#### SOUTH PACIFIC PERMANENT COMMISSION - CPPS UNITED NATIONS ENVIRONMENT PROGRAMME - UNEP

# ACTION PLAN FOR THE PROTECTION OF THE MARINE ENVIROMENT AND COASTAL AREAS OF THE SOUTHEAST PACIFIC Brief Information

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#### PERMANENT COMMISSION OF THE SOUTH PACIFIC - CPPS GENERAL SECRETARIAT

#### PLAN OF ACTION FOR THE PROTECTION OF THE MARINE ENVIRONMENT AND COASTAL AREAS OF THE SOUTHEAST PACIFIC (Colombia, Chile, Ecuador, Panama and Peru)

#### I. BACKGROUND

The Plan of Action for the Protection of the Marine Environment and Coastal Areas of the Southeast Pacific, approved in 1981 by a Plenipotentiaries Conference, as well as the Convention for the Protection of the Marine Environment and the Coastal Zone of the Southeast Pacific (Convention of Lima) and other complementary agreements, establish the basis for achieving a fructiferous regional cooperation among Chile, Colombia, Ecuador, Peru and Panama, in order to preserve the marine and coastal environments. Just as it was adopted, this Plan of Action has the same characteristics of the other Regional Seas Programmes that the United Nations Environment Programme, UNEP, has promoted. The Permanent Commission of the South Pacific (CPPS), which is the appropriate marine organism created in 1952, has been appointed for its regional coordination.

The main objective of this regional cooperation mechanism is the protection of the marine environment and the coastal areas, in order to promote health preservation and the welfare of the present and future generations.

On the other side, the Convention for the Protection of the Marine Environment and Coastal Zones of the Southeast Pacific -also called "Convention of Lima"- 1981, compels the High Contracting Parties so as they make efforts, whether individually or by means of bilateral or multilateral cooperation, to adopt the appropriate measures for preventing, reducing and controlling the pollution of the marine environment and coastal zone of the Southeast Pacific and for assuring a correct environmental management of natural resources.

The Plan of Action of the Southeast Pacific includes the following components:

 Environmental evaluation: it is the main component which provides the scientific basis for the establishment of the other components, and includes the evaluation of oil-based pollution; the establishment of the magnitude reached by the pollution derived from industrial, mining and agricultural residues and its effects; as well as the pollution caused by domestic waste, radioactive pollution, marine environment pollution through the atmosphere, etc.



- Environmental management: it is carried out through the design and application of programmes aimed at preventing, watching, reducing and controlling pollution.
- Legal component: the development of regional instruments, which will be indicated subsequently, constitute an important achievement of the Plan of Action.
- 4. Institutional and financial devices: according to this component, the General Authority of the Plan of Action falls on periodical meetings among governments representatives (Intergovernmental Meetings). It is in charge of evaluating the state of execution of the Plan of Action and it approves Drafts and other activities.
  - Moreover, as institutional mechanism, it counts on the meetings of Consultative Groups, formed by experts named by the Governments.
     They are in charge of analyzing and advising regarding the scientific and technical aspects of the Plan of Action.
  - In order to assure the integral execution of the Plan of Action, the CPPS acts as Regional Coordination Unit (UCR) in order to perform the activities entrusted by the General Authority.
  - The Plan of Action is executed through national institutions, coordinated by the National Focal Points. The Governments have appointed in each country the National Focal Points of the Plan of Action, in order to perform a coordinated and harmonic work in the region. In Chile, the National Focal Point is the General Direction of Marine Territory and Merchant Navy, Chilean Navy; in Colombia, the General Direction of Organisms and Political, Economic, Social and Multilateral Conferences of the Ministry of Foreign Affairs; in Ecuador, the General Direction of Marine Interests of the Ecuadoran Army; in Peru, the National Focal Point is the Peruvian Sea Institute (Instituto del Mar del Peru IMARPE) and in Panama, the National Commission of the Environment, CONAMA.

The great changes that the environment has suffered in the last decade and the last global events related to the environment have represented a challenge for the Plan of Action so as it achieves a fast adaptation to these new global realities.

The important financing and technical support of the United Nations Environment Programme (UNEP) -institutional cooperation developed with the CPPS uninterruptedly since 1976- has been the essence of a great mobilization of institutions

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and experts of the region for searching cooperation actions in order to protect the marine environment and coastal areas in the Eastern Pacific.

#### II. ACTIVITIES OF THE PLAN OF ACTION

The activities included in the Plan of Action are assembled as follows:

#### 1. Research and Monitoring of Marine Pollution

The Environmental Evaluation is mainly carried out within the framework of the Coordinated Research, Surveillance and Control Programme of Marine Pollution of the Southeast Pacific (CONPACSE).

The Activities comprised the performance of research programmes regarding the evaluation of oil hydrocarbons and inventory of land-based pollution sources in selected critical areas. Studies regarding microbic pollution; studies of pollution effects over living organisms communities. Reports regarding the environment condition in the Southeast Pacific; national reports of consultations and Report of the First International Seminar on Research and Surveillance of Marine Pollution in the Southeast Pacific (70 scientific reports). Compilation of Reference Methods for Marine Pollution Studies, etc.

Courses about analytic methods for monitoring contaminants (national seminars). Regional Course regarding treatment and final disposition of residual waters and basic sanitation in coastal waters. Latin American Seminar on security and prevention of marine pollution derived from fishing vessels and fishing terminals and seminar on port facilities for the reception of wastes derived from vessels.

Five (5) Hewlet Packard gas chromatographers were located in 5 scientific institutions in Colombia, Chile, Ecuador, Panama and Peru, in order to establish the Regional Network of Pesticides Surveillance and reinforcement of CONPACSE.

In February 1995, the Regional Course on Determination and Analysis of Pollution caused by Pesticides and PVCs in Biological Organisms and Sediments took place in Lima, where the above mentioned gas chromatographer was used.

The Experts Meeting for Revising the Development of CONPACSE and the Condition of Marine Pollution in the Southeast Pacific took place in Guayaquil, Ecuador, in January 1996.



The II Meeting of the Ad-Hoc Experts Group regarding Radioactive Pollution took place in April 1996. There, experts elaborated a Profile of the Programme of Research and Monitoring of Radioactive Pollution in the Southeast Pacific and a Draft of the Contingency Plan about Radioactive Pollution.

On the other side, the Regional Inventory about land-based marine pollution sources is under preparation, as well as a study regarding the Condition of the Marine Environment in the Southeast Pacific.

In 1996, two expert meetings took place: one in Bogota, Colombia, and the other in Lima, Peru. They were aimed at examining the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities. The CPPS gave a great importance to this issue both in the preparation stage as well as in the implementation process.

#### 2. Environmental Management (Integrated Coastal Zone Management)

A Workshop on Methods and Techniques for Integrated Coastal Zone Management of the Southeast Pacific took place in October 1992 in Guayaquil. The course about coastal zones management was carried out in April 1993. The Course on Geographical Information Systems for Coastal Zones Management took place in September 1993.

Then, National Groups were created for the execution of case studies. The first stage of the case studies execution on Environmental Management was finished in Bahia de Valparaiso (Chile), Tumaco (Colombia), Bahia de Caraquez (Ecuador), Pisco-Ica (Peru) and Bique-Vacamonte (Panama), with the participation of multidisciplinary institutions. These activities are part of the Regional Plan of Integrated Coastal Zone Management of the Southeast Pacific.

The Experts Meeting about Integrated Coastal Zone Management of the Southeast Pacific took place in Viña del Mar, Chile, in November 1995. This meeting evaluated the results of said case studies and recommended the continuation of the second stage, in addition to the performance of training courses.

A course about integrated coastal zone management is foreseen for this year in Guayaquil, Ecuador, with the Programme of Management of Coastal Resources -PMRC- from Ecuador.

#### 3. Climatic changes

The "Regional Group regarding the Consequences of Climatic Changes on the Marine Environment and Coastal Areas of the Southeast Pacific" was established in the framework of the Plan of Action of the Southeast Pacific, on the basis of the regional interest for the consequences of climatic changes in the Southeast Pacific. It was in charge of preparing national and regional reports on the effect of climatic changes in marine and coastal ecosystems of the Southeast Pacific and it prepared in 1991 a regional diagnosis, published as "Effects of Climatic Changes on Marine and Coastal Ecosystems of the Southeast Pacific".

The III Regional Group Meeting, which took place in Santiago de Chile in 1992, recommended to carry out, in each member country of the Plan of Action, case studies regarding the consequences of socioeconomic effects of climatic changes, following the methodology recommended by the Intergovernmental Panel on Climatic Changes (IPCC-1991), using scenarios for the accelerated increase of the sea level to be reached in year 2,100.

Case studies were carried out since 1992 in Tumaco, Colombia; Concepción in Chile; Estuario del Rio Chone in Ecuador; Lima Metropolitana and Callao in Peru and Vacamonte in Panama.

The IV Regional Group Meeting regarding the Consequences of Climatic Changes in the Marine Environment and Coastal Areas of the South Pacific, which was carried out in Viña del Mar, Chile, in September 1996, examined the results of said national case studies, analyzed the applicability of the efficacy of the IPCC's common methodology (1991), examined the applicability of new methodologies contained in the IPCC's technical directrices (1995) and identified the areas of future action of the anthropogenic effects of climatic changes in the marine environment and coastal areas of the Southeast Pacific, in the context of the United Nations Framework Convention on Climate Change, to be considered in the next VIII Intergovernmental Meeting of the Plan of Action.

#### 4. Evaluation of the Environmental Impact

National Courses regarding the Basic Evaluation Techniques of the Environmental Impact in the Marine Environment and Coastal Areas of the Southeast Pacific were elaborated. An Expert Meeting about Evaluation Guides and Instructions of the Environmental Impact in the Marine Environment. Study Case (Chile).



Study Case on Evaluation of the Environmental Impact of a Draft of Coastal Aquiculture (Ecuador).

Seminar Workshop on Environmental Impact of a Coastal Aquiculture (Ecuador-1994).

According to the activities approved by the VII Intergovernmental Meeting of the Plan of Action, the execution of a new study case of Evaluation of the Environmental Impact is foreseen, as well as an expert meeting for the corresponding analysis.

#### 5. Protected Marine and Coastal Areas

The Regional Network of Protected Marine and Coastal Areas in the Southeast Pacific was approved in 1992 (V Intergovernmental Meeting of the Plan of Action).

The Working Plan for this Regional Network was prepared at an experts meeting.

A Monograph about Protected Marine and Coastal Areas of the Southeast Pacific was prepared with the support of the FAO, in the framework of this mechanism of environmental management.

The Ad-Hoc Group Meeting about Protected Marine and Coastal Areas of the Southeast Pacific took place in Panama, in June 1995, in order to implement, among other things, the "Protocol for the Conservation and Administration of the Protected Marine and Coastal Areas of the Southeast Pacific."

#### 6. Conservation of Southeast Pacific Marine Mammals

The Regional Diagnosis about the situation of Marine Mammals was elaborated, based on the national Reports of Consultations, and the Plan of Action for the Conservation of Marine Mammals was approved (V Intergovernmental Meeting).

National Groups of Marine Mammals have been formed.

The Experts Meeting for Analyzing the Activities of the Plan of Action for the Conservation of the Southeast Pacific Marine Mammals took place in Costa Rica, in January 1995. This meeting determined that great advances have been



made in research, management and legislation for the protection of these resources.

The realization of national and regional courses and studies about research and monitoring methodologies on incidental or addressed mortality of marine mammals is foreseen for this year.

#### 7. Marine and Coastal Biodiversity

The VII Intergovernmental Meeting of the Plan of Action approved the performance of studies on identification of marine ecosystems associated to high biodiversity and productivity levels and other habitat zones especially important and the establishment of the limitations which are necessary for using these zones by means of, among other measures, the creation of protected areas and the inventory of the flora and fauna in high biodiversity areas.

Currently, we count on the following studies:

- Preliminary Study on Biological Diversity in the marine zone contiguous to the Parque Nacional Chiloe: A Proposal of Protected Marine Area. Ivan Benoit Contese, Chile, 1996.
- National Study on Marine and Coastal Biological Diversity in a Protected Area. Management of the Marine Area of the Parque Nacional Machalilla. Ecuador. Segundo Coello. 1996.
- National Study on Marine and Coastal Biological Diversity in El Salvador. Proposal for declaring a Protected Area. Juan B. Ulloa, Margarita Salazar de Jurado, Nicolas F. Jimenez, Jose Luis Salazar. 1996.
- Contribution to the knowledge of Marine-Coastal Biodiversity of Isla de Malpelo, Colombia. National Report. CCO. May, 1996.

The experts meeting for analyzing the national studies on marine biodiversity in protected areas or on the way to being proposed as so is foreseen for this year.



#### III. INTERINSTITUTIONAL COOPERATION

The Plan of Action for the Protection of the Marine Environment and Coastal Areas of the Southeast Pacific is developed owing to a fluent interinstitutional cooperation between the Permanent Commission of the South Pacific -CPPS- and the United Nations Environment Programme -UNEP-. Moreover, it counts on the valuable support of the Intergovernmental Oceanographic Commission (IOC-UNESCO), the Food and Agricultural Organization of the United Nations (FAO), the International Maritime Organization (IMO), the International Atomic Energy Organization (IAEA), the World Health Organization (WHO), the United Nations Development Program (UNDP), the United Nations Industrial Development Organization (UNIDO), the Economic Commission for Latin America (ECLAC), etc.

#### IV. ACHIEVEMENTS

The evaluation carried out regarding the 15 years of the Plan of Action in an International Seminar, led to the following conclusions:

- 1. The Plan of Action has been a valuable experience of strenghtening the national capacities in benefit of the regional environmental concerns.
- 2. At a national extent, the Plan of Action allowed to catalyze institutional actions, facilitating efforts concentration in the priority needs for the protection of the marine environment and coastal areas in the respective countries. It has greatly impeled the national experts training.
- 3. The participation in the Convention of Lima and its different Protocols has generated a multiplying effect in national legislations.
- 4. The development of the different activities of the Plan meant an important notice to the different competent international organisms, which have joined their efforts to the action areas undertaken by the countries.
- 5. The Plan allowed to obtain an image of the condition of the region's marine environment, about which policies may be adopted, programs and specific activities may be designed, in order to solve the priority problems related to the marine environment.
- The results of the Plan of Action represented an attractive arena for the obtainment of additional resources and the incorporation of new global-regional environmental concerns.



- 7. The Plan of Environmental Management and new orientations derived from the United Nations Conference on Environment and Development have permitted the fast adaptation of the Plan of Action to these new realities, thus priorizing its activities in the following areas:
  - Integrated Management of Coastal Zones (Plan of Environmental Management).

- Climatic Changes (Increase of the Sea Average Level).

- Surveillance of the Marine Environment Pollution (Analytical quality control, pesticides surveillance, creation of databases, microbiological pollution).
- Protection of the Marine Biological Diversity (Regional Network of Protected Marine and Coastal Areas).
- Information Diffusion and Public Acknowledgement.

## V. CONVENTIONS AND PROTOCOLS IN THE FRAMEWORK OF THE PLAN OF ACTION

The legal component of the Plan of Action has been one of the most developed in the context of the Regional Seas Programme.

The Regional Conventions and Protocols in the framework of the Plan of Action in force to the date are the following:

- Convention for the Protection of the Marine Environment and Coastal Areas of the Southeast Pacific.
- Agreement on Regional Cooperation in Combating Pollution of the South-East Pacific by Hydrocarbons or other Harmful Substances in Cases of Emergency
- Complementary Protocol to the Agreement on Regional Cooperation in Combating Pollution of the South-East Pacific by Hydrocarbons or Other Harmful Substances in Cases of Emergency.
- Protocol for the Protection of the South-East Pacific against Pollution from Land-Based Sources.
- Protocol for the Conervation and Management of Protected Marine And Coastal Areas of the South-East Pacific.
- Protocol for the Protection of the South-East Pacific Against Radioactive Pollution.

The following are Drafts which are under consultation for its corresponding subscription:

 Draft Protocol on the Assessment of the Environmental Impact in the Southeast Pacific.



Draft Protocol about the Prohibition of Transborder Movements of Dangerous Wastes and their Disposal in the Southeast Pacific.

#### VI. WORKING PROGRAMME 1996-1997

#### 1996 ACTIVITIES

ACT. N°	ACTIVITY	DATE	PLACE
1/96	II Meeting of the Ad-Hoc Experts Group on Radioactive Pollution	April	Peru
2/96	Regional Inventory of Land-based Pollution Sources in the Southeast Pacific	First Semester	
3/96	Draft for the Establishment of a Regional Reference Laboratory for Analitic Quality Control and Distributive Plant of Standarized Patterns	Third quarter	
4/96	Support for the preparation of the Second Stage of the pilot studies on Environmental Ordering	April- September	
5/96	Support and assistance to the National Laboratories of CONPACSE		
6/96	Implementation of Pilot Studies of the Surveillance Network of Organochloride Pesticides		
7/96	Experts Meeting for incorporating the regional components of the Global Programme of Action for the Protection of the Marine Environment	May	Colombia
8/96	I Experts Meeting to examine the case studies results regarding the socioeconomic effects of climatic changes and increase of the sea level	May	Chile
9/96	Ad-Hoc Experts Group Meeting on the Incorporation of Central America countries to the Action Plan	June	Panama



ACT. N°	ACTIVITY	DATE	PLACE
10/96	Regional Course-Workshop on technical aspects to establish criteria for the Standarization and a Seminar-Workshop to establish methodologies of Environmental Impact	July	Peru
11/96	Regional Course on Integrated Management of Coastal Zones, with the support of the Programme of Coastal Resources Management of Ecuador, the UNEP and other agencies	July	Ecuador
12/96	Development of Priority Activities of the Action Plan for the Preservation of Marine Mammals in the Southeast Pacific	April-July	
13/96	Experts Meeting to analyze the national studies on marine biodiversity in protected areas or those to be protected	August	Panama
14/96	Regional Course on submarine outfalls and other urban and industrial wastewater disposal methods in the Southeast Pacific region	September	Chile
15/96	Preparation of training modules and manuals for the management of protected areas, addressed towards managers of protected marine and coastal areas	2nd semester	
16/96	Preparation of an updated review of the condition of the marine Pollution of the Southeast Pacific	2nd semester	
17/96	IV Consulting Meeting of National Focal Points of the Action Plan of the Southeast Pacific	October	Colombia



ACT. N°	ACTIVITY	DATE	PLACE
18/96	II Meeting of the High Contracting Parties of the Convention for the Protection of the Marine Environment and Coastal Areas of the Southeast Pacific	2nd semester	

#### 1997 ACTIVITIES

ACT. N°	ACTIVITY	DATE	PLACE
1/97	Study of the National Legislation and the preparation of a diagnosis on the protected marine and coastal areas of the Southeast Pacific	January- July	
2/97	Support and assistance to national laboratories of the CONPACSE for the development of the Coordinated Programme of Research, Surveillance and Control of the Marine Pollution		
3/97	Meeting of Technical and Juridical Experts for the Revision of the Protocol Draft on the Prohibition and Control of Transborder Movements of Hazardous Waste and their Disposal on the Southeast Pacific	January	Ecuador
	Consulting Study to examine the Conventions of the Action Plan	January	Ecuador
4/97	Regional Seminar Workshop on database management and geographic information systems for the environmental ordering of marine and coastal areas of the Southeast Pacific	February	Ecuador



ACT. N°	ACTIVITY	DATE	PLACE
5/97	Practical Regional Course on toxicology of organochloride pesticides and PVC in the marine ecosystem	April	Peru
	Regional Course on strategies and techniques of monitoring of organochloride pesticides and polichloride binephiles in organisms and marine sediments	April	Peru
6/97	National Consultations on economic devices, incentives, etc. for the promotion and management of natural resources	May	4
7/97	III International Seminar on Research and Surveillance of the Marine Pollution in the Southeast Pacific	May	Peru
	International Seminar on Radioactive Pollution in the Marine Environment of the Southeast Pacific	May	Peru
8/97	Experts Meeting for the analysis of the national studies on Coastal Profiles	June	Colombia
9/97	Implementation and development of the education and environmental awareness Programme for the protection of the marine environment and coastal areas of the Southeast Pacific	January - September	
10/97	Regional Seminar on the application of Programme 21	June	Colombia
11/97	Experts Meeting on Environment and Economy and Environmental Indicators for a Sustainable Development	August	Panama
12/97	Regional Seminar Workshop on Environmental Education of the Southeast Pacific	September	Chile



ACT. N°	ACTIVITY	DATE	PLACE
13/97	Labor Workshop on the diagnosis of the economic instruments for the environmental ordering of the marine and coastal areas of the Southeast Pacific	October	Colombia
14/97	VIII Meeting of the Consulting Group of the Action Plan of the Southeast Pacific VIII Intergovernmental Meeting of the Action Plan of the Southeast Pacific	November November	Peru
15/97	Publications and dissemination of regional and national studies, Consultant reports, course reports, workshop seminars, experts meeting, etc., carried out by Action Plan and other donations		