be as follows (in thousands of US\$):

Source	1982	1983	Total
UNEP	200	200	400
SPC	71	52	123
SPEC	20	20	40
Special Government contribution	-	200	200
Total	291	472	763

Contributions to SPREP might be in cash or kind (e.g. provision of expert services).

40. A resolution summarizing the main points was adopted. (Resolution No.3).

#### Work Plan for the next phase of the Programme

- 41. The Secretariat presented the strategy it expects to follow in the development of the work plan, depending on the level of support available. A balance will be sought between assessment and management actions, and between country assistance, information, and education and training. Priorities can be drawn from the country reports, government requests and this Conference. Initial priorities selected for the next phase of the Programme will be submitted to the South Pacific Forum and South Pacific Conference this year.
- 42. Several governments indicated their priority areas in the Action Plan. It was emphasized that the Programme should not overextend itself by trying to undertake too many actions at once.

#### Closing of the Conference

- 43. The report of the Conference was adopted.
- 44. A resolution of acknowledgement to the Government of the Cook Islands was approved (Resolution No.4).

#### V. RESOLUTIONS

#### RESOLUTION NO.1

#### The Prevention of Storage and Disposal of Nuclear Waste

In furtherance of its declared policy on the prevention of the storage or disposal of nuclear waste in the Pacific region, the Conference resolves that the following actions should be taken:

- (1) The Japanese, United States and other governments should be requested to abandon their studies of specific proposals to store or dispose of nuclear waste in the Pacific regional environment. They should be strongly urged to research alternative methods of disposal outside the region.
- (2) Each country and territory of the region should be requested to accede to the London Dumping Convention. A regional meeting should be held preferably before the end of 1982 so that these countries and territories can prepare a common regional agreement. This would enable them to invoke the provisions of Article VIII of the London Dumping Convention, and thus ensure that the regulatory framework of the Convention incorporates the prohibition on storage and disposal which has been adopted as a policy of the South Pacific Regional Environment Programme (SPREP).
- (3) The Co-ordinating Group should include follow up activities in the work plan including the presentation of the regional agreement to the meeting of parties to the London Dumping Convention in February 1983, and notification to all interested governments and international agencies of the common policy of SPREP participants. The Group should facilitate actions by individual countries and territories to this end.

#### RESOLUTION NO.2

#### Appreciation to UNEP

The Conference expresses appreciation for UNEP's role in supporting the development of SPREP as part of its Regional Seas Programme. This Conference also requests the Executive Director of UNEP to continue UNEP's association with SPREP through participation in the joint SPC/SPEC/ESCAP/UNEP Co-ordinating Group and by providing matching funds (US\$ 200,000 for 1982 and the same amount for 1983) to those expected to be contributed by the Governments of the region for the implementation of SPREP.

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#### RESOLUTION NO.3

#### Institutional and Financial Arrangements

Taking into account that a decision has already been made to entrust the South Pacific Commission with the responsibility of the Secretariat, the Conference resolves that:

- (1) The Secretariat be established as an independent entity within the South Pacific Commission;
- (2) Reporting to the South Pacific Forum and the South Pacific Conference be restricted to budgetary matters and to programme priorities;
- (3) The Co-ordinating Group through the Secretariat be requested to circulate to Governments, well in advance, draft reports every two years to the South Pacific Conference and the South Pacific Forum for comment and amendment;
- (4) Governments be requested to make additional contributions to the South Pacific Commission earmarked for the South Pacific Regional Environment Programme and assessed according to the South Pacific Commission scale current at the time of the assessment, or by some other formula to be decided upon by governments;
- (5) Countries not contributing to the fund according to paragraph 4 be requested to contribute on a voluntary basis according to their ability;
- (6) A target figure for the member countries contributions for 1983 be set at \$ 200,000; and
- (7) The Conference requests the Executive Director of United Nations Environment Programme to provide matching funds.

#### RESOLUTION NO.4

Acknowledgement to the Government of the Cook Islands

The Conference on the Human Environment in the South Pacific:

Having met in Rarotonga from 8th to 11th March 1982 at the generous invitation of the Government of the Cook Islands;

Having adopted the South Pacific Declaration on Natural Resources and the Action Plan, for Managing the Natural Resources and Environment of the South Pacific Region;

Recognizing that the preparations made and the assistance provided by the Government of the Cook Islands contributed greatly to the smooth running of the Conference;

Appreciative of the generous hospitality extended by the Government and the people of the Cook Islands to members of the delegations, the observers, and the Secretariat attending the Conference;

Expresses its gratitude to the Government and the people of the Cook Islands.

#### ANNEX 1

# SOUTH PACIFIC DECLARATION ON NATURAL RESOURCES AND THE ENVIRONMENT

This Conference:

Having regard to the Declaration of the UN Conference on the Human Environment adopted in Stockholm in 1972 and the desirability for a regional declaration within the South Pacific framework;

Noting the World Conservation Strategy;

Recognizing that the environment of the South Pacific Region has features such as tropical rain forests and small island/lagoon/reef ecosystems which require special care in responsible management;

Taking into account the traditions and cultures of the Pacific people which incorporate wise management, born of their long history of living successfully in the region, as expressed in accepted customs and rules of conduct;

Seeking to ensure that resource development for the benefit of the people shall be in harmony with the maintenance of the unique environmental quality of the region and the evolving principles of sustained resource management, particularly in view of increasing population densities;

Building on the established processes of regional co-operation based on independence, consultation and consensus;

#### Declares that :

- The resources of land, sea and air which are the basis of life and cultures for South Pacific peoples must be controlled with responsibility, and safeguarded for the benefit of present and future generations, through sustained resource management.
- 2. Integrated environmental, economic, social and resource planning and management is essential to ensure sustainable rational use of the land and sea resources of the region, and the greatest enhancement of human well-being.
- 3. An effective programme of public information, education and training is necessary to promote basic environmental understanding by the people, as well as the skills necessary for effective environmental assessment and management.

- 4. Appropriate and enforceable legal instruments and institutional arrangements are a necessary basis for effective integration of environmental concern with the whole development process.
- 5. A system of specially-designated areas such as national parks and reserves is essential for the protection of traditional use of resources, and should be included in resource use planning.
- 6. The economic utilization of resources, particularly forests and fisheries, should be based upon reliable information to ensure sustainable production without over-exploitation or damage to the environment and affected peoples.
- 7. Management of the growth and distribution of population should be encouraged to ensure adequate management of natural resources and to maintain adequate standards of human well-being.
- 8. The rate and nature of discharges of non-nuclear wastes shall not exceed the capacity of the environment to absorb them without harm to the environment and to the people who live from it.
- 9. The storage and release of nuclear wastes in the Pacific regional environment shall be prevented.
- 10. The testing of nuclear devices against the wishes of the majority of the people in the region will not be permitted.
- 11. The vulnerability of much of the region to environmental and economic damage from natural and man-made disasters requires the development of national and regional contingency plans and prevention programmes.
- 12. Regional co-operation should be further developed as an effective means of helping the countries and territories of the South Pacific to maintain and improve their shared environment and to enhance their capacity to provide a present and future resource base to support the needs and maintain the quality of life of the people.
- 13. Traditional conservation practices and technology and traditional systems of land and reef tenure adaptable for modern resource management shall be encouraged. Traditional environmental knowledge will be sought and considered when assessing the expected effects of development projects.
- 14. Involvement and participation of directly affected people in the management of their resources, including the decision-making process, should be encouraged.

#### ANNEX 2

# ACTION PLAN FOR MANAGING THE NATURAL RESOURCES AND ENVIRONMENT OF THE SOUTH PACIFIC REGION

#### I. INTRODUCTION

- 1. The South Pacific Region has been designated by the Governing Council of the United Nations Environment Programme as a "concentration area" in which UNEP, in close co-operation with ESCAP and other relevant components of the UN system, working through the established co-operative regional agencies the South Pacific Commission (SPC) and the South Pacific Bureau for Economic Co-operation (SPEC) will fulfil its catalytic role by fostering the design and adoption of a regional Action Plan by the countries of the region.
- 2. The area of application of the  $\frac{Action}{Plan}$  is that covered by the area of reponsibility of the South Pacific Commission, together with any associated national maritime resource management zones.

Countries and territories within this area are:

American Samoa Cook Islands Federated States of Micronesia Fiji French Polynesia Guam Kiribati Marshall Islands Nauru New Caledonia

Northern Mariana Islands Palau Papua New Guinea Pitcairn Island Solomon Islands Tokelau Tonga Tuvalu Vanuatu Wallis and Futuna Western Samoa

#### II. OBJECTIVES

- 3. The principal objective of the Action Plan is --"to help the countries of the South Pacific to maintain and improve their shared environment and to enhance their capacity to provide a present and future resource base to support the needs and maintain the quality of life of the people."
- 4. The Action Plan is intended to provide a framework for environmentally sound planning and management, suited to the needs and conditions of the countries and people in the region, and to enhance their own environmental capabilities. Particular projects which should be undertaken under the Action Plan will be developed later in an operational programme document. The more specific objectives of the Action Plan are:
  - 4.1 Further assessment of the state of the environment in the region including the impacts of man's activities on land, fresh water, lagoons, reefs and ocean, the effects of these on the quality of man's environment, and the human conditions which have led to these impacts.
  - 4.2 The development of management methods suited to the environment of the region which will maintain or enhance environmental quality while utilizing resources on a sustainable basis.
  - 4.3 The improvement of national legislation and the development of regional agreements to provide for responsible and effective management of the environment.
  - 4.4 The strengthening of national and regional capabilities, institutional arrangements and financial support which will enable the Action Plan to be put into effect efficiently and economically.

#### III. HISTORICAL BACKGROUND

- 5. Regional activities providing formative guidelines for the Action Plan have been :
  - 5.1 A regional symposium on reefs and lagoons organized by SPC in 1971.
  - 5.2 The initiation by SPC of a Special Project on Conservation of Nature in 1974, and the appointment of a Regional Ecological Adviser.

- 5.3 Consultations with UNEP leading to the suggestion that a South Pacific Conference on the Human Environment should be held in the region.
- 5.4 The request by UNEP in 1975 to SPC to develop a comprehensive programme for environmental management for the region, including a Regional Conference on the Human Environment.
- 5.5 The decision of the South Pacific Forum in 1976 that SPEC should consult with SPC with a view to preparing proposals for a co-ordinated regional approach to the problem of environmental management.
- 5.6 The direction of the South Pacific Conference (1976) that a comprehensive environmental programme reflecting the environmental interests of all countries and territories in the region be jointly prepared by SPEC and SPC.
- 5.7 The reiteration of UN support for the programme at the ESCAP/UNEP Joint Programming Meeting in Bangkok in 1977.
- 5.8 The endorsement by the 34th Session of ESCAP held in Bangkok in March 1978 of "the idea of convening a South Pacific Conference on the Human Environment, and recommended that such a conference should be held in co-ordination with SPEC and SPC."
- Successive considerations of the proposal submitted to the Forum and the South Pacific Conference leading to refinement and re-definition of the proposal by a special meeting of officials in 1978 and subsequent adoption of the South Pacific Regional Environment Programme by the South Pacific Forum and the South Pacific Conference later that year.
- 5.10 The preparation of "country reports" by 18 governments of countries of the region as official statements on the state of the environment, the trends and problems.
- 5.11 The preparation by invited specialists of "Topic Reviews" of fields identified as of wide importance to the region from analysis of the country reports.
- 5.12 The consideration of the country reports and the topic reviews by a Technical Meeting of representatives of participating countries.

- 5.13 The very substantial scientific investigations which have been carried out and reported on in the region covering geology, soils, seas, plants and animals and their inter-relationships, together with a smaller but increasing body of investigation into socio-economic factors and the relationship of man to his environment.
- 5.14 The contributions of institutions of higher education and research in the region, and the provision of effective platforms for regional discussion (South Pacific Forum and South Pacific Conference), and to established bodies for regional action (SPEC and SPC).

#### IV. NATURE OF THE ACTION PLAN

- 6. All components of the Action Plan are inter-dependent and provide a framework for comprehensive action which should contribute to both the protection and continued development of the region. Each activity is intended to assist governments and regional organizations to improve the quality of the information on which environmental management policies are based.
- 7. The Action Plan will be implemented by making the fullest possible use of government and independent institutions in countries of the region, supplemented by appropriate regional bodies (SPC and SPEC), with assistance from participating countries and international institutions. For some projects, the assistance of experts from inside and outside the region will be required.
- 8. Efforts should be made to co-ordinate the implementation of the Action Plan with activities being undertaken in other Regional Seas Programmes, particularly those adjacent to the region.
- 9. In a subsequent step, the environmental assessment and management components of the Action Plan will be developed in the form of an operational programme document, taking into account current and planned programmes of the participating countries and regional and international organizations.

#### V. ENVIRONMENTAL ASSESSMENT COMPONENT

10. Many of the country reports indicate that policy makers consider environmental management to be primarily concerned with pollution controls and preservation. The programme will seek to emphasize that environmental assessment should attempt to establish harmony in the use of natural resources viewed from the true well-being of people at present and of future generations.

- 11. An essential element of the Action Plan must be the gathering of information on the processes taking place in nature in typical environments of the region and how man is modifying these natural processes for better or for worse. Special consideration should be given to this element at the earliest stage of planning development proposals. A working information exchange at which the findings of relevant work are assembled, wherever it has been done, and made available in a readily usable form, is a basic requirement.
- 12. A directory of institutions and professionals in the region with expertise in fields relevant to environmental assessment and management is a basic resource that is essential to efficient use of expert manpower. The SPC has the production of such a directory under consideration. It should be given high priority as a preparatory document necessary for the implementation of the Action Plan.
- 13. Although the region has only limited capacity to carry out research basic to the wise management of the environment, there are some very active research centres. An extensive body of knowledge already exists. Integrating studies building on the basic data available and translating them into "process" terms on which management effects can be superposed would, if well presented, probably attract the interest and participation of research institutions of high standing and capacity. Examples are the land/lagoon/reef ecosystem and the maintenance of fertility in tropical forest soils.
- 14. The region is short of local expertise in disciplines basic to the understanding and monitoring of natural and human-induced processes and to the management of man-induced land use systems such as agriculture and forestry. It also lacks the skills of inter-disciplinary integration which are necessary for sound environmental assessment. A practical means of creating such expertise would be to include suitable programmes of basic study and training programmes in environmental assessment at appropriate institutions within the region. Post graduate training in inter-disciplinary integration requires special emphasis.
- 15. Initial areas which have been identified as requiring environmental assessment on a regional basis are:
  - 15.1 The impact of sediments, tailings, nutrients, and metallic and organic pollutants on the river and lagoon/coral reef ecosystems.
  - 15.2 The impact of land use, and industrial and urban development on mangrove ecosystems.
  - 15.3 The impact of off-shore sea bed exploration and exploitation, and the processing of marine products, on the marine and adjoining ocean environment.

- 15.4 The impact of marine oil spills on sensitive coastal environments of the region.
- 15.5 The impact of tourism development on land/lagoon/reef ecosystems.
- 15.6 The impact of urbanization and increasing population density on representative environments of the region.
- 15.7 The impact of storage and utilization of pesticides on the small island environment.
- 15.8 The impact of subsistence and commercial activities on forests of the region, including the impact of the burgeoning demand for unprocessed logs for use outside the region.
- 15.9 The impact of development on the quality and quantity of available fresh water.
- 15.10 The impact of natural and artificial radioactivity on people and the environment including in particular the effects of nuclear testing.
- 15.11 The potential dangers to the region of the storage and dumping of hazardous wastes, particularly nuclear wastes, anywhere in the Pacific.
- 15.12 The impact of modern education systems and current development trends on traditional systems of resource management.
- 15.13 The impact of modern commercial agricultural production on traditional food and agricultural systems and the environment.
- 16. Effective environmental assessment on a regional basis requires acceptance of standards and procedures throughout the region, so that meaningful comparisons can be made. In general, this will involve adoption of compatible standards and procedures developed elsewhere but, where necessary, adapting them to Pacific conditions.

#### Examples are :

- 16.1 The adoption of standardized analytical techniques for measuring levels and trends of pollution and its effects.
- 16.2 The development of quality control in analytical procedures such as inter-laboratory calibration exercises both within the region and with outside reference laboratories.

- 16.3 The development of centres of expertise in equipment maintenance which could be available throughout the region.
- 16.4 The development of regionally compatible methodologies for the handling, validation, and evaluation of data basic to environmental assessment.
- 16.5 Though there will be variation in detail in assessment procedures according to differences in machinery of government, a standardization of terminology in the assessment process would assist in developing regional compatibility.
- 17. Successful regional assessment depends on the capacity of individual countries to undertake effective local assessment. Countries will be encouraged and assisted to establish mechanisms for effective environmental assessment suited to their own particular conditions, cultures, resources, and needs.

#### VI. ENVIRONMENTAL MANAGEMENT COMPONENT

- 18. Continuing socio-economic development in the region can only be achieved on a sustainable basis if environmental considerations are incorporated into the designing of developments. Improved knowledge of environmental systems may now enable some environmental errors of the past to be corrected and avoided in future.
- 19. The aim of the environmental management component of the Programme should be:
  - 19.1 To ensure that environmental assessments are thoroughly and effectively carried out, and that the results are incorporated into management programmes.
  - 19.2 To strenghen environmental education in school curricula and to support programmes to increase community awareness of environmental issues.
  - 19.3 To ensure that adequate training is provided for all levels of environmental management, so that skilled people are available within the region.
  - 19.4 To train managers and policy makers on how to take environmental considerations into account in management programmes.
  - 19.5 To encourage the development and effective placement of people skilled in environmental aspects of development.

- 19.6 To devise ways of making wise use of natural resources (such as land, water, minerals, and forests), balancing utilization with conservation and preservation, and the needs of present people with the needs of future generations.
- 19.7 To adapt to changing patterns of energy availability without damaging the environment, including the use of new sources.
- 19.8 To ensure that national and regional environmental management systems are compatible and complement each other.
- 19.9 To develop the framework of laws and international agreements necessary for wise regional environmental management.
- 20. Certains areas which are regarded as regionally important are:
  - 20.1 The management of the land/lagoon/reef ecosystem to maintain its health and condition.
  - 20.2 The balanced management of mangrove ecosystems to maintain their many uses including fisheries.
  - 20.3 The study of traditional land and marine tenure systems and their reconciliation with environmental management, especially in relation to conservation and the designation and management of reserves.
  - 20.4 The management of forests in such a way as to safeguard their health and vigour.
  - 20.5 The monitoring and publishing of international prices for commodities from the region and of royalties and taxes deriving from their production.
  - 20.6 The development of national contingency plans integrated with a regional control plan to minimize the effects of major oil spills.
  - 20.7 The management of fertilizers, pesticides, and herbicides in a small island environment to minimize their adverse effects on the environment and people.
  - 20.8 The continued gathering of information on the populations and movements of important types of fish throughout the region.
  - 20.9 The minimization of deleterious environmental effects of urbanization in the South Pacific.

- 20.10 The development of a strategy for prohibiting the storage and disposal of nuclear waste in the region.
- 20.11 The development of strategies to prohibit the testing of nuclear devices within the Pacific region against the wishes of the majority of the people.
- 20.12 The development of regional policies for the disposal of non-nuclear wastes.
- 20.13 The reconciliation of tourism development and protection of the environment in the South Pacific.
- 20.14 The development of mining methods with minimum deleterious effects on the environment.
- 20.15 The selection, dedication, and management of reserves, both land and marine, and their incorporation into a planned regional pattern of reserves.
- 20.16 The development of regional programmes for the safeguarding of regionally important endangered species of plants and animals - land and marine.
- 20.17 The consideration of means, appropriate to the countries of the region, of bringing the environmental factor effectively into government decision making.
- 20.18 The development of an effective environmental information exchange to ensure that the best available knowledge can be applied to environmental management in the region.
- 20.19 The development of a regional programme to control litter problems giving primary consideration to recycling and reuse and export of recoverable materials.
- 20.20 The development of appropriate sub-regional programmes to ensure the supply of safe domestic water.
- 20.21 The recording and revived use of traditional knowledge of island natural resources in order to complement scientific knowledge in the management of those resources.
- 20.22 The consideration of the effects on the environment and the economy of the introduction of exotic plants and animals.
- 20.23 The minimization of the adverse impacts of commercial agricultural development on traditional food and agricultural systems and on the environment.

20.24 The auditing of the effectiveness of previous environmental management decisions.

#### VII. THE LEGAL COMPONENT

- 21. Legal agreements generally provide the fundamental basis for regional co-operation to protect the environment. But in the South Pacific region, there is a wide diversity of approaches to environmental law and very different stages of legal development. Countries have expressed their need for assistance in developing their environmental legal controls and assessing the advantages and disadvantages of becoming parties to international conventions.
- 22. Most of the countries are small island states and still practise customary controls. For legislation to be effective, it must, as far as possible, be harmonized with customary practices to ensure that laws are effective and can be enforced.
- 23. The Convention on Conservation of Nature in the South Pacific (1976), not yet in force, could serve as a legal basis for regional co-operation on conservation in the region. A revised convention consistent with evolving principles of environmental management may need to be considered.
- 24. The legal component should:
  - 24.1 Identify existing customary controls, local by-laws and national legislation relevant to the protection and conservation of the environment. This should be done by national administrations.
  - 24.2 Examine and determine the most appropriate mechanism to harmonize the implementation of controls to ensure maximum effectiveness including examination of the need or otherwise to update, amend or pass new legislation. This can be done by national administrations with assistance from the programme.
  - 24.3 Examine the advantages of participation by countries in international conventions on the environment with particular emphasis on conventions on pollution of the environment by any source. This should cover the International Composite Negotiating Text of the United Nations Conference on the Law of the Sea and the London Dumping Convention. Individual countries should seek advice on appropriate national legislation to give effect to international conventions.

25. Expertise to undertake studies should as far as possible be recruited from the region and have the requisite knowledge of traditional customs of the region. In that respect, the programme should keep in close contact with the Regional Advisory Services being established in the region by the Commonwealth Secretariat and other regional institutions in the South Pacific.

#### VIII. INSTITUTIONAL AND FINANCIAL ARRANGEMENTS

- 26. In formulating institutional arrangements for carrying out the Action Plan, mechanisms should be worked out which use the national capabilities available and the capabilities of existing regional organizations. Where necessary, both national and regional institutions should be strengthened so that they have the capacity to gut the Action Plan into effect. The designation of national focal points a concept which proved successful in the assembly of the country reports should be used to facilitate communication and co-operation in the region.
- 27. The financing of operations under the Action Plan will be principally concerned with :
  - 27.1 Increasing the technical capacities and breadth of coverage of national and regional institutions to out the Plan into effect.
  - 27.2 Providing funds for personnel training inside and outside the region.
  - 27.3 Providing the costs for regional studies and meetings to develop common approaches to and understanding of regional environmental matters.
  - 27.4 Providing resources for special studies necessary for effective regional environmental management, but outside existing available capacities.
  - 27.5 Providing resources to establish and operate a regional information exchange system.
  - 27.6 Providing resources for the existing regional bodies to operate an adequate administrative tase to service the implementation of the Action Plan.
- 28. The activities arising from this Action flan should be principally financed by participating governments, by regional organizations, by international agencies, and by non-governmental organizations. Initially support should be provided by the United Nations system as a catalytic initiation of a new phase of regional co-operative activity.

- 29. To provide for the orderly evolution of an operational programme from the Action Plan, a central co-ordination mechanism is necessary involving the existing regional organizations and the major funding agencies.
- 30. The present Co-ordinating Group, consisting of representatives of UNEP, ESCAP, SPC and SPEC, should be retained as the central co-ordinating mechanism for the implementation of the Action Plan. The membership of this Group should be readily adjustable to reflect the emphasis of the programme and of its funding sources.
- 31. The Secretariat, including a Regional Co-ordinator, who could also perform the functions of the SPC Regional Ecological Adviser, should be appointed to cover the day-to-day execution of the operational programme including active communication with the co-operating organizations and the designated national focal points.
- 32. The ultimate aim should be to make the regional programme self-supporting, part of the normal programme of co-operative regional activities which would incorporate the SPREP objective "to help the countries of the South Pacific to maintain and improve their shared environment and to enhance their capacity to provide a present and future resource base to support the needs and maintain the quality of life of the people".