



United Nations Environment Programme



Distr.
GENERAL

UNEP/GC.14/16
25 March 1987

ORIGINAL: ENGLISH

GOVERNING COUNCIL
Fourteenth session
Item 10 of the provisional agenda

PROPOSED PROGRAMME BUDGET OF UNEP FOR THE
THIRD BIENNIUM OF THE SYSTEM-WIDE MEDIUM-TERM
ENVIRONMENT PROGRAMME, 1988-1989

Report of the Executive Director

Contents

	<u>Budget line or subline</u>	<u>Page</u>
INTRODUCTION		3
Proposed apportionment for the 1988-1989 biennium		8
I. EARTHWATCH		11
A. MONITORING AND ASSESSMENT	11	12
1. Global Environmental Monitoring System (GEMS)	111	12
2. Atmosphere	112	18
B. INFORMATION EXCHANGE	12	23
1. International Register of Potentially Toxic Chemicals (IRPTC)	121	23
2. INFOTERRA	122	28
3. State of the environment	123	32
II. ENVIRONMENTAL MANAGEMENT		34
A. OCEANS	21	34
B. WATER	22	52
C. TERRESTRIAL ECOSYSTEMS MANAGEMENT	23	61
1. Renewable resources management and conservation	231	63
2. Lithosphere (including biogeochemical cycles)	232	81
D. DESERTIFICATION CONTROL	24	86
E. ENVIRONMENTAL HEALTH (including agricultural chemicals)	25	93
F. PEACE, ARMS RACE AND ENVIRONMENT	26	98
G. TECHNOLOGY AND ENVIRONMENT	27	101
1. Energy	271	101
2. Industry and transportation (including working environment)	272	105
3. Human settlements	273	111
4. Natural disasters	274	114
III. SUPPORT		116
A. SUPPORT MEASURES	31	116
1. Environmental education and training	311	118
2. Public information	312	123
3. Environmental law and machinery	313	126
4. Environmental aspects of development planning and co-operation	314	129
B. TECHNICAL AND REGIONAL CO-OPERATION	32	134

INTRODUCTION

1. The present proposed programme budget of UNEP for the third biennium of the system-wide medium-term environment programme has been prepared in response to Governing Council decision 13/15. It is the result of extensive consultations among bodies of the United Nations system through bilateral and multilateral discussions, joint programming and meetings of the Designated Officials for Environmental Matters. It therefore reflects the collective efforts of the United Nations system.
2. In the last quarter of 1985 and the first nine months of 1986, the secretariat of UNEP made an evaluation of all completed and ongoing Fund projects (numbering close to 1,000). The conclusions were commented upon by Governments and the partners of UNEP in the United Nations system. The lessons learnt were taken into consideration in the preparation of this document.
3. The lessons from the evaluation exercise were applied mainly to new activities, but as many adjustments as feasible were introduced into the ongoing activities.
4. The principal modifications introduced into the present programme budget as compared with the previous ones reflect a greater emphasis on:
 - (a) The multidisciplinary aspect of activities;
 - (b) Larger scale activities at the expense of some of the less useful smaller ones;
 - (c) Greater selectivity in the choice of subject areas and countries in which activities will be implemented;
 - (d) Integration of activities into more comprehensive subprogrammes.
5. The recommendations of regional intergovernmental meetings in, for example, Latin America and Africa were also taken into consideration.
6. Over the past two or three years, UNEP has undertaken a number of activities to reach circles which do not have environment as their main concern (industrialists, parliamentarians, women's groups, youth organizations, religious institutions, etc.) A follow-up component has been incorporated into a number of programmes. It is, however, appreciated that there is considerable room for expansion of these activities.
7. A set of UNEP targets for 1992 and global goals for 1995 is proposed in document UNEP/GC.14/4/Add.4. They are not intended to cover the whole range of issues dealt with in the present document, but only to reach a few key objectives. Once the targets and goals are approved by

the Governing Council in 1987 and 1988 respectively, they will be used as management tools to measure the progress in improvement of the environment and its natural resources. Of course, this and future programme budget proposals will be geared to the achievement of these UNEP targets and global goals.

8. One of the purposes behind the restructuring of the Programme on the basis of the lessons learnt from the evaluation exercise is to present for the period of the next system-wide medium-term environment programme (1990-1995), a programme largely based on the following three basic concepts:

- (a) Advocacy of, and assistance in, the integration of environmental considerations in development policies, plans and projects;
- (b) Anticipation of future environmental problems;
- (c) Concentration on solving a limited number of the most serious existing environmental problems.

The present document constitutes an interim step in this direction.

9. The format of the present document follows that suggested in Governing Council decision 13/15. An introduction was added to each subprogramme and/or programme element, to explain its rationale and strategies. The structure of the subprogrammes and programme elements has been changed in accordance with the recommendations of the evaluation exercise. The table at the end of this section provides for a comparison between the proposed allocations for 1988-1989 for the restructured budget lines and the appropriations for 1986-1987 for the corresponding lines in the programme budget for that biennium.

10. Another major result of the evaluation exercise was the proposal to establish a higher degree of multidisciplinary within the Environment Programme. A newly introduced column, "Interlinkages", displays the correlations between the activities of the various subprogrammes and/or programme elements. A number of activities are funded from two or more budget lines or sublines, which also reflects the higher degree of programme integration.

11. In another newly introduced column, the small roman numerals indicate the relationship of an activity to one or more of the five criteria laid down in Governing Council decision 13/15, paragraph 1 (b), i.e. "that it addresses an environmental issue or problem which is:

- "(i) Essential to a basic understanding of a major environmental problem or to stimulating effective action to resolve such a problem;
- "(ii) Global in nature;
- "(iii) Likely to cause serious and widespread damage to health or ecological systems;
- "(iv) Of particular importance to the environment of developing countries;
- "(v) Of significance and occurring at the regional or subregional level or in multiple locations."

12. A third new column indicates to which of the following proposed UNEP targets for 1992 the activity in question relates:

- (1)
 - (a) Entry into force of the Vienna Convention for the Protection of the Ozone Layer;
 - (b) A protocol to the Convention, on the control of chlorofluorocarbons, signed by at least 20 Governments;
 - (c) Advanced preparation for a legal instrument to address climate modification and change in atmospheric conditions.
- (2) Establishment of inland water programmes similar to regional seas programme, with three regional action plans, giving priority to the Zambezi river basin.
- (3) Assist eight countries affected by soil degradation and desertification in re-orienting development plans to ensure they help control desertification and soil degradation.
- (4) Establishment of a working mechanism for encouraging Governments, through international co-operation, to ensure that at least 10 per cent of existing tropical forests ecosystems be designated protected areas.
- (5) Assist relevant Governments in adopting one regional action plan and two conventions and related protocols for the protection and development of the marine and coastal environment for the East Asian and South Asian Seas regions.
- (6) Preparation of guidelines for adoption by Governments on:
 - (a) Hazardous wastes;
 - (b) Trade in chemicals.In co-operation with other organizations, work towards translating guidelines into international agreements.
- (7) Prepare, in co-operation with other organizations and industry, two legal instruments on notification and mutual assistance in case of industrial accidents for adoption by Governments, together with a programme for anticipating and preventing such accidents or mitigating their negative effects.
- (8) Prepare, in co-operation with other relevant organizations, a legal instrument or instruments for facilitating access to low-waste technologies and measures and information regarding environmental technologies.
- (9) Assess the needs of some six developing countries for industrial management that is compatible with their environment, and arrange to meet these needs through assistance from developed countries, including their private sectors.

- (10) Advanced progress in the implementation of the Cairo Programme for African Co-operation adopted by the African Ministerial Conference on the Environment.
- (11) Support six countries in the application of environmentally sound guidelines for planning and management of human settlements as a means of facing the urban crisis.
- (12) Assist at least three developing countries, one from each developing region, in integrating environmental objectives in their national development planning processes.
- (13) Assist two countries in each developing region in the preparation, adoption and initial implementation of national conservation strategies.
- (14) Assist some ten developing countries to strengthen their national environmental machineries and establish coherent, implementable national environmental legislation.
- (15) (a) Prepare at least ten assessments of selected environmental problems to be used for environmental management. These assessments will cover, inter alia, the status of water pollution, global forests, soil loss, selected chemicals, and climatic change.
(b) Establish six operational GRID nodes linked via telecommunications and serving as regional or sectoral data exchange switchboards and training centres.
- (16) Increase the number of countries that have incorporated environmental education into their education system from 45 to 65.
- (17) Assist in the training of some 15,000 nationals from developing countries in different fields of environmental management.
- (18) Co-operate with some 20 selected developing countries in launching specific information campaigns.
- (19) Ensure that all major financing institutions have made serious efforts in:
 - (a) Implementing the 1980 Declaration on Environmental Policies and Procedures Relating to Economic Development by strengthening their own environmental units;
 - (b) Applying proper environmental impact assessments to all development projects which they finance;
 - (c) Supporting the Committee of International Development Institutions on the Environment (CIDIE) in becoming an effective forum for the integration of environmental considerations into policies and operational activities by multilateral financing institutions and development co-operation agencies.
- (20) Develop and promote a declaration on CIDIE to make it a strong forum for action on environmental considerations by bilateral aid agencies or ensure that such bilateral agencies become signatories to the 1980 declaration and thus members of CIDIE.

13. Completed activities of the 1986-1987 programme are not referred to in this document as they are already reported on in the 1986 Annual Report of the Executive Director.

14. For each subject area the presentation is in the following five sections, as proposed by the Governing Council in decision 13/15:

(a) Legislative authority. In the case of UNEP, applicable resolutions and decisions of the General Assembly, Economic and Social Council and Governing Council are shown. In the case of other organizations, references of their governing bodies' decisions are included as far as available;

(b) System-wide strategy. In most areas the system-wide strategy has not changed in the third biennium, and in such cases the text has been omitted from the present document, and cross-reference made to the appropriate text, generally the system-wide medium-term environment programme for the period 1984-1989 (UNEP/GC.10/7);

(c) Implementation of the strategy. This section is in three parts:

- (i) An explanation of the programme strategy of UNEP;
- (ii) A description of relationship to activities of other international organizations;
- (iii) A description of activities of UNEP.

The document classifies all activities in four categories:

- (i) Category A: Rephasings. This category gives an estimate of the cost of project activities where resources were committed but could not be implemented and thus were deferred from 1986-1987 to 1988-1989. Here, as throughout the document, all references to dollars are to United States dollars;
- (ii) Category B: Ongoing activities to be continued in the 1988-1989 biennium. This category includes all activities which were started in previous biennia and which will be continuing into the period 1988-1989. In some cases the description of the activities has been modified from that presented in the 1986-1987 programme budget, to reflect a refinement of the activities. In other cases activities have been merged, to reflect the line of maximum integration followed. The year of commencement has been indicated in brackets for each activity;
- (iii) Category C: Unimplemented activities of the 1986-1987 programme. This category includes activities which, although listed in the 1986-1987 programme budget, could not be started (because of lack of funds), but which are considered suitable for implementation in 1988-1989;
- (iv) Category D: New activities. This group includes activities which have been formulated to implement decisions of the Council and recommendations emanating from the evaluation exercise and those regarding the emerging issues and various topics discussed in the state-of-the-environment reports.

When describing these activities, the co-operating agencies and the major supporting organizations are identified by their acronyms, while for the national organizations acting as supporting organizations only their number is given. Under the heading "Interlinkages", specific mention is made only of those units of UNEP which will actively co-operate in the implementation of described activities, with the title of the subprogramme or programme element being followed, where appropriate, by the category and number of the related activity as it appears in the relevant section of this document. A list of abbreviations used appears in the annex to this document.

(d) Other activities of the United Nations system. The other activities of the United Nations system indicate the ongoing and planned activities of the system, both with and without the support of the Environment Fund in the implementation of the system-wide medium-term environment programme.

(e) System-wide budgetary implications. The section on system-wide budgetary implications reflects the provisional allocations, both of UNEP and other relevant United Nations bodies, necessary to implement the programme activities of UNEP as well as those of agencies described under section (d), "Other activities of the United Nations system". All relevant United Nations agencies had been invited to provide the relevant information. Unfortunately, at least two major agencies were unable to provide the necessary figures before the deadline. The agencies which have provided figures have, where relevant, divided them into regular budget (Rb) and extrabudgetary funds (Exb). The latter mainly derive from UNDP and multilateral and bilateral sources, so that each executing agency is left to indicate the funds deployed on environmental activities. Counterpart contributions will be further sought from national or regional supporting organizations. Some activities may also be supported through the clearing-house mechanism.

Proposed apportionment for the 1988-1989 biennium

15. By paragraph 15 of decision 13/36, Governing Council requested the Executive Director to draw up a programme for Fund activities and Fund reserve activities in 1988-1989 which would result in an estimated level of project expenditure of approximately \$50 million. By paragraph 2 of decision 13/15, the Executive Director was further requested to design the programme, at the cost determined by the Council, in two parts: a core programme costing the equivalent of up to 85 per cent of the total, and a supplementary programme costing the balance to 100 per cent that would be implemented only on receipt of the expected contributions from member countries on which the programme was based.

16. Taking into account shortfalls in project delivery that past experience has shown to be unavoidable, the Executive Director has, for the biennium 1988-1989, drawn up a programme of \$60 million for Fund programme activities and provided \$2 million for the Fund programme reserve. In accordance with the Governing Council's request, the programme has been drawn up on the basis that 85 per cent, or \$51 million, represents the core programme (formerly priority I) and 15 per cent, or \$9 million, constitutes the balance described as the supplementary programme (formerly priority II). In the document, core programme activities are indicated by the letter "C", and supplementary programme activities by "S".

17. The Executive Director has set out the financial framework of this programme in document UNEP/GC.14/22. In order to be able to implement the programme in full - both the core and the supplementary programmes - the Environment Fund will need to receive contributions of approximately \$60 million during the biennium. Any significant shortfall from that total will of necessity mean that the Executive Director will have to cut back supplementary activities. However, the financial projections also take into account the likelihood that part of the contributions to the

Environment Fund will be paid in non-convertible currencies. As a result, the planned programme of activities provides that some 25 per cent of the \$60 million programme shall be financed in these currencies. Since the availability of these currencies appears to be, at the time of compilation of this programme, more assured than the convertible currency component, cutbacks in the programme seem more likely to affect those activities planned to be financed in convertible currencies than those financed in non-convertible currencies.

18. If the Governing Council approves the programme set out in this document, it will be asked to approve an appropriation for Fund programme activities of \$60 million and an appropriation for Fund programme reserve activities of \$2 million. This will represent an authority to the Executive Director to allocate funds for the programme within the ceilings represented by these two appropriations, depending on the level of resources available to him at the time.

19. The apportionment of the total appropriation proposed between the two-digit budget lines (generally comprising a number of separate three digit lines) is indicated in the table below:

/...

Budget lines 1988-1989	<u>1986-1987</u> Appropriations		<u>1988-1989</u> Proposed allocations	
	Thousands of US dollars	Percentage of total	Thousands of US dollars	Percentage of total
1. <u>Earthwatch</u>				
11 Monitoring and assessment	7 850	13.1	8 300	13.8
12 Information exchange	5 400	9.0	5 600	9.3
Earthwatch total	13 250	22.1	13 900	23.1
2. <u>Environmental management</u>				
21 Oceans	6 780	11.3	6 900	11.5
22 Water	3 000	5.0	3 200	5.3
23 Terrestrial ecosystems management	6 290	10.5	6 300	10.5
24 Desertification control	6 000	10.0	6 000	10.0
25 Environmental health (including agricultural chemicals)*	2 950	4.9	2 100	3.5
26 Arms race and environment	360	0.6	350	0.6
27 Technology and environment	5 230	8.7	4 900	8.2
Environmental management total	30 610	51.0	29 750	49.6
3. <u>Support</u>				
Support	16 140	26.9	16 350	27.3
Grand total	60 000	100.0	60 000	100.0

* Including \$550,000 for IPCS which will be managed by IRPTC.

/...

I. EARTHWATCH

Elements

Earthwatch is a global environmental assessment programme performing four major functions: monitoring and assessment, evaluation, research, and information exchange. It provides the data, the understanding and the consensus necessary for the identification and assessment of specific environmental problems. Evaluation (including forecasting) is aimed at providing the continuous overview and stimuli necessary to assure that appropriate actions are taken.

Earthwatch is composed of the following programme elements:

(a) Monitoring and assessment, comprising:

- (i) The Global Environment Monitoring System (GEMS) concerned with monitoring, research and the production of assessments;
- (ii) Atmosphere, which is primarily concerned with the evaluation of and research on environmental problems related to the atmosphere;

(b) Information exchange, comprising IRPTC, INFOTERRA and State of the environment.

Links among the elements

Within Earthwatch, the GEMS Programme Activity Centre has been given the responsibility for co-ordinating all the assessment activities that might arise out of the whole of UNEP's programme; the necessary inputs are derived from GEMS monitoring data, the GRID system, environmental data, and the appropriate sources of the INFOTERRA and IRPTC networks.

The distribution of technical documents generated by the assessment process is carried out by the Information Service, INFOTERRA, IRPTC and other units as appropriate.

The establishment of GRID is a major step towards more effective use of GEMS data. GRID will assist users in gaining access to global and regional data currently scattered among various data centres. It will also assist Governments, particularly those of developing countries, in the identification and measurement of important environmental variables and in the development of national and regional monitoring capabilities. In this way GRID will serve as a bridge between assessment and management activities.

In addition, work is under way on the preparation of technical analyses of raw data and the preparation of full assessments. This is an ongoing task and will result in the production by 1992 of some 20 technical analyses and 10 assessments, based on data drawn from GEMS networks, as well as from other sources, including those within UNEP itself. In addition to the scientific reports, short and factually sound versions will be produced for the use of decision makers, managers and planners and for training purposes.

/...

A. MONITORING AND ASSESSMENT (budget line 11)

1. Programme element: Global Environmental Monitoring System (GEMS) (budget subline 111)

	Total allocation (thousands of US dollars)	Percentage of total budget
1988-1989	6 600	11.0
1986-1987	6 280	10.5

PPSC budget contribution to the implementation of the programme element: \$120,000
Regular budget contribution to the implementation of the programme element: \$40,000

(a) Legislative authority

Governing Council decisions 11/7, part one, para. 4 (e), and 13/1, section II, subsection 2

(b) System-wide strategy

UNEP/GC.11/7, p. 63 and p. 69

(c) Implementation of the strategy

(i) Programme strategy of UNEP

Improve and maintain existing international networks on air, water, food and climate

Develop methodologies for the analysis of relevant global and national environmental data; in the area of natural resources, cost-effective methods are employed using remote-sensing systems for resource analyses and assessments and for early warning, along with the complementary ground verification and calibration work to be carried out at the national level

The resource analysis system, the Global Resource Information Database (GRID) will be developed and utilized as an environmental management tool at the regional and national levels. GRID will help to bridge the gap between monitoring and assessment, and management. The initial phases of GRID will concentrate on developing appropriate institutional and communications machinery, compiling global resource data sets and on demonstrating the value of GRID through national case studies

Interpret and analyse environmental data and publish consolidated information for environmental managers

/...

One of the main tasks of GEMS is the production of assessments based on monitored data. The information strategy for each assessment includes determination of relevant target audiences, media contacts and distribution of materials. For each assessment, a dissemination forum involving the media and experts is held at appropriate locations

In the area of environmental data the strategy is to establish a machinery of periodic environmental data reports. The reports will draw data from relevant sources both within and outside the United Nations system

(ii) Relationship to activities of other international organizations

GEMS monitoring networks are operated by United Nations agencies (WMO, WHO and FAO), GEMS performing a co-ordinating role

Assessments are done with the co-operation of agencies and other international institutions, especially WMO, FAO, WHO and IUCN, following UNEP guidelines for the production of assessments

(iii) Activities of UNEP

- A. Rephasings: \$90,000 (C)
 B. Ongoing activities: \$5,520,000 (C)
 \$990,000 (S)

<u>Activity (implementation; year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
1. Management of GEMS/PAC (Internal)	All programmes	1600 (C) 100 (S)		(i), (ii), (iv), (v)	C, S (15a), (17)	Operational global networks improved methodologies; environmental data and assessments published for use by environmental managers
2. Support to the Conservation Monitoring Centre (CMC) (IUCN (EOG); 1984)	Wildlife and protected areas (B2); Oceans/Living marine resources (B1, C1)	180	FAO: UNESCO: 50	(ii)	S (15a)	Assessments on the status of selected species and groups; two specific analyses and one global assessment targeted by 1989 for use by environment planners

/...

3.	Rangeland monitoring (FAO, UNESCO, ILCA, UNEP/COM, national supporting organizations; 1979)	Desertification control (B9); Renewable resources management and conservation	200 (C) 200 (S)	UNESCO: 100	(i),(ii),(iii), (iv),(v)	C, S (10),(15a),(17)	National rangeland assessment and management plans; AVHRR monitoring methodologies for biomass estimates
4.	Integrated monitoring in biosphere reserves (UNESCO (biotic part), WMO (abiotic part), CMEA, national supporting organizations; 1987)	Atmosphere	100 (C) 60 (S)	UNESCO: 250 WMO:	(i)	C, S	A global monitoring network; publications; pollution pathways identified
5.	Global assessment of soil degradation (ISSS, FAO, UNESCO, ISRIC; 1987)	Renewable resources management and conservation/Soils (B2)	Multiline funded: 50 (C) 50 (S) from line 111; 110 from line 231/Soils	150 (ISRIC: 60 ISSS: 40 UNESCO: 50)	(i),(ii),(iii), (iv),(v)	C, S (3),(10),(15), (15a),(17)	Assessment of the state and trends of soil degradation for use by environmental managers
6.	Forest resource assessment and damages due to acid rain (FAO, ECE, UNESCO, UNEP/COM; 1986)	Forests (B3); Environmental law and machinery (B1)	Multiline funded: 50 (C) 100 (S) from line 111; 60 from line 231/Forests	FAO: UNESCO: UNEP/COM:	(i), (v)	C, S (15a)	Assessment of extent and changes in forest cover; assessment of forest damage due to acid rain in the ECE region for use by environmental managers and background information for the preparation of conventions
7.	Health-related monitoring (WHO, FAO, UNESCO, WMO; 1976)	Environmental health (D1); Training (B6); IRPTC (B1, B2, B6); Oceans/Global marine environment (B1)	500 (C) 200 (S)	WHO: 500 FAO:	(i),(ii),(iii), (v)	C, S (15a),(17)	Expanded networks (80 countries targeted); assessment on water quality, air pollution and food contamination; data and information reports (Sentinel); Establishment of 10 human exposure assessment locations; strengthened national health-related monitoring programmes in 50 member States for pollution control

8.	Support to the Monitoring and Assessment Research Centre (MARC) King's College, London (WHO; 1980)	Environmental health; IRPTC (B1, B3, B4)	600	WHO: 100	(i),(ii)	C (15a),(17)	Assessment statements on environmental pathways and human exposure to various pollutants; four technical analyses for development of control strategies
9.	Climate-related monitoring (WMO (BAPMON), IOC, ICSU, SCOPE and others; 1984)	Atmosphere (B1, B9); Environmental law and machinery (B1); Environmental training (B6)	440 (C) 100 (S)	WMO: ICSU: WMO: IOC: 50	(i),(ii),(iii)	C, S (15a),(17)	Expanded network, mainly in developing world, to assess trends in precipitation chemistry, particulate matter, carbon dioxide, turbidity; climate system bulletins; data available through WMO, later also through GRID leading to a better understanding of the climate system
10.	Environmental data Reports* (MARC, WRI/IIED; 1984)	State of the environment (B3)	390	WRI/IIED:	(i),(ii)	C	Environmental data for reports use by decision makers
11.	GRID, the Global Resource Information Data Base (Internal)	All programmes	1 550	600 (Governments of the United States, Switzerland, Norway, the Federal Republic of Germany, Austria, Japan)	(ii)	C (15b),(17)	Global, regional and national data sets for environmental assessment and management; five case-studies in UNEP concentration areas and two major assessments of applicability of GRID to be used by environmental managers for planning activities

* Previously under line 3105

12.	Regional network for environmental monitoring (African Governments; 1987)	Desertification control (B2); Renewable resources management and conservation/ Soils (B5)/ Forests (D2); Energy (B4)	40	200 (Governments)	(i),(iv),(v)	C	A first phase in the implementation of the pan-African environmental monitoring network (AFRINEM) to co-ordinate, standardize and expedite the collection, analysis and dissemination of environmental data on the state and trends of renewable natural resources for use by national, subregional and regional institutions
-----	---	--	----	----------------------	--------------	---	---

C. Unimplemented activities

1.	Determination of land cover and primary production through remote sensing (NASA, FAO)	Renewable Resources * Management and Conservation/ Soils (B2) Bioproductivity (D1)	*	*	(i),(iv)	C	A preliminary methodology to estimate biomass production for management purposes
----	---	---	---	---	----------	---	--

* The above activity was partly implemented in the 1986-1987 biennium under the internal GEMS/PAC project.

D. New activities

None

(d) Other activities of the United Nations system

ECE	Monitoring and assessment of air pollution effects on materials (including historic and cultural monuments) and on acidification of rivers and lakes, in the framework of the Convention on Long-range Transboundary Air Pollution
FAO	Further development of pest surveillance and assessment programmes, particularly that on the desert locust and its habitat; expansion of the Global Early Warning System on Food and Agriculture Development of forest survey methodologies and of national, regional and global forest assessments for forest products other than wood; monitoring of contaminants in fish and fishery products, particularly mercury, cadmium, PCBs and chlorinated hydrocarbons
FAO, UNESCO, WHO	Monitoring and assessment of the level and impact of pesticides and fertilizers on ecosystem stability and the environment
FAO	Further development of methodologies for agro-ecological zone determination; evaluation of land and soil production capabilities at national, regional and global levels
UNESCO	Promotion of the biosphere reserve network for baseline studies of natural ecological processes. Monitoring of glaciers, perennial ice and snow

/...

- WHO Promotion of health-related environmental monitoring through the continued operation of monitoring networks on global air and water quality at impact level and food contamination and through the implementation of a programme component on human exposure monitoring and assessment; activities directed towards the improvement and harmonization of methods and the acquisition of data which are comparable and valid; strengthening of national capabilities through training and other means of technical co-operation; co-operation with other programmes such as IPCS
- WMO Assessment of background atmospheric pollution and carbon dioxide (BAPMoN), atmospheric heat balance, solar radiation and total ozone; operation of World Weather Watch, and of the INFOCLIMA referral system; research and monitoring related to transboundary air pollution, integrated monitoring, and environmental climatology
- WMO, UNESCO, IOC Promotion of a global system for monitoring changes in atmospheric aerosol content; expansion of the ocean-atmosphere monitoring system
- WMO, WHO Monitoring of UV-B radiation at the Earth's surface
- FAO Establishment of country-level food information systems in conjunction with the FAO Global Early Warning System on Food and Agriculture; assessment and management of crop genetic resources at national, regional and global levels; assessment of the status of endangered, uniquely adapted or rare breeds of livestock, and establishment of regional livestock genetic resource data banks; assessment of local, national, regional and global fish and marine animal stocks, including development of appropriate assessment methods, with particular attention to brackish-water fisheries, assessment of fish stock genetic diversity
- FAO, UNESCO, IUCN Continuation and expansion of a marine resources data base
- FAO, UNESCO, IUCN, IUFRO Assessment of the status of endangered or vulnerable forest tree species and provenances
- IAEA Development of nuclear techniques for assessing contamination by trace elements
- IAEA/UNESCO Physics of natural resources and the environment (Trieste International Centre for Theoretical Physics)
- IMO, UNESCO, IOC Assessment of marine pollution by petroleum hydrocarbons from shipping activities as well as from coastal exploitation
- Regional commissions, UNESCO Assessment of local, national, and regional surface and sub-surface water resources
- UNESCO Preparation of state of knowledge reports on coastal areas, including mangroves, salt marshes and estuaries; extension of integrated applied research into the structure and ecology of tropical forests and woodlands, with due regard to social and cultural diversity
- WHO Assessment of environmental and health consequences of chemical, biological and environmental methods for controlling communicable diseases or vectors; assessments of health hazards created by new and emerging technologies in industry, energy production, agriculture, transport communication and by consumer products; assessments of drinking water quality

/...

WHO, FAO	Regional and global assessments of air, water and food contaminants, food additives, and pesticide residues
WHO, IARC	Evaluation, as part of IPCS, of the carcinogenic risks of chemicals and occupational exposures, and publication of monographs on individual chemicals
WHO	Development, testing and application of methods for assessing total human exposure to environmental pollutants and contaminants
WHO, UNESCO, IMO	Assessment of land-based sources of ocean pollution such as industries, settlements, etc., including source identification, discharge evaluation and assessment of the health effects of pollutants
ECA	Socio-economic assessment of food losses and encroachment of arable land in Africa

(e) System-wide budgetary implications in thousands of US dollars

UNEP	Priority C	5 610
	Priority S	990
WHO		2 000 Rb
IAEA		1 420 Rb
		920 Rb
UNESCO		1 000 Rb
FAO		50 Exb

2. Programme element: Atmosphere (budget subline 112)

	Total allocation (thousands of US dollars)	Percentage of total budget
1988 - 1989	1 700	2.8
1986 - 1987	1 570	2.6

PPSC budget contribution to the implementation of the programme element: \$120,000
Regular budget contribution to the implementation of the programme element: \$130,000

(a) Legislative authority

Resolution I of the Governing Council at its session of a special character, section III, paragraph 2 (a), and section IV, paragraph 2 (a); Governing Council decisions 11/7, part one, paragraph 4 (e) and part two, section B, subsection I, 12/14, section I, 13/18, section I, and annex, and 13/24

(b) System-wide strategy

UNEP/GC.10/7, paras 102 and 111; UNEP/GC.11/7, chapter C, section 1 (b)

/...

(c) Implementation of the strategy

(i) Programme strategy of UNEP

Through co-ordination of national climate impact studies, to improve the understanding of climatic processes and of their impact upon man and his environment. To incorporate climate considerations into planning. To co-ordinate research and the acquiring of data necessary to the assessment of the state of the atmosphere and the impacts of human activities, with particular emphasis on increasing levels of atmospheric pollutants and on the possibility of irreversible modification of the natural atmosphere, and to assess the nature and scale of the environmental impacts of such modification

To acquire, through internationally co-ordinated research, knowledge of the functioning of selected processes that play a significant role in maintaining the balance of the atmosphere and to initiate the development of methodologies to rationalize monitoring and assessment. To assemble and evaluate data for assessment report on selected topics, in order that the information necessary for appropriate managerial or policy options is available to decision makers

(ii) Relationship to activities of other international organizations

The activities of UNEP are co-ordinated closely with relevant activities of the United Nations system and with other international, governmental or non-governmental organizations having atmosphere related programmes. UNEP implements the World Climate Impact Studies Programme under the overall co-ordination of WMO as part of the World Climate Programme; the International Council of Scientific Unions participates with WMO and UNEP in this activity which is also supported by UNESCO, WHO, FAO and others. The World Plan of Action on the Ozone Layer is implemented by relevant organizations of the United Nations system under the co-ordination of UNEP

(iii) Activities of UNEP

A. Rephasings: \$100,000 (C)

B. Ongoing activities: \$1,240,000 (C)
\$260,000 (S)

<u>Activity (implementation; year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
1. Assessment of ozone layer modification and its impact (WMO, FAO, OECD; 1977)	GEMS (B9)	120	-	(i),(ii)(iii) (iv)	C (1)	Three assessment statements; publication of <u>Ozone Layer Bulletin</u> ; meeting of Co-ordination Committee on the Ozone Layer (physical aspects); meeting of Co-ordinating Committee on the Ozone Layer (health and environmental impacts)

/...

2.	Support of the interim secretariat of the Vienna Convention for Protection of the Ozone Layer (Internal; 1987)	Environmental law and machinery (B1)	-	-	(i)	(1)	Co-ordination of relevant data and technical information collection and dissemination to facilitate implementation of Vienna Convention for the Protection of the Ozone Layer
----	--	--------------------------------------	---	---	-----	-----	---

World Climate Impact Studies Programme

3.	Scientific Advisory Committee of the World Climate Impact Studies Programme (WCIP) (Internal; 1979)		100	-	(i)	C (1)	Recommendations of the Scientific Advisory Committee to review progress in the WCIP and recommend programme development
4.	Regional socio-economic assessment of impacts of climate change and analysis of policy response alternatives (IIASA, WRI, national institutions; 1987)		300 (C) 80 (S)	330 (IIASA: WRI: National institutions:)	(i), (iii), (v)	C, S (1), (17)	Expert group policy meetings in two selected regions (one developing and one developed); assessment statement on policy options for use in national decision-making
5.	Assessment of impact of sea level rise in coastal and river delta areas (National institutions; 1987)	Oceans/ Global marine environment (B1)	120	120 (National institutions:)	(i), (iii), (iv), (v)	C (1)	Assessment statement and policy guidance report for two selected regions (one developing and one developed)
6.	Advisory Group on Greenhouse Gases (ICSU, WMO; 1986)		50	20 ICSU: WMO:	(i), (iii), (iv), (v)	C (1)	Recommendations of the Advisory Group to international organizations on programme activities relevant to the greenhouse effect/climate issue
7.	Assessment of the impacts of extreme climate variability and change, including drought, on climate sensitive sectors e.g. agriculture, water, energy, health (WMO, FAO, WHO, UNESCO, COSPAR, IIASA, UNHCR, UNEPOM, ICSU; 1986)		200 (C) 100 (S)	500 WMO: FAO: WHO: 20 UNESCO: COSPAR: IIASA: UNHCR: ICSU:	(i), (iii), (iv), (v)	C, S (1), (17)	Three assessment statements, case study reports and recommendations for mitigation of drought impacts; support to African Centre of Meteorological Applications for Development

/...

8.	Co-ordination of national climate impact studies (Internal; 1986)		100		(i), (v)	C (1), (17)	Inventory of national climate impact studies to improve use of climate information for economic development
9.	Training in and application of methods of climate impact study. (IAMAP, ICSU, WMO, IIASA, COSPAR; 1987)	GEMS (B9)	150	80 IAMAP: ICSU: WMO: IIASA: COSPAR:	(i), (iv), (v)	C (17)	Seminars and workshops for training in application of climate impact assessment methods
10.	Second World Climate Conference, 1989 (WMO, ICSU; 1987)		100	80 WMO: ICSU:	(i), (v)	C (1)	Report and recommendations to Governments for climate applications in policy development

Weather modification

11.	Determination of environmental consequences of deliberate or inadvertent weather modification (WMO; 1974)		80	80 WMO:	(i) (iii) (v)	S (1)	Research reports to prevent adverse regional environmental impacts
-----	--	--	----	------------	---------------	----------	--

C. Unimplemented activities

These have been grouped together with ongoing activities and refer to elements 9, 10, 11, and 12 above which have been only partially addressed in previous bienniums owing to shortage of financial resources

D. New activities: \$100,000 (C)

	International conference on sources and future concentrations of atmospheric trace gases (WMO, ICSU, United States Environmental Protection Agency, Government of Canada; 1988)		100		(i), (iii), (iv), (v)	C (1)	Guidelines on international response legal instrument to global atmospheric issues
--	---	--	-----	--	--------------------------	----------	--

(d) Other activities of the United Nations system

WMO Continuation and improvement of applications of meteorological knowledge to aviation, shipping, water problems, agriculture and other human activities through World Weather Watch, the World Climate Programme, the Research and Development Programme, the Hydrology and Water Resources Programme, the Education and Training Programme, the Regional Programme and the Technical Co-operation Programme

In co-operation with ICSU, through the Joint Scientific Committee:

- (i) Investigation of climatologically significant processes: cloudiness and radiation; ocean processes; hydrological cycle and land surface processes;

/...

- (ii) Climate model development and assessment;
- (iii) Observational and diagnostic studies and determination of data requirements

WMO,
IGSU Monitoring of total ozone and solar radiation, simultaneous measurements of selected chemical species and research into chemical reactions of the atmosphere

WMO,
UNESCO Improvement of access to present and historical records of climatic data, as well as to other data sources, through better co-ordination of the work of institutions compiling these data, and the establishment of a referral system of climate-related data sources. Preparation and research to be carried out within the framework of the World Climate Research Programme on the relationship between climate and oceanic processes

WMO,
WHO,
FAO Monitoring of UV-B radiation at the Earth's surface, improvement of UV-B instrumentation and promotion of UV-B research with particular regard to human health and effects on plants and animals (see also system activities listed under GEMS)

ECA,
IFAD Socio-economic assessment of food losses and encroachment on arable land in Africa

ECE,
WMO Production of regular assessments of the acid rain situation

ECE Monitoring, modelling and assessment of long-range transboundary air pollution

(e) System-wide budgetary implications in thousands of US dollars

UNEP Priority C	1 440
Priority S	260
WHO	20 Rb
WMO	

B. INFORMATION EXCHANGE (budget line 12)

1. Programme element: International Register of Potentially Toxic Chemicals (IRPTC) (budget subline 121)

	Total allocation (thousands of US dollars)	Percentage of total budget
1988-1989	3 100	5.2
1986-1987	2 760	4.6

PPSC budget contribution to the implementation of the programme element: \$10,000
Regular budget contribution to the implementation of the programme element: \$20,000

(a) Legislative authority

Governing Council decisions 10/15, 10/16, 12/11, para. 4, 13/18, section III B, and 13/31

(b) System-wide strategy

UNEP/GC.10/7, para. 356

(c) Implementation of the strategy

(i) Programme strategy of UNEP

To undertake the further development of IRPTC, including the expansion of facilities for data collection, processing and dissemination, operation of a query/response service, networking of existing national and international information systems and provision of training and assistance in establishing and strengthening national data systems

To participate, jointly with organs of the United Nations system and other international organizations, in the further development and strengthening of the International Programme on Chemical Safety towards improved chemical safety at the country level

(ii) Relationship to activities of other international organizations

UNEP regularly co-operates with United Nations organizations, in particular the United Nations Department of International Economic and Social Affairs, FAO, IARC, ILO, IMO and WHO; and other international organizations, such as the Commission of the European Communities, OMEA and OECD, in programmes and activities related to collection and dissemination of reliable information on chemicals, assessment and control of health and environmental hazards due to chemicals, and manpower development and training to improve chemical safety, with special emphasis on problems and needs of developing countries. On an ad hoc basis, UNEP also exchanges information with the United Nations Centre on Transnational Corporations, ECE and UNDR0

/...

(iii) Activities of UNEP

A. Rephasings

None

B. Ongoing activities \$2,710,000 (C)
\$550,000 (S)

<u>Activity (implementation; year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
1. IRPTC Programme Activity Centre (Internal; 1976)	GEMS (B7, B8); Environmental health	1 750 (C) 200 (S)	-	(i),(ii),(iii), (iv)	C, S (6),(7), (14), (15a),(17)	Co-ordination of a global information network on chemicals; collection, validation, processing and assessment of chemical data, provision of training facilities and materials
2. Preparation, storage and dissemination of data profiles for chemicals and other chemical data compilations; IRPTC bulletins (Internal; 1977)	GEMS (B7); Oceans (B1)	250 (C) 20 (S)	50	(i),(ii),(iii) (iv)	C, S (6),(7), (15a)	Publication and dissemination of data profiles and other technical data compilations; two issues of the <u>IRPTC Bulletin</u> per year

/...

3.	Co-operation with and assistance to national and international information systems as contributing network partners (FAO, IARC, ILO, WHO, Governments; 1978)	INFOTERRA (B3); GEMS (B8)	250 (C) 100 (S)	50	(i),(ii),(iii), (iv)	C, S (6),(7), (17)	Operation and expansion of a global inter-active information network on chemicals; trained manpower
4.	Co-operation with and support for international chemical safety programmes, particularly IPCS (WHO, ILO, FAO, IARC; 1980)	GEMS (B8); Environmental health (B2)	100 (C) 20 (S)	-	(i),(ii),(iii), (iv)	C, S (6),(7), (14),(15a), (17)	Environmental health criteria documents, health and safety guides, international chemical safety cards, 50 trainees
5.	Continued operation and expansion of the query/response service (Internal, with assistance from Governments; 1976)	INFOTERRA (B3); Industry and transportation (B1)	200 (C) 50 (S)	-	(i),(ii),(iii), (iv)	C, S (6),(7)	Data and advice to Governments and others involved in chemical hazard assessment and control operations
6.	Review of information on environmentally dangerous chemical substances and processes of global significance (United Nations organizations, NGOs and industry; 1981)	GEMS (B7); Oceans/Global marine environment; Renewable resources management and conservation	40 (C) 20 (S)	-	(i),(ii),(iii), (iv)	C, S (15a)	Dissemination of evaluated scientific information on chemicals with advance warning function
7.	Implementation of a notification scheme for banned and severely restricted chemicals (FAO, intergovernmental organizations, Governments; 1984)	Environmental law and machinery (B1)	80	20	(i),(ii),(iii), (iv)	C (6),(14)	Improved information exchange for control of hazardous chemicals in international trade

/...

8.	Guidelines for the environmentally sound management of hazardous wastes and the safe handling and use of chemicals. (Governments, United Nations organizations, 1983)	Environmental law and machinery (B1); Industry and transportation (B2)	40 (C) 40 (S)	20	(i),(ii),(iii), (iv)	C, S (6),(7),(14)	Improved protection of human health and environmental quality from noxious effects of chemicals and wastes
----	--	--	------------------	----	-------------------------	----------------------	--

C. Unimplemented activities: \$30,000 (C)
\$30,000 (S)

<u>Activity (implementation; year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
Regular workshops and training courses for national correspondents (FAO, IARC)	GEMS; Renewable resources management and conservation	30 (C) 30 (S)	30		C, S (17)	Trained network partners

D. New activities

None

(d) Other activities of the United Nations system

DIESA	Preparation, jointly with other United Nations organizations and bodies, including WHO and UNEP, of a consolidated list of products whose consumption and/or sale have been banned, severely restricted or not approved by Governments
FAO	Assistance and guidance to Governments for the implementation of the International Code of Conduct on the Distribution and Use of Pesticides

/...

- ILO Promotion of the adoption and implementation of international conventions and recommendations for the control of workers' exposure to toxic and carcinogenic agents; collection and dissemination of information on occupational health and safety and preparation of guidelines for handling chemical accidents and for the reclamation of contaminated plant sites and adjacent areas; international occupational safety and health hazard alert system; support for manpower training related to safe handling and use of chemicals and hazardous wastes
- WHO Preparation of guidelines on treatment and disposal of hazardous waste and control of international trade in hazardous chemicals; preparation of monograph on hazard classification, and principles and procedures for developing environmental health standards; development, testing and application of improved techniques for assessing total human exposure to environmental pollutants and contaminants and the risks to health
- Surveillance and media and biological monitoring related to environmental pollution in selected areas
- WHO, FAO Assessment of health risks posed by food contaminants, food additives and pesticide residues, and preparation of recommendations on acceptable daily intakes
- WHO, IARC Continuing evaluation, as part of IPCS, of the carcinogenic risks of selected chemicals and occupational exposures, and publication of monographs thereon
- WHO, ILO, FAO Assessment of the health and environmental effects of priority chemicals of international significance in the framework of IPCS and publication of criteria documents, health and safety guides and international chemical safety cards. Development and evaluation of laboratory and epidemiological methods for the assessment of effects of chemicals on health. Assistance and advice for handling chemical emergencies; manpower development and training to improve chemical safety

(e) System-wide budgetary implications in thousands of US dollars

UNEP	Priority C	2 740
	Priority S	560

2. Programme element: INFOTERRA (budget subline 122)

	Total allocation (thousands of US dollars)	Percentage of total budget
1988-1989	2 050	3.4
1986-1987	1 920	3.2

PPSC budget contribution to the implementation of the programme element: \$10,000
Regular budget contribution to the implementation of the programme element: \$20,000

(a) Legislative authority

Resolution I of the Governing Council at its session of a special character, section IV, paragraph 2(a)(iv)

(b) System-wide strategy

UNEP/GC.10/7, paras. 90-91

(c) Implementation of the strategy

(i) Programme strategy of UNEP

To co-ordinate and activate networks of 129 INFOTERRA national focal points, 7,000 INFOTERRA sources of information, 24 INFOTERRA Special Sectoral Sources and 8 INFOTERRA Regional Service Centres, for the increased information flow on environmental subjects, in all regions of the world

To catalyse the input of substantive environmental information at the national level, through assistance provided to INFOTERRA national focal points to extend their activities beyond referral

(ii) Relationship to activities of other international organizations

An effective framework for international collaboration and co-ordination in respect of scientific and technical information is Intergovernmental Programme for Co-operation in the Field of Scientific and Technological Information (UNISIST) programme of UNESCO, which provides a conceptual framework for information systems development. The design and procedures of INFOTERRA closely follow the UNISIST concepts. Close co-operation will be continued at the operational level with the appropriate information systems of all United Nations, as well as non-governmental, organizations. All major United Nations organizations have registered their relevant information systems and/or substantive units, as INFOTERRA sources

(iii) Activities of UNEP

A. Rephasings

None

B. Ongoing activities: \$1,750,000 (C)
 \$4,300,000 (S)

<u>Activity (implementation; year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
1. Operation of INFOTERRA Programme Activity Centre (Internal)		850	-	(i),(ii),(iv)	C*	Operation of the Programme Activity Centre, a global environmental information system, an environmental database; an operational query- response service; bulletins and technical publications; national environmental information systems, especially in developing countries; trained manpower

*/ As a primary information service unit, INFOTERRA provides substantive information support for most of the Environment Programme upon request.

2.	Provision of referral services (Internal)		80	-	(i),(ii),(iv)	C	Referral services provided to users in all countries, United Nations and other organizations
3.	Support to acquisition of substantive information by developing countries (Internal, in co-operation with ILO, UNESCO, UNIDO, UNEP/COM)	GEMS; IRPTC (B3, B5); Industry and transportation (B1)	460 (C) 100 (S)	-	(i),(iv)	C, S	On-line access to data banks; improved substantive information from 24 Special Sectoral Sources and 8 Regional Service Centres
4.	Development and strengthening of the network of national focal points (Internal)	Environmental training (B6)	200 (C) 200 (S)	-	(i),(ii),(iv)	C, S	Training of 30 focal points; promotion of use of INFOTERRA. Assistance to focal points in computerizing their operations; strengthening telecommunication links within INFOTERRA network
5.	Publications (Internal)	Information	160	-	(i),(ii),(iv)	C	<u>INFOTERRA International Directory</u> and supplements, for distribution to all INFOTERRA focal points, and United Nations organizations; <u>INFOTERRA specialized directories</u> , for distribution to specialists; <u>environmental experience exchange series</u> ; <u>INFOTERRA Bulletin</u> and bibliographies of selected United Nations documents on the environment, for distribution to focal points

C. Unimplemented activities

None

D. New activities

None

/...

(d) Other activities of the United Nations system

United Nations	Operation of some 30 information systems and data banks, many of which provide information of environmental relevance (including the Dag Hammarskjold Library, the Bibliographic Information System, the Development Information System, the Population Information Network, World Statistics in Brief, etc.)
Regional commissions	Operation of economic information systems and data banks, notably the ECLAC Latin American Centre for Economic and Social Documentation (CLADES), the ESCAP Documentation Information System and the ECA PADIS
UNCHS	Development of a unified terminology and information system for human settlements
UNIDO	Operation of INDIS and INTIB, providing information relating to all aspects of industrial development and technical alternatives
UNDP	Collection and dissemination by INRES of information on the capacities of developing countries that are available for technical co-operation activities with other developing countries
ILO	Operation of some 15 information systems and data banks, with CIS most closely related to environmental issues
FAO	Operation of some 30 information systems and data banks, many of which are closely related to environmental issues
UNESCO	Operation of some 40 information systems and data banks, the Man and Biosphere Information System being the most closely related to environmental issues
IOC	Operation of the Marine Environmental Data and Information System (MEDII), co-sponsored by FAO, UNESCO and UNEP
WHO	Operation of some 30 information systems and data banks, including World Health Statistics, Appropriate Technology for Health Information System, Epidemiological Information System, etc.
World Bank	Operation of seven information systems, including the documentation referral and the Interactive Indexing System
WMO	Operation of the INFOCLIMA information system, providing meteorological and other environmental information
IMO	Maintenance of a specialized collection of literature in the field of prevention and control of marine pollution, safety of life at sea, etc.
IAEA	Operation of seven information systems and data banks, with INIS being the major system of environmental relevance

Many other organizations have information systems, some of them covering a number of environmental concerns. These include the Referral Programme of Academic Services of UNU, the Documentation Centre of UNHCR, the data bank on natural disasters operated by UNDRR, the ICAO information system on air safety, etc.

(e) System-wide budgetary implications in thousands of US dollars

UNEP	Priority C	1 750
	Priority S	300
WHO	Health information:	25 000 Rb

/...

3. Programme element: State of the environment (budget subline 123)

	Total allocation (thousands of US dollars)	Percentage of total budget
1988-1989	250	0.4
1986-1987	720	1.2

PPSC budget contribution to the implementation of the programme element: \$20,000
Regular budget contribution to the implementation of the programme element: \$200,000

(a) Legislative authority

General Assembly resolution 2997 (XXVII); Governing Council decisions 47 (IV), para. 10, 11/1, section II, para. 4, 12/3 B and C, 13/9 B and D, and 13/23, para. 2

(b) System-wide strategy

General Assembly resolution 2997 (XXVII), section I, para. 1 (d); Governing Council decision 47 (IV), para. 10

(c) Implementation of the strategy

(i) Programme strategy of UNEP

To implement the Governing Council decisions for a follow-up of past state-of-the-environment reports, and to prepare a world state-of-the-environment report on a biennial basis, utilizing, inter alia, the data and results of assessments available through GEMS. Separate reports on emerging environmental issues and environmental events also to be prepared on an annual basis. UNEP will also continue to assist selected developing countries in the preparation of their national state-of-the-environment reports

(ii) Relationship to activities of other international organizations

Inputs for the preparation of reports are obtained from, among other sources, international organizations. The annual state-of-the-environment report is finalized during an expert group meeting, including experts from international organizations

(iii) Activities of UNEP

A. Rephasings: \$40,000 (C)

B. Ongoing activities: \$170,000 (C)
\$40,000 (S)

/...

<u>Activity (implementation; year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
1. Preparation of annual state-of-the-environment reports (Internal; 1973)	All programmes	140 (C) 20 (S)	-	(i)	C, S	Two annual state-of-the-environment reports
2. Analysis of environmental issues of global significance (Internal, in co-operation with United Nations agencies; 1985)		30 (C) 20 (S)	-	(i),(ii),(iii), (iv)	C, S (15)	Report on emerging environmental issues
3. Support for the preparation of national state-of-the-environment reports (1985)		To be funded under line 32 (Regional and technical co-operation)	-	(iv)		National state-of-the-environment reports prepared by developing countries with the assistance of UNEP
<u>C. Unimplemented activities</u>						
None						
<u>D. New activities</u>						
None						
<u>(d) Other activities of the United Nations system</u>						
ECE	Preparation of a review of environmental policies and strategies in the ECE region. Preparation of an experimental compendium of ECE environment statistics					
<u>(e) System-wide budgetary implications in thousands of US dollars</u>						
UNEP	Priority C	210				
	Priority S	40				

II. ENVIRONMENTAL MANAGEMENT

UNEP plays its catalytic and co-ordinating role at all levels - local, district, national, sub-regional, regional and global - initiating and/or accelerating actions and activities aimed at the integration of serious environmental considerations in the management of world natural resources, to ensure their sustainable utilization. Environmental management involves the suggestion of procedures and mechanisms to reduce or prevent unnecessary, costly damage to natural resources and assistance in improving the planning and design of development activities. Assistance is also provided in the formulation of appropriate regulations and standards. UNEP therefore provides both intellectual and financial support for the production and application of tools and guidelines, the training of experts at various levels from developing countries, the implementation of pilot demonstration projects, and so forth. Environmental management actions are based on proper assessment of the problem in question.

A. OCEANS AND COASTAL AREAS (budget line 21)

Elements

The subprogramme will have three elements:

- (a) Global marine environment;
- (b) Regional seas programme;
- (c) Living marine resources.

These three elements will, however, be implemented under the co-ordination of the Oceans and Coastal Areas Programme Activity Centre (OCA/PAC) in an integrated way, without any sharp boundary between them, and keeping in mind that the assessment component of the subprogramme represents the marine component of GEMS.

Rationale

The protection of the marine environment involves more than pollution control. Since most of the problems of the marine environment are generated by land-based activities, its objectives cannot be achieved without dealing with that part of the terrestrial environment which exerts a decisive influence on the quality of the marine environment. Consequently, the strategy and policy of UNEP in the implementation of the subprogramme has been and remains an interdisciplinary and integrated approach dealing with the factors (policies, plans and activities) causing deterioration of the coastal and marine environment, harm to living resources, destruction of ecosystems and amenities, and hazards to human health.

Human impact on the marine environment is of a global nature, although it is most prominent in coastal waters, semi-enclosed and marginal seas bordering highly populated and industrialized zones. Except for a few that are truly global (e.g. the impact of expected global warming and sea-level rise, the build-up of persistent contaminants due to long-range atmospheric and oceanic transport processes, damage to widespread marine and coastal ecosystems due to commercial exploitation or destruction of habitat), most marine environmental problems are region- and site-specific. Therefore a globally co-ordinated regional approach to their solution will continue to be pursued as the most promising strategy.

Principal directions

The main achievements expected in the biennium are:

- (a) Adoption and implementation of a comprehensive action plan for the protection of the marine and coastal environment for the South Asian Seas;
- (b) Integration of the monitoring programmes carried out by networks of national institutions in the framework of nine adopted regional seas action plans into a globally co-ordinated programme;
- (c) Formulation of a feasible integrated global ocean monitoring programme;
- (d) Training of five hundred experts annually, predominantly from developing countries, in subjects relevant to the assessment of the sources, levels and effects of pollutants, to the management of the coastal and marine environment and to the protection of living resources;
- (e) Continued implementation of all major components of the Global Plan of Action for the Conservation, Management and Utilization of Marine Mammals;
- (f) Increase in the number of national institutions participating in UNEP-sponsored "Oceans" programme by 20 per cent over the last biennium;
- (g) Establishment of a co-ordinated data processing mechanism based on GRID (GEMS) and using to the maximum degree the existing systems, procedures and mechanisms. This mechanism will constitute a basis for the assessment of the status of the marine environment and for the proper management of the cause agents for its deterioration.

The strategy adopted for the subprogramme element is cross-sectoral, covering practically all aspects of UNEP's programme. Nevertheless, in the forthcoming biennium stronger working relationship (joint projects) will be established with activities being planned by other programme units, such as GEMS/PAC, IRPTC/PAC, the Environmental Education and Training Unit and the Information Service.

The catalytic role of UNEP will be further strengthened in the forthcoming biennium by enlisting the participation of an increasing number of international, intergovernmental, regional and national institutions in the programme. Although the subprogramme has already attracted considerable resources from sources other than the Environment Fund of UNEP, efforts will be pursued to make it self-sufficient and to use the resources of the Environment Fund only to catalyse new developments.

Practically all activities of the subprogramme are long-term in nature. For easier understanding of their organic links and interrelationships they are presented as grouped under the same titles as in other sections of this document. The indicated outputs of ongoing activities in the section dealing with the regional seas programme are very tentative, as they depend, in most cases, on the decisions of annual intergovernmental meetings yet to be held. The outputs from the regional seas action plans are intended to further the goals of these action plans and therefore the use is not specifically mentioned.

	Total allocation (thousands of US dollars)	Percentage of total budget
1988-1989	6 900	11.5
1986-1987	6 780	11.3

PFSC budget contribution to the implementation of the subprogramme: \$60,000
Regular budget contribution to the implementation of the sub-programme: \$140,000

1. Programme element: Global marine environment

(a) Legislative authority

Governing Council decisions 11/7, part 4, section A, and 12/12, section VIII

(b) System-wide strategy

As in UNEP/GC.13/8, page 59

(c) Implementation of the strategy

(i) Programme strategy of UNEP

To assist international efforts aimed at understanding and controlling global marine pollution problems. Some of these efforts are initiated and co-ordinated by UNEP, while others are supported as they contribute to the strategy stated above.

(ii) Relationship to activities of other international organizations

Several international organizations play an eminent role in the implementation of specific components of the system wide strategy and UNEP closely co-operates with all of them

(iii) Activities of UNEP

- A. Rephasings: \$20,000 (C)
B. Ongoing activities: \$510,000 (C)
\$30,000 (S)

<u>Activity (implementation, year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
1. Evaluation of the state of the art of coastal modelling; global review of the state of the marine environment; assessment of long-term ecological consequences of low-level marine contamination; review of carcinogens and nutrients as marine pollutants (Prepared through GESAMP (IMO, FAO, UNESCO, WMO, WHO, IAEA, United Nations, IOC); 1975)	GEMS (B7); IRPTC (B2, B6); Atmosphere (B5); Environmental aspects of development planning (B1)	300 (C) 30 (S)	600 (Co-operating agencies)	(i), (ii), (v)	C, S (15a)	The reviews and studies will be published and distributed to Governments, international and national institutions and scientists for information and advice for the development of programmes for the protection of the oceans and management of its resources, including the implementation of the regional seas programme
2. Development, testing and application of guidelines and reference methods for marine pollution studies, and development of standards and reference materials to be used with these methods (IAEA, IOC, FAO, WHO, WMO, UNESCO)		210	400 (Co-operating agencies)	(i)	C	Twenty reference methods and two reference materials published, distributed and used by networks of national institutions participating in UNEP-sponsored marine pollution research and monitoring programmes, in order to ensure global comparability of data

/...

C. Unimplemented activities: \$20 000 (S)

<u>Activity (implementation; year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
1. Development of guide- lines for the assess- ment of environmental impacts of the disposal of radio- active wastes on the sea-bed as well as of sea-bed mining (IAEA, IMO)		20	200 (Co-operating agencies)	(i), (ii), (v)	S	Guidelines for use in assessment of environmental impacts of sea- bed mining and of radioactive waste disposal

The above activity was not implemented in the 1986-1987 biennium because, in view of the shortage of financial resources, the existing guidelines and those already being prepared were considered adequate.

D. New activities: \$20,000 (S)

<u>Activity (implementation; year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
1. Analysis of economic aspects of marine pollution (through GESAMP (IMO, FAO, UNESCO, WMO, WHO, IAEA, United Nations, IOC))		20	100 (Co-operating agencies)	(i), (ii), (v)	S	The analysis may assist Governments and national policy makers in defining their environmental manage- ment policies

(d) Other activities of the United Nations system

Scientific research (pure and applied)

WHO, IOC, FAO, IAEA	Study of the distribution of pollutants (water, sediments, organisms); effects of pollutants on the marine environment (organisms, water, sediments) and human health
IMO, FAO, IOC, UNESCO, WMO, WHO, IAEA, United Nations (co-sponsors of GESAMP)	Assessment of the state of the marine environment (pollution, health of the oceans)
IOC, IAEA	Basis for open-ocean monitoring
IOC, FAO, UNESCO, IESA	Relationship between marine environment and living and non-living marine resources
IOC, WMO	Ocean dynamics and climatic changes
WHO	Relationship between marine environment and human health; land-based sources of marine pollution

Methodology and monitoring

IOC, IAEA	Development of chemical analytical methods
IOC, UNESCO, IAEA, WHO, FAO	Determination of reference methods (sampling and analysis)
IAEA, IOC, WHO	Provision of analytical reference materials
IAEA, IOC, WHO	Intercalibration of sampling procedures and sample analyses, including provision of reference materials

/...

- IOC, IAEA,
FAO, UNESCO,
WHO
- Preparation of manuals on methods of marine environment research
- FAO, WHO
- Monitoring of selected contaminants in fish and fish products
- IOC, WHO,
UNESCO
- Monitoring of pollutants in the marine environment; applications of remote sensing to ocean research and protection

Technical assistance

- IMO
- Marine pollution prevention and control; technical, legal and administrative assistance to countries in the implementation of international conventions, codes and guidelines aimed at the protection of the marine environment
- IMO, IAEA,
WHO
- Implementation of marine environmental conventions and protocols
- IOC, IMO,
WHO, FAO,
United Nations,
IAEA
- Development of marine environmental quality criteria
- IESA, TDC,
UNESCO
- Promotion of technical co-operation among developing countries in coastal area development and management, exploration of mineral resources, marine and coastal technology acquisition and application
- UNIDO
- Promotion of the manufacture of hydrophobic expanded perlite to remove oil spills

Data and information management

- FAO, IOC,
United Nations,
UNESCO
- Aquatic Sciences and Fisheries Information System
- ECA
- Developing capacities for acquisition and assessment of marine surveying technologies
- IOC
- International oceanographic data exchange
- WMO
- INFOCLIMA (Collaboration established with BAPMoA)
- IMO, FAO,
UNESCO, WHO,
IAEA, United
Nations,
WMO, UNEP,
(co-sponsors of
GESAMP), IOC
- Marine Environmental Data Information Referral System (MEDI)

Training

IMO, FAO, Seminars, workshops, courses
UNESCO, WHO,
IAEA, IOC,
United Nations,
WMO, UNEP
(co-sponsors of
GESAMP), IOC

IOC, FAO, WHO, Development of national infrastructures in the field of marine environment
UNESCO

UNESCO Development of school and university curricula

Specialized supporting ocean services

IOC, WMO Integrated Global Ocean Services System

IAEA Development of regulatory criteria for the disposal of radioactive waste in the marine environment; technical support for marine radioactivity monitoring and investigation (Monaco laboratory); data collection, evaluation and research on radionuclide inputs into the marine environment (Monaco laboratory)

(e) System-wide budgetary implications in thousands of US dollars

UNEP	Priority C	530
	Priority S	70
WHO		50 Rb
IAEA		4 350 Rb
UNESCO		
(including IOC)		2 500 Rb
		3 500 Exb

2. Programme element: regional seas

(a) Legislative authority

Governing Council decisions 11/7, part one, para. 4 (f), part four, sections A and B, and part eight, section A, para. 1 (f); 11/8, para. 2 (d); 11/9, para. 2 (b); 12/12, section VIII, para. 3 and section IX; 12/17 C, para. 3; 12/17 D, para. 6 (c); 13/18 section II; 13/25; 13/32; 13/34, paras. 4 (a), (b), (d), (e), (f) and 5

/...

(b) System-wide strategy

UNEP/GC.10/7, para. 134

(c) Implementation of the strategy

(i) Programme strategy of UNEP

To assist international efforts aimed at understanding and controlling regional marine pollution problems by:

- (a) Developing a co-ordinated information system and data base and regular reports on the state of regional seas and coastal areas using existing information, data and facilities;
- (b) Adoption of action plans for the protection of the marine and coastal areas;
- (c) Adoption of regional conventions and related protocols for the protection and development of the marine and coastal environment;
- (d) Training of experts in the protection of marine and coastal environment

Some of these efforts are initiated and co-ordinated by UNEP, while others are supported as they contribute to the strategy

(ii) Relationship to activities of other international organizations

Several international organizations play an eminent role in the implementation of specific activities of the system-wide strategy, and UNEP closely co-operates with all of them as reflected below

(iii) Activities of UNEP

- A. Rephasings: \$200,000 (C)
- B. Ongoing activities: \$4,770,000 (C)
 \$800,000 (S)

<u>Activity (implementation; year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
1. Co-ordination of the oceans and coastal areas sub-programme (three elements under budget line 21) through direct implementation of a number of projects or through supervision and guidance of projects implemented by co-operating agencies and supporting organizations (United Nations, FAO, UNESCO, IOC, WHO, WMO, IAEA, IUCN and others, 1977)	GEMS; IRPTC; Information; Environmental training	1 600 (C) 100 (S)	500 (Co-operating agencies)	(i),(ii),(iii), (iv),(v)	C, S (5),(15a), (17),(18)	Co-ordination of UNEP's oceans programme according to the decisions of the Governing Council and relevant intergovernmental meetings
2. Implementation of the Mediterranean Action Plan: promotion of the establishment of marine parks and protected areas, promotion of the construction of marine waste outfalls and waste treatment plants, manual on environment impact assessment, provision of equipment and technical assistance to participants in the Action Plan (FAO, UNESCO, IOC, WHO, WMO, IAEA, IMO, UNIDO, IUCN, 1975)		100 (C) 100 (S)	8 000 (Trust Fund) 2 000 (Co-operating agencies) 20 000 (Supporting organizations)	(i),(iii), (iv),(v)	C, S (17),(18)	Four national contingency plans, three national monitoring programmes signed, 20 technical reports, adopted protocol on the control of pollution from offshore exploration and exploitation, 250 experts trained in subjects relevant to the Action Plan

/...

<p>3. Implementation of the Kuwait Action Plan: Assistance to the the secretariat of Action Plan (ROPME) in its implementation (ROPME, IOC, UNESCO, IAEA, IMO, IUCN; 1974)</p>	20	<p>1 000 (Trust Fund) 600 (Co-operating agencies) 1 400 (Supporting organizations)</p>	<p>(i),(iii), (iv),(v)</p>	<p>C (17)</p>	<p>Several technical reports resulting from specific project activities; further strengthening of national capabilities by training of experts in subjects relevant to the action plan; environmental impact assessments in several countries</p>
<p>4. Implementation of the Caribbean Action Plan; implementation of decisions of Contracting Parties to the Cartagena Convention (ECLAC, FAO, UNESCO, WHO, PAHO, IMO, IOC, CCA, CARICOM, OAS, IAEA and ten supporting organizations; 1974)</p>	300	<p>1 000 (Trust Fund) 300 (Co-operating agencies) 500 (Supporting organizations)</p>	<p>(i),(iii), (iv),(v)</p>	C	<p>Twenty-three priority projects implemented; protocols on land-based sources of pollution and protection of endangered species adopted</p>
<p>5. Implementation of the West and Central African Action Plan; implementation of decisions of Contracting Parties to the Abidjan Convention (DIESA, FAO, UNIDO, IOC, UNESCO, WHO, WMO, IAEA, ECA; 1977)</p>	<p>400 (C) 80 (S)</p>	<p>1 100 (Trust Fund) 700 (Co-operating agencies) 400 (Supporting organizations)</p>	<p>(i), (iii), (iv), (v)</p>	<p>C, S</p>	<p>Three national contingency plans and one multi-lateral contingency plan; three studies on national marine environmental legislation; harmonization of national legislation with the Abidjan Convention; network for marine pollution monitoring areas requiring special protection identified; environmental impact assessment</p>

/...

<p>6. Implementation of the Eastern African Action Plan; implementation of decisions of Contracting Parties to Nairobi Convention (FAO, UNESCO, WHO, IMO, IAEA, IUCN, ECA; 1980)</p>	<p>500 (C) 80 (S)</p>	<p>900 (Co-operating agencies) 300 (Supporting organizations)</p>	<p>(i),(iii), (iv),(v)</p>	<p>C, S (17)</p>	<p>Marine pollution research monitoring network; national contingency plans for maritime emergencies; management plans for a network of protected areas, including training of managers</p>
<p>7. Implementation of the East Asian Seas Action Plan; implementation of decisions of the Co-ordinating Body on the Seas of East Asia (UNESCO, IOC, IMO, IAEA, IUCN, WHO; 1977)</p>	<p>300 (C) 50 (S)</p>	<p>350 100 (Trust Fund) 50 (Co-operating agencies) 200 (Supporting organizations)</p>	<p>(i),(iii), (iv),(v)</p>	<p>C, S (15)</p>	<p>Operational co-operative network of pollution monitoring and research institutions</p>
<p>8. Implementation of the Red Sea and Gulf of Aden Action Plan; Assistance to PERSGA in the implementation of the Action Plan (UNESCO, ALESCO, PERSGA, FAO, IOC, IMO, WHO, IAEA; 1973)</p>	<p>80 (C) 20 (S)</p>	<p>300 (Co-operating agencies)</p>	<p>(i),(iii), (iv),(v)</p>	<p>C, S (17)</p>	<p>Trained experts for participation in national and regional environmental projects; national contingency plans for maritime emergencies</p>
<p>9. Implementation of the South Pacific Action Plan; assistance to the secretariat of the action plan according to decisions of countries participating in the South Pacific Regional Environment Programme (ESCAP, SPC, SPEC, IOC, IMO, WHO, IUCN, IAEA; 1975)</p>	<p>400 (C) 80 (S)</p>	<p>200 (Co-operating agencies) 1 800 (Supporting organizations)</p>	<p>(i),(iii), (iv),(v)</p>	<p>C, S (5),(17)</p>	<p>About 25 technical reports from various projects of the action plan; fully operational regional networks of research and training institutions</p>

/...

10. Implementation of the South-East Pacific; Action Plan assistance to the secretariat of CPPS in the implementation of the Action Plan according to the decisions of Contracting Parties to the Lima Convention (CPPS, IOC, WHO, PAHO, IMO, IAEA, UNESCO; 1977)	300 (C) 50 (S)	200 (Co-operating agencies) 1 500 (Supporting organizations)	(i),(iii), (iv),(v)	C, S (17)	Expanded pollution monitoring programme; national contingency plans to control pollution in cases of emergencies; case-studies on environmental impact assessment; training and intercalibration exercises
11. Implementation of the South Asian Seas Action Plan; Implementation of decisions taken by Governments participating in the Action Plan (ESCAP, UNDP, IMO, IOC, IUCN, WHO, SACEP, IAEA; 1983)	450 (C) 80 (S)	125 (Co-operating agencies) 125 (Supporting organizations)	(i),(iii), (iv),(v)	C, S (5)	Action plan and convention for South Asian Seas region adopted; implementation of priority projects initiated.
12. Preparation of global, regional and subject-specific directories and bibliographies relevant to the oceans and coastal areas subprogramme (FAO, IOC, UNESCO, IUCN; 1976)	100 (C) 80 (S)	100 (Co-operating agencies)	(i),(iii), (iv),(v)	C, S	Fifteen directories and bibliographies

13. Interregional co-operation (FAO, WHO, UNESCO, IOC, IAEA, SPREP, SPC, CPPS, SACEP, and others; 1976)	220 (C) 80 (S)	250 (Co-operating agencies)	(i),(ii), (iv),(v)	C, S (17)	Seven interregional seminars; five interregional intercalibration workshops; five interregional courses on analytical techniques for marine pollution studies; five interregional seminars on environmental impact assessment consultations between secretariats; interregional seminars on data management, etc.
<u>C. Unimplemented activities</u>					
None					
<u>D. New activities</u>					
None					
<u>D. Other Activities of the United Nations system:</u>					
IOC	IOC regional subsidiary bodies undertaking programmes of international co-operative marine sciences, ocean services and related training, education and mutual assistance, covering relevant aspects of UNEP regional seas action plans. Sub-Commission for the Caribbean and Adjacent Regions (IOCARIBE); IOC/WMO/CPPS Working Group on the Investigation of El Niño (south-east Pacific); Programme Group for the Western Pacific (WESTPAC); Programme Group for the Central Indian Ocean (CINDIO); Programme Group for the Co-operative Investigation of the Northern and Central Western Indian Ocean (CINOWIO); Programme Group for the Central Eastern Atlantic (IOCEA). IOC also works, at the secretariat level, through marine science officers (also acting as IOC assistant secretaries) assigned to UNESCO regional offices for science and technology. Development through the Marine Pollution Monitoring System of regional networks and monitoring programmes of selected contaminants				
UNESCO	Advancement of international marine research and methodology; development of marine science infrastructure in developing countries; training and education in marine science and development of university curricula; major interregional project for research and training leading to the integrated management of the coastal systems				
IAEA	Evaluation of the environmental impact of radio-nuclide releases into the sea; intercalibration exercises and issue of reference materials to national institutions to promote analytical quality control; instrument maintenance				

- FAO There are a number of fishery commissions for which FAO provides the Secretariat and which are concerned with fishery matters in a broad sense: the General Fisheries Council for the Mediterranean, covering the Mediterranean; the Fishery Committee for the East Central Atlantic, covering the area from Morocco to Zaire; the Indian Ocean Fishery Commission, covering the whole Indian Ocean; and the Indo-Pacific Fishery Commission, covering the Western Pacific including the South China Sea. The latter body has an active Scientific Committee on Ocean Resources Research and Development. There are FAO regional offices for Africa (in Accra), Asia and the Pacific (in Bangkok), Europe (in Rome), Latin America (in Santiago) and North America (in Washington D.C.). The bodies and offices mentioned may be concerned with environmental issues whenever these are of importance to fisheries. The World Conference on Fisheries Management and Development was held in 1984
- WHO Six regional offices are implementing country and inter-country projects dealing with environmental health problems which, in some cases, include coastal pollution control components. In addition, regional centres for technical and scientific aspects of environmental health exist in the Western Pacific and in Latin America and will be established in other areas. Regional activities include the development of quality criteria for pollutant discharges, waste disposal, bathing and shellfish-growing waters and edible marine organisms, and the assessment of land-based pollution sources causing air, water and land pollution, source identification and the assessment of resulting health impacts. Regional and national training programmes support such activities. The Joint FAO/WHO Codex Alimentarius Commission, primarily through its Committee on Fish and Fishery Products, elaborates internationally agreed standards and codes of practice for fish and fishery products. These include, inter alia, provisions concerning chemical contamination of certain edible marine organisms
- Regional Commissions Technical advisory services to coastal States on the legal, administrative and technical aspects of the protection of the marine and coastal environment at regional and subregional levels
- ECA/UNESCO Development of marine science and technology in Africa
- ECA Development of environmental training for coastal area management, monitoring of marine pollution, and assessment and management of marine and coastal ecosystems for productive development
- WMO Monitoring of transfer of pollutants between the atmosphere and the seas

(e) System-wide budgetary implications in thousands of US dollars

UNEP	Priority C	4 970
	Priority S	800
WHO		350 Rb
IAEA		360 Rb
		300 Exb
UNESCO		
(including IOC)		3 400 Rb
		3 000 Exb
FAO		

3. Programme element: Living marine resources

(a) Legislative authority

Governing Council decision 12/12, section I

(b) System-wide strategy

UNEP/GC.10/7, para. 145

(c) Implementation of the strategy

(i) Programme strategy of UNEP

To assist international efforts aimed at the conservation, management and utilization of marine living resources, particularly marine mammals. Some of these efforts are initiated and co-ordinated by UNEP, while others are supported as they contribute to the strategy

(ii) Relationship to activities of other international organizations

The Action Plan has been endorsed by the major international organizations dealing with marine mammals conservation issues (FAO, IWC, IUCN) as a timely and valuable framework for policy planning and programme formulation by the international community; UNEP closely co-operates with all of these organizations

(iii) Activities of UNEP

A. <u>Rephasings:</u>	\$30,000
B. <u>Ongoing activities:</u>	\$330,000 (C) \$ 50,000 (S)

<u>Activity (implementation; year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
1. Implementation of the Global Plan of Action for the Conservation, Management and Utilization of Marine Mammals (FAO, IWC, IUCN)	GEMS (B2)	330 (C) 50 (S)	2 500 150 (Trust Fund) 350 (Co-operating agencies) 2 000 (Supporting organizations)	(ii), (iv), (v)	C, S (17)	Continuous co-ordination of marine mammals conservation activities world-wide; five technical reports distributed through network of supporting organizations; twenty individuals trained on marine mammal management and conservation techniques

C. Unimplemented activities: \$120,000 (S)

<u>Activity (Implementation; year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (Thousands of US dollars)</u>	<u>Counterpart Contribution 1988-1989 (Thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
1. Protection of fishery resources of developing countries from pollution and environmentally sound fisheries management (FAO, IOC, WHD, IAEA)	GEMS (B2)	120	500 expected from co-operating agencies	(ii),(iv),(v)	S (17)	Guidelines and manuals for protection of fisheries resources from pollution and on environmentally sound fisheries management techniques; pilot projects combined with training on the application of guidelines and manuals

This activity was implemented in a regional context in some regions under the regional seas budget and was therefore not implemented under this heading.

D. New activities:

None

(d) Other activities of the United Nations system:

FAO	Development and promotion of reliable stock assessment methods through support to research, organization of expert meetings and workshops, collection and dissemination of information and promotion of results in technical assistance and training programmes; support for local, national, regional and global assessment of fish and marine mammals resources through field projects and statistics on fish and other harvests from the aquatic environment; assistance in the formulation of national and regional policies and programmes for the management and development of fisheries in exclusive economic zones following the results of the World Conference on Fisheries Management and Development; provision of advice, technical assistance and training in planning and implementation of fisheries management and development programmes and on scientific, economic, legal and institutional aspects of fishery management and development, with particular attention to developing coastal States; advice on environmental issues of special importance to fisheries
ECA	Technical assistance to ECA member States for the implementation of the United Nations Convention of the Law of the Sea, involving the development of manpower capabilities, infrastructure and technologies for the exploitation of the oceans and the management of its resources
FAO, UNESCO	Field surveys for the identification and selection of marine and coastal protected areas, which need special protection; protection of ecologically significant ecosystems
FAO, UNESCO	In co-operation with IUCN and IWC, participation in the implementation of the Global Plan of Action on marine mammals

/...

UNESCO Research on near-shore ecosystems and their interrelationship with adjoining terrestrial systems through regional projects, organization of seminars and training activities; establishment of marine biosphere reserves

FAO, UNESCO, IOC Implementation of an international research and application programme on marine living resources with emphasis on biology, ecology and the effects of exploitation and environmental change on fish stocks; determination of variability of species and individual abundance in high diversity ecosystems; research on the interaction between marine species, their predators and their habitats, so as to improve knowledge of the possible effects of man's interference with these natural systems, with a view to the inclusion of adequate provisions for their protection and national management in relevant conventions

IMO Development and promulgation of guidelines on oil-spill dispersant application and environmental considerations with reference to the effect of use of dispersants on living marine resources

(e) System-wide budgetary implications in thousands of US dollars

UNEP	Priority C	360
	Priority S	170
UNESCO (including IOC)		800 Rb
FAO		1 500 Exb

B. WATER (budget line 22)

Rationale

As a result of accelerated human activities, water resources development and its associated environmental impacts on freshwater ecosystems are becoming more and more complex in their structural, spatial and temporal dimensions. There is an increased demand for fresh water for agricultural, industrial, municipal and recreational purposes. Not only is fresh water a renewable natural resource for which no substitute exists, it also plays a very important part in ecosystems. Contrary to the prevailing practice of considering water mainly as a natural resource, all these functions should be considered simultaneously. The interaction between the natural conditions of rivers and lakes, freshwater ecosystems within their basins and human activities is becoming ever more complex and conflicting. These water basins are changing rapidly due to large-scale development schemes. In view of these interactions and changes, water development activities and their environmental impacts cannot be managed solely in the context of individual projects, but should be considered on a basin-wide scale. This approach is particularly important in the case of international water basins.

Solving "environment versus development" conflicts generated in river basins by large water projects (dams, irrigation, etc.) and water-related activities (open-pit mining, road and industrial construction, forestry, tourism, etc.) requires a new and comprehensive approach which reconciles the competing interests and integrates them into environmentally-sound sustainable development plans through environmental management.

Objective and strategy

In the light of the above considerations and in line with UNEP policy to promote sustainable development, UNEP, in co-operation with United Nations agencies, has launched a new comprehensive water programme for the environmental management of inland waters (EMINWA). The objective of this programme is to help Governments reconcile conflicting interests of regional development and the water-related environment in whole water systems. The environmentally sound management of an inland water system would involve the preparation of a draft action plan, its adoption by the competent authorities and its actual implementation, including co-ordination, regular review and evaluation.

Implementation of the subprogramme

At the request of the Governments concerned, UNEP in co-operation with interested United Nations agencies, donors and non-governmental organizations, each in accordance with their specific terms of reference, will co-ordinate the assistance to the countries in preparing and implementing the action plans. Inland water systems in each region would constitute an element in a regional network at a later stage. These networks would link the UNEP regional seas programme to inland water management activities in river systems flowing into the regional seas. In the present programme period, however, UNEP will concentrate on the management of international water systems. As a first step, the Zambezi river system has been selected and will be followed by other inland water systems on the basis of the experience gained.

Interrelationships with other subprogrammes

Selected inland water systems will become the focal areas in which a variety of technical co-operation activities of UNEP and the United Nations system (soils, forests, desertification, health, wildlife, etc) are concentrated. The first steps of this co-ordinated concentration will be undertaken in the 1988-1989 biennium.

	Total allocation (thousands of US dollars)	Percentage of total budget
1988 - 1989	3 200	5.3
1986 - 1987	3 000	5.0

PPSC budget contribution to the implementation of the subprogramme: \$310,000
Regular budget contribution to the implementation of the subprogramme: \$70,000

(a) Legislative authority

Governing Council decisions 11/7, part five, para. 1 and UNEP/GC.13/8, part E, section A

(b) System-wide strategy

UNEP/GC.10/7, chapter V, paras. 163, 175 and 187

To promote sustainable development of inland water systems by integrating the environmental dimension into their management.

To harmonize the conflicting interests of environment and socio-economic development in river basins by the implementation of environmentally sound water management. This strategy contributes to the follow-up of the Stockholm and Mar del Plata Action Plans, the aims of the International Drinking Water Supply and Sanitation Decade and the implementation of the decisions of the African Ministerial Conference on the Environment.

(c) Implementation of the strategy

(i) Programme strategy of UNEP

To promote the incorporation of environmental considerations in the development and management of water resources in order to attain effective, long-term sustainable development in river and lake basins. The environmentally sound management of inland water (EMINWA) programme launched in 1986 is geared towards the implementation of this strategy in selected areas, first in the Zambezi river basin. UNEP is the initiator and co-ordinator of that programme, in co-operation with other United Nations agencies in the framework of the ACC Inter-secretariat Group for Water Resources.

The environmentally sound management of an international inland water system involves the preparation of a draft action plan by the Government concerned, its adoption and joint implementation, including co-ordination, regular review and evaluation. UNEP will assist Governments in this process. Such plans involve also close co-operation among various subprogrammes of UNEP (GEMS, desertification, regional offices, environmental health, soils, wildlife, forests, oceans) and the concentration of the elements of these subprogrammes as they apply to the particular system.

(ii) Relationship to activities of other international organizations

The programme is implemented on a co-operative basis by Governments, United Nations bodies, donor organizations and non-governmental organizations.

Interested United Nations organizations and bodies (United Nations Department of Technical Co-operation for Development, ECA, UNDP, WHO, WMO, UNESCO, FAO, etc.), in accordance with their specific mandates, and non-governmental organizations (IUCN, IAHS, IWRA, ILEC) participate in the preparation and implementation of plans of action in particular the Zambezi Action Plan, as a first step of the EMINWA programme, and in related activities (training network).

/...

(iii) Activities of UNEPA. Rephasings: \$100,000 (C)B. Ongoing activities: \$2,450,000 (C)
\$250,000 (S)

<u>Activity (implementation, year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
<u>EMINWA programme:</u>						
1. Approval and implementation of Zambezi Action Plan (ZACPLAN) (Governments of the Zambezi countries, SADCC, UNESCO, United Nations Department of Technical Co-operation for Development, ECA, World Bank, UNDP, WHO, WMO, FAO, INSTRAW, donor Governments, International Lake Environment Committee (ILEC); 1987)	Renewable resources management and conservation Soils (D1); Energy; Environmental health (C2); Environmental law and machinery (B1); Desertification control (B14); GEMS; INFOTERRA; Environmental training (B6); Information; Environmental aspects of development planning (B1)	Multiline funded: 800 from budget line 22; see under relevant activity for allocations from other subprogrammes or programme elements	9 000 (United Nations agencies: 500 Governments and supporting organizations: 8 500 WHO: 80)	(i),(iv), (v)	C (2),(10), (17)	Approved Zambezi Action Plan; Implementation of its Phase I: Initial network of monitoring stations established within the basin-wide integrated monitoring system for water quantity and quality; improvement of water supply, health and sanitation conditions; 100 professionals trained to implement the Action Plan

<p>2. Development of two action plans for fresh water bodies in Africa (e.g. lakes Chad, Victoria, Tanganyika, River Nile) (United Nations Department of Technical Co-operation for Development, ECA, World Bank, UNDP, FAO, UNESCO, WHO, WMO, INSTRAW, Governments, ILEC; 1987)</p>	<p>Environmental law and machinery (B1); Environmental training (B6); Desertification control (B14); Environmental aspects of development planning (B1)</p>	<p>Multiline funded: 350 from budget line 22; see under relevant activity for allocation from other sub-programmes or programme elements</p>	<p>1 000 (UNESCO: 30)</p>	<p>(i), (iv), (v)</p>	<p>C (2), (10), (17)</p>	<p>Two draft action plans submitted for approval of the basin countries; 100 experts trained. Commencing the implementation of environmental assessment part of the action plan</p>
<p>3. Preparatory work for further action plans in Asia and Latin America (Governments, United Nations agencies; 1987)</p>	<p>As above</p>	<p>100</p>	<p>-</p>	<p>(i), (iv), (v)</p>	<p>C (2)</p>	<p>At least two international water systems identified for action plans (ground-water aquifer, river systems); preparatory work started</p>
<p>4. Assistance to the Governments to develop EMINWA programmes for national water systems (Governments of India and Brazil; 1987)</p>	<p>As above</p>	<p>250</p>	<p>1 000 (Governments) ILEC UNESCO</p>	<p>(iv), (v)</p>	<p>S</p>	<p>Two action plans on the sound management of water resources in national river basins in India and Brazil</p>

<p>5. Development of a network of specialized training institutes in developing countries to train experts to implement river basin plans of action, including the improvement of rural drinking water supply and sanitation and the preparation of training materials and technical publications (Governments, UNEP/COM, UNESCO, WHO, ILO, ILEC; 1986)</p>	<p>Environmental training (B1 and B4); GEMS; Renewable resources management and conservation; Human settlements (B2); Energy (B2)</p>	<p>Multiline funded: 550 from budget line 22 and 10 from subline 311 (activity B4)</p>	<p>1000 (Governments: 800 ILEC and UNESCO: 100 WHD: 100)</p>	<p>(i),(ii)</p>	<p>C (17)</p>	<p>International training network established; 200 professionals from developing countries trained in environmentally sound water development; training and information materials to be distributed to national training and decision-making institutions in the countries involved in action plans</p>
---	---	--	--	-----------------	---------------	---

Other ongoing activities

<p>6. Development and implementation of methodologies for assessing and forecasting environmental impacts of large-scale water development projects including dams (UNEP/COM, ESCAP, Mekong Commission, Government of Viet Nam; 1986)</p>	<p>360</p>	<p>3 000 (Government of Viet Nam: 2 000 Mekong Commission Secretariat: 1 000)</p>	<p>(i),(v)</p>	<p>C (15),(17)</p>	<p>Pilot project on the use of inundated acid sulphate soils in the Mekong Delta area to promote sustainable agricultural development; training of 30 professionals to manage the pilot project and to disseminate the results</p>
---	------------	---	----------------	--------------------	--

7. Assessment and management of fresh-water bodies (Governments of Kenya and Nicaragua, ILEC, 1986) 290 960 (Governments: 900 ILEC: 60) (i),(v) C (15),(17) Water quality monitoring facilities; Water quality control programmes for Lake Victoria and Lake Managua; 30 trained experts on water quality management

C. Unimplemented activities

None

- D. New activities: \$200,000 (C)
\$200,000 (S)

<u>Activity (implementation, year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1968-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
1. Development and management of the all-African network of water resources (follow-up of the Cairo Conference) (African Governments, ECA, UNESCO)	Desertification control (B2); Renewable resources management and conservation/ Soils (B5)/ Forests (D2); Energy (B4)	Multiline funded: 100 (C) 100 (S) from subline 22; see under relevant activity for allocation of other sub-programme or programme elements	2 000 (Governments: 1,800 Co-operating agencies: 200)	(i),(iv),(v)	C, S (10)	Under priority C, a basic network of subregional centres established. Under priority S, a comprehensive network of national centres will be developed
2. Reuse of domestic waste-water for irrigation (Government of Egypt, Jordan, WHD, FAO)	Environmental health (C2)	100 (C) 100 (S)	500 (Governments: 450 WHD: 50)	(i),(iii),(iv),(v)	C, S (17)	Two pilot projects (one priority C and one S) to demonstrate the safe reuse of domestic sewage for irrigation; 30 professionals from the African and West Asian regions trained

/...

(d) Other activities of the United Nations system

Department of Technical Co-operation for Development	Activities related to overall water resources management and development at the national, regional and local levels, and exploration and efficient utilization of surface and ground water, including the establishment or strengthening of national services and training of personnel; periodic provision of information on the activities and co-operative arrangements of international river and lake organizations
Regional commissions	Appraisal of availability of water resources in the regions, including assistance in the assessment of surface and ground-water resources, advisory services for surveys and studies for ground-water development, planning and development of hydrological networks, assistance in the strengthening of data systems, and review of progress in the implementation of the Mar del Plata Action Plan. Incorporation of environmental considerations in water development projects; assistance to Governments in the formulation and implementation of integrated programmes on water resources; water pollution control, including transboundary pollution; rational use of water; guidelines for ground-water management; promotion of ground-water legislation
UNDP	Activities dealing with single-purpose or multi-purpose water resources development; assistance to Governments in the formulation and implementation of master plans for sewage disposal, irrigation, hydropower, assistance to river basin development authorities
ILO	Assistance in the assessment of selected national training institutions and identification of training needs for skilled workers and technicians in the field of water resources; development of the "modules of employable skills" approach in drinking water supply and sanitation; training of personnel in the operation and maintenance of low-lift pumps in irrigation schemes; management and development of water supply systems and sanitation projects; manpower assessment, technical and vocational training in water supply and sanitation skills and appropriate technology for water supply and irrigation systems
FAO	Assessment of water resources activities to identify, evaluate and prepare proposals for irrigation, drainage, water development and reclamation projects; watershed management, sediment control and water conservation. Non-operational activities may include surveys and programmes of systematic collection and processing of information, research studies, publications, seminars and training courses on water quality and environmental health (with WHO). Provision of advice and technical assistance to Governments on legislation relating to the conservation, development, use and administration of national and international water resources. Development of water quality criteria for effluents from agricultural operations. Promotion of water resources development and utilization
UNESCO	Under the International Hydrological Programme: assessment of water resources, including methods of determining water balances, remote sensing, mathematical modelling, nuclear and chemical methods in hydrology, ground-water computation and models, status of knowledge of hydrology of humid tropical zones and arid and semi-arid areas; guidelines for the assessment of water resources, research, pilot studies in drought-prone areas, use of water resources in coastal and deltaic areas; assessment of the influence of man's activities on the hydrological régime and the interaction of those activities with the environment; development and application of methodologies for integrated water resources management, development of hydro-environmental indices for the evaluation of water projects to be used in environmental impact studies; assistance in institution building in hydrological and water resources development research and training programmes

- WHO Assessment of drinking water quality and preparation of guidelines for the evaluation of drinking water. Development of laboratories and programmes for water quality control. Co-operation in the elaboration of plans and programmes for water supply and sanitation. Provision of a secretariat for the Steering Committee for Co-operative Action for the International Drinking Water Supply and Sanitation Decade
- WMO Under the Operational Hydrology Programme: exchange of information on and standardization of hydrological instruments and retrieval of hydrological data. Analysis of hydrological and related meteorological data as a basis for the assessment of the quantity and quality of water resources. Hydrological forecasting, including flood forecasting and the study of droughts. Development and strengthening of hydrological and meteorological services and technical assistance in the field of operational hydrology. Support to the international exchange of hydrological technology through the Hydrological Operational Multi-purpose Subprogramme
- IAEA Exchange of information on and technology transfer of isotope methods in the assessment of water resources; investigation of surface waters and global survey of precipitation from the point of view of basic data collection for application of environmental isotope techniques; study of water resources in Africa (arid and semi-arid zones)
- UNIDO Development of guidelines and methods for industrial use in river and lake basin development projects in Africa to assist the existing and new basin authorities to improve industrial water use and water treatment in the context of integrated river basin development. Development of a handbook on industrial water use in Africa to provide African engineers with data on new technologies
- UNICEF Assistance in the development of national plans and programmes for improving water supply and sanitation, including assessment and planning of low-cost water supply and sanitation, with particular regard to the needs of developing countries

- UNDRO Promotion of studies on the prevention and control of water-related disasters (floods, storm surges, landslides and mud flows), advice and assistance to Governments at their request in the formulation of long-term policies and programmes to prevent or mitigate losses from disasters; risk evaluation, vulnerability analysis and other aspects of flood plain zoning and management; planning of flood control and flood mitigation structures; strengthening of national disaster relief institutions and improvement of disaster preparedness. Incorporation of those techniques into land-use and water development processes
- FAO Provision of guidelines and assistance to Governments in the management of freshwater resources, including the monitoring and maintenance of adequate water quality for fisheries
- UNESCO Continuation, within MAB, of integrated studies on the ecological effects of human activities on the value and resources of lakes, marshes, swamps and deltas; training and dissemination of information

(e) System-wide budgetary implications in thousands of US dollars

UNEP	Priority C	2 750
	Priority S	450
WHO		20 000 Rb
		20 000 Exb
UNESCO		5 600 Rb
		2 500 Exb
IAEA		2 370 Rb
		1 520 Exb
FAO		
WMO		

C. TERRESTRIAL ECOSYSTEMS MANAGEMENT (Budget line 23)

Elements

This chapter presents an interdisciplinary programme on the rational use and conservation of the terrestrial environment and its resources, and the issues described therein bear on the terrestrial part of the biosphere, including certain aspects of the lithosphere. The resources considered are biological (forests, wildlife, genetic resources), and the soils and biogeochemical cycles on which they depend. These are interrelated and mutually reinforcing and also have strong linkages to programmes on desertification control, water, coastal ecosystems, Earthwatch, environment and development planning, environmental law and technology and the environment.

Rationale

The needs and requirements of human society are increasing rapidly. The population of the planet is growing at an exponential rate. Industrialization is being accompanied by a vast exploitation of natural resources and by a profound impact on the natural environment. The ploughing of large tracts of land, its use for pastures, the felling of forests, the construction of dams and canals, mining, fertilization, irrigation, soil erosion and many other results of human activities, cause considerable changes in nature. Due to current development strategies and practices, these changes are often of destructive character and, what is particularly dangerous for the future, of irreversible character, disrupting the established systems and relations in the biosphere.

Fortunately, because of its considerable elasticity, the biosphere is capable of remaining remarkably stable in the face of external influences. This elasticity is of great importance for people, as it enables them to use and to transform biosphere resources, according to their needs. This transformation, however, cannot be carried beyond certain limits, otherwise it may imperil the dynamic equilibrium of the biosphere. In some important areas of the globe these limits have already been passed with a resultant degradation of considerable parts of the biosphere, as exemplified by spreading deserts, depleted freshwater basins and soils, and the disappearance of numerous plant and animal species. These are the symptoms of patterns of development which continuously depreciate the fixed natural resource assets of nations.

Anything done to even one element of a terrestrial ecosystem creates impacts on other elements. Therefore, the interrelatedness of all components of the biosphere is a very important factor to be taken into account in environmental management of terrestrial ecosystems. New creative and constructive ways to integrate present knowledge of natural systems into economic development planning are needed, to ensure that the short-term benefits of an activity are not cancelled by long-term damages to natural systems, making it impossible or excessively costly to meet development objectives in a sustainable manner. It is the broad objective of this programme to continue to bring a multisectoral, inter-disciplinary environmentally sound approach to development planning, so as to achieve a sustainable process in the long term.

Main directions

The various activities of the subprogramme are directed towards the following major purposes:

- (a) To develop measures leading to rational and sustainable use of terrestrial resources;
- (b) To promote measures which preserve biological diversity, ecological processes and improve the resource base and its productivity in all development activities, so as to ensure biospheric stability;
- (c) Managing human transformation of the components of terrestrial ecosystems without the residuals which disturb their dynamic equilibrium or impair their quality;
- (d) Training of specialists in environmental management techniques to implement measures for environmental protection and efficient resource use.

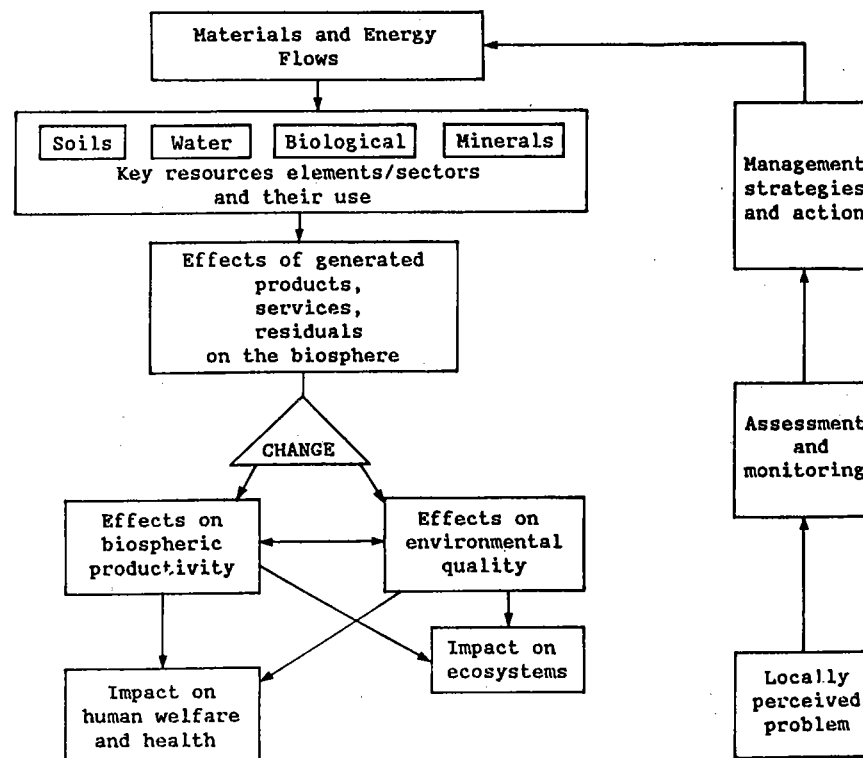
Strategies

This subprogramme is directed to problem area which have been selected on a priority basis to introduce interrelated measures required in the management of terrestrial ecosystems, so as to prevent or reverse the decline in their quality. For instance, a most serious problem facing terrestrial ecosystems is the loss of top vegetation cover, particularly through deforestation, leading to loss of topsoil and desertification, irreplaceable loss of animal and plant species, and hence the loss of biological diversity. The activities proposed under Forests, Soils, Genetic resources and Wildlife and
/...

protected areas address this issue, even though tackling it from different angles and perspectives. Similarly, managed and man-made ecosystems are severely threatened by the unwise use of technologies, which manifests itself most glaringly in all types of pollution effects. Some of the aspects of this problem are addressed by the programme element on Agricultural chemicals and residues with strong linkages to Environmental health and Environmental law. The use of various types of chemicals in development activities can cause rapid and drastic impacts upon biospheric stability, ecosystem productivity and ambient environmental quality. Corrective measures must interlink considerations of plant cover, soil erosion, the quality of water resources and industrial and agricultural technologies. This ecosystem-oriented approach aims to introduce an inter-disciplinary and interactive methodology to management information and decision-making processes.

A simplified diagrammatic representation of the interlinked strategies to terrestrial ecosystem management cutting across the programme elements of this subprogramme is presented below:

(CHART)



Implementation

Decisions affecting resource use and environmental effects are made under national, regional or international jurisdiction. However, most of the actual actions inducing regional and global environmental problems are carried out at the national level. Another set of these activities are taken as regional co-operative programmes or projects. Therefore, the focus of the activities described in this part is national or regional, rather than global. For this purpose a few countries will be selected, on the basis of agreed criteria, for concentrated activities serving to demonstrate the efficacy of the proposed solutions to the environmental management question. Activities addressing the special environmental problems of African countries will be in accordance with the policies set out in the Cairo Programme, and will go down to the village level. Implementation will also seek involvement and inputs of special community groups, such as women, youth, and non-governmental organizations and will take advantage of intimate local experiences.

1. Programme element: Renewable resources management and conservation (budget subline 231)

Explanatory note

The activities comprising this new programme element were covered during the biennium 1986-1987 under budget lines 6101, 6102, 6103, 6105, 6106 and parts of 4103. In grouping them under a single line, their multidisciplinary and integration are better reflected, with greater flexibility and selectivity of activities. The following summary of funding is provided to simplify comparisons in expenditure for these activities with those of the previous biennium.

	Total allocation (thousands of US dollars)	Percentage of total budget
1988-1989	5 700	9.5
1986-1987	5 990	10

PPSC budget contribution to the implementation of the programme element: \$700,000
Regular budget contribution to the implementation of the programme element: \$350,000

The programme element has five components, the allocations for which are divided as follows:

	Allocation (US dollars)	
	1988-1989	1986-1987
(i) Soils	1 750 000	1 700 000
(ii) Forests and other ecosystem	1 200 000	1 500 000
(iii) Wildlife and protected areas	1 200 000	1 440 000
(iv) Genetic resources (biological diversity)	1 300 000	1 150 000
(v) Bioproductivity research	250 000	200 000

(i) Soils

(a) Legislative authority

Governing Council decisions 11/7, paragraph 8, 12/12, section II; 12/13 and 13/27

(b) System-wide strategy

Section III, para. 2 (e), and section IV, para. 3, of resolution I adopted by the Governing Council at its session of a special character;
UNEP/GC.10/7, paras. 228-229

/...

(c) Implementation of the strategy

(i) Programme strategy of UNEP

To implement the Plan of Action for the Implementation of the World Soils Policy by assisting countries in the formulation of policies and regulations and institutions that will enable them to implement national soils policies, and by assisting developing countries in the design and application of national soils policies through field projects, study missions, training courses, seminars and publications

To assist selected countries in solving the problems of terrestrial ecosystems assessment, monitoring, protection and management in an interdisciplinary framework, in co-operation with the Desertification Control Programme Activity Centre and Earthwatch

(ii) Relationship to activities of other international organizations

The World Soils Policy, the World Conservation Strategy, the World Charter for Nature and the World Soils Charter are all complementary to each other. A number of priority issues identified in these policies and strategies are directly concerned with maintaining soil productivity, preventing soil degradation and stimulating soil reclamation. The activities envisaged in this document stem from these outlines and from the need for the implementation of the elements of the World Soils Policy. The implementation of these activities will be through co-operative efforts of UNESCO, FAO, UNDP, ECA, the International Soil Reference and Information Centre (ISRIC), the International Centre for Integrated Mountain Development (ICIMOD), the International Society of Soil Science, (ISSS), the International Union of Biological Sciences, (IUBS), and others. Emphasis will be given to the promotion, through country missions and field projects, of appropriate soil management practices and land use policies aiming at the formulation of National Soils Policies. Multidisciplinary and integrated ecological approaches will be followed towards natural resources assessments, soil conservation management, revegetation and rehabilitation of watersheds and river basins. Global and local assessments of land resources and soil degradation hazards will be disseminated for both awareness and management purposes. Studies will be conducted, in collaboration with FAO, UNDP, microbiological research centres (MIRCENS), IUBS, etc. on various aspects of soil management, soil fertility improvement through biological nitrogen fixation and other soil biological processes and use of local fertilizer resources.

(iii) Activities of UNEP

- A. Rephasings: \$200,000 (C)
- B. Ongoing activities: \$1,050,000 (C)
\$250,000 (S)

<u>Activity (implementation; year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
1. Assistance to Governments in the formulation of national soils policies and their integration with other natural resource policies (Governments of the African region, UNDP, FAO,	Wildlife and protected areas (B1); Desertification control (B3); Environmental law and machinery (B1)	240	150 (Governments/ bilateral donors)	(iv)	C (3),(4),(10), (11),(12), (13),(14)	Environmentally sound national soil policies adopted in three countries

- | | | | | | | |
|--|--|---|---|---------------------|--------------------|---|
| 2. Application of existing methodologies for the assessment of global soil degradation, erodibility and erosivity (ISRIC, ISSS, 1987) | GEMS (B5, C1); Desertification control (B8) | Multiline funded: 110 from sub-line 231; 50 (C) and 50 (S) from 111 | 150 (60 ISRIC/Soils 40 ISSS/UNESCO: 50) | (i),(ii),(iii),(iv) | C (3),(10),(15) | Detailed output and its use are subject to recommendations of the ad hoc expert group meeting to be held in May 1987 |
| 3. Promotion of technology of biological nitrogen fixation by strengthening MIRCEN projects (FAO/UNEP/COM, 1986) | Genetic resources (B5); Desertification control | Joint funding: 30 from 231/Soils 75 from 231/Genetic resources | 410 (AGFUND/Governments) | (ii) | C (3),(10),(17) | Guidelines and demonstration projects on application of biological nitrogen fixation to increase soil fertility |
| 4. Testing and promotion of integrated watershed development and management systems (Government of Jamaica, 1986) | Water; Oceans; Forests; Energy; Technical, and regional co-operation; Environmental aspects of development planning (B2) | Multiline funded: 200 from 231/Soils; 70 from 314 | 500 (Government of Jamaica/UNDP) | (iv),(v) | C (2),(3),(5),(17) | One pilot project on watershed management, to be used for demonstration purposes in the region; 20 trainees to assist the Government of Jamaica in applying the natural resources management approach to watersheds in other regions of the country |
| 5. Demonstration of sustainable agriculture through pilot villages and the development of an African network on soils and fertilizers (Governments of the Africa region, UNDP/FAO/OAU, 1987) | Genetic Resources (D1); Forests (D1); Environmental training (B4); Desertification control (B1); Water (D1); Energy (B4) | Multiline funded: 500 (C) and 250 (S) from 231/Soils; for allocations from other sub-programmes or programme elements see under relevant activity | 1 000 (Governments/UNDP/FAO/OAU) | (iii),(iv),(v) | C, S (3),(10),(17) | Pilot projects on sustainable agricultural development in selected African villages in five countries; 45 trainees in sustainable agriculture, regional data on land use and local fertilizer resources, (follow up of the African Ministerial Conference on the Environment) |

C. Unimplemented activities

None

/...

D. New activities: \$220,000 (C)

<u>Activity (implementation; year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
1. Integration of land issues and components in the Zambezi Action Plan (Governments of the Zambezi basin countries, ECA, UNDP, FAO, UNEP/COM)	Water (B1); Environmental health (C2); Desertification control (B14)	Multiline funded: 220 from 231/Soils 800 from 22	200 (Governments/bilateral donors)		C (2),(3),(4), (10),(17)	Three pilot projects on appropriate land use in different agroecological zones, for demonstration purposes and training

(d) Other activities of the United Nations system

FAO	Programmes in conservation, improvement and management of tropical soils, introduction of appropriate practices in shifting cultivation areas; aid to developing countries in the identification and survey of available land including analysis of land-use practices in different agro-ecological zones; testing of the provisional methodology for soil degradation assessment in different geographical areas; technical backstopping of soil resources appraisal and field projects in a number of African countries; dissemination of knowledge on the methods of soil erosion control, farm management and fertilizer use					Further development of methodologies for agro-ecological evaluation of land/soil capabilities; application of methodologies for the evaluation of present and potential land resources at global, regional and national levels
						Updating of the Soil Map of the World and preparation of soil maps on a larger scale for particular purposes
UNESCO FAO	Establishment of an international reference base for soil classification and promotion of global soil resources assessment: promotion through country missions and field projects of appropriate soil management practices, such as recycling of agricultural wastes, biological nitrogen fixation, soil and water management at farm level and multidisciplinary studies on the economic and social constraints on the adoption of improved soil conservation management and reclamation methods. In co-operation with IUBS and ISSS, implementation of collaborative field projects on soil biological processes and tropical soil fertility. Launching of pilot projects on integrated ecological approaches to the study of soil erosion and conservation					
FAO, CGIAR, UNESCO						Research on various aspects of soil management, in particular soil conservation in watersheds, appropriate, practices in irrigation, alternatives to shifting cultivation and improvements in soil fertility

/...

- IAEA/FAO Activities to strengthen research capabilities for optimizing the use of water, fertilizers and other agrochemicals, to facilitate research aimed at enhancing biological nitrogen fixation through the use of isotope techniques, and to facilitate research to improve crop production in salt-affected soils
- WMO Work on meteorological aspects of agricultural management practices; technical inputs for training seminars, training manuals and syllabi for the control of water and wind erosion; technical knowledge efficient use of meteorological inputs in land/soil conservation and management

(e) System-wide budgetary implications in thousands of US dollars

UNEP	Priority C	1 500
	Priority S	250
IAEA		2 520 Rb
		6 300 Exb
UNESCO		800 Rb
		1 000 Exb

FAO

(ii) Forests and other ecosystems

(a) Legislative authority

Section II, section III, para. 2 (e), and section IV, paras. 1, 2 and 3, of resolution 1 adopted by the Governing Council at its session of a special character; Governing Council decisions 10/3, 10/12, 10/13, 10/14, section III, and 12/12, section II

(b) System-wide strategy

UNEP/GC.10/7, paras. 250, 261, 271, 282, 293 and 302

(c) Implementation of the strategy

(i) Programme strategy of UNEP

To promote the incorporation of environmental considerations at the planning and management levels, in the forestry sectors of countries in developing regions; to encourage the application of existing guidelines and to build on the experience gained in the pilot demonstrations of integrated and multisectoral approach to the problems of forest ecosystems

To catalyse regional and national efforts towards the development of new approaches to the conservation and management of forest ecosystems and their resources and stimulate the existing regional and national structures towards sustainable development planning. In particular, the programme will be fully involved in the implementation of the Cairo Programme for African Co-operation

To participate in the implementation of global plans of action, programmes and agreements related to the environmentally sound management and conservation of forest resources, incorporating a fuller appreciation of the value of forest ecosystems as a whole. Because of the inadequate understanding of the full aspects of the environmental value of forests, the programme will collaborate in the continuous assessment and evaluation of the forest resources

/...

UNEP/GC.14/16 Page 68 In order to implement its policy of integrated and multisectoral approach in the management of natural resources UNEP will develop its programmes and activities in close technical/intellectual and financial co-operation with other sectors of the Environment Programme and, in particular, with GEMS, Energy, Education and training, Regional seas, Water, Wildlife and protected areas, Genetic resources and Desertification and in close co-ordination with the regional offices

(ii) Relationship to activities of other international organizations

UNEP has initiated, catalysed and contributed to the development of baseline information and data on the state of tropical forest resources, supported the preparation of guidelines and pilot projects on research management and training of national counterparts, the development of the Tropical Forests Action Plan and the incorporation of environmental aspects in the International Tropical Timber Agreement. These activities have been developed in close co-ordination with other United Nations partners such as FAO, UNESCO and UNCTAD, but also with other international organizations such as IUCN, ELC, WRI, IIED, the International Union of Forestry Research Organizations (IUFRO), IUBS and the Centro Agronomico Tropical de Investigación y Enseñanza (CATIE). This co-operation will continue while new links will be established with other international and regional bodies such as the International Tropical Timber Organization (ITTO), the Latin American Economic System (SELA), the United Nations economic commissions, the secretariat of the African Ministerial Conference on the Environment and the secretariats of related agreements and conventions. Special efforts will be directed towards the activation and the implementation of the conservation and rational management of tropical forest resources components of the International Tropical Timber Agreement, now under the recently established ITTO.

(iii) Activities of UNEP

- A. Rephasings: \$120,000 (C)
 B. Ongoing activities: \$680,000 (C)

<u>Activity (implementation/ year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
1. Co-ordination and harmonization of international action in support of national efforts for rational management of forest resources within the context of the Tropical Forests Action Plan (FAO, UNDP, UNESCO, IUCN; 1986)	Desertification control (B3); Wildlife and protected areas (B2); Genetic resources (B1)	Joint funding: 320 from 231/ Forests 25 from 231/ Genetic resources	2 000 (FAO: UNDP: UNESCO: 300 IUCN)	(i), (ii), (iii), (iv), (v)	C (4a), (4b), (10)	Environmentally sound development of forest resources; management plans for specific areas
2. Conservation of ecologically significant critical and/or unique forests and wildland habitats through appropriate, including in situ, management practices for specific forest genetic resources and tree species (FAO, IUCN, Governments; 1984)	Genetic resources (D2); Wildlife and protected areas (B2); Desertification control (B4); Information	250	400 (FAO: IUCN: Governments:)	(i), (ii), (iii), (iv), (v)	C (4a), (17)	Selected forest genetic resources and sites protected. Training of national staff

3.	Continuous monitoring and assessment of forest resources (FAO, ECE, Governments; 1979)	GEMS (B6)	Multiline funded: 60 from 231/Forests 50 (C) and 100 (S) from 111	120 (FAO: Governments:)	(i),(ii) (iv)	C (15a)	Global, national and regional assessments for planners and decision makers; improved methodology
4.	Collaboration in the implementation of international agreements and conventions (1985)	Environmental law and machinery (B1)	50	200	(iv),(v)	C (4a)	Detailed plan of collaboration with ITTO

C. Unimplemented activities

None

D. New activities: \$200,000 (C)
\$200,000 (S)

<u>Activity (implementation; year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
1. Incorporation of forestry related activities within regional programmes such as the Cairo Programme for African Co-operation the Zambezi Action Plan, etc.	Genetic resources (D1) Soils (B5); Environmental training (B6); Desertification control (B2); Water (D1); Energy (B4)	Multiline funded: 200 (C) and 200 (S) from 231/Forests; for allocations from other sub-programmes or programme elements see under relevant activity	200 (Governments)	(i)	C, S (4a),(10),(17)	Improved development and management of forest resources in selected sites; training of national staff; data available for improved decision-making

/...

(d) Other activities of the United Nations system

- FAO Development of technical assistance programmes in forest resources management at national level. Development, implementation and co-ordination of the Tropical Forests Action Plan. Diversification of forestry production and multiple-use forests. Activities in in situ conservation of forest genetic resources
- UNESCO Research and training for integrated management of tropical and subtropical forests and woodlands; establishment of biosphere reserves and world heritage sites
- UNCTAD Assistance in the development and establishment of the International Tropical Timber Organization (ITTO), located in Yokohama, Japan. ITTO will now initiate the implementation of the Agreement
- UNU Development of socio-economic aspects of forest resources
- ECE Research and development of methodologies for evaluation and control of the effects of acid depositions on forests, within the framework of the Convention on Long-range Transboundary Air Pollution. Technologies and equipment used in forest fire control and prevention. Methods of quantifying and evaluating environmental benefits of forests

(e) System-wide budgetary implications in thousands of US dollars

UNEP	Priority C	1 000
	Priority S	200
UNESCO		700 Rb
		1 600 Exb
FAO		
UNCTAD		

(iii) Wildlife and protected areas

(a) Legislative authority

General Assembly resolutions 35/74, endorsing the World Conservation Strategy, and 37/7, adopting the World Charter for Nature; section I, para. 3 (b) (iv) of resolution I adopted by the Governing Council at its session of a special character, Governing council decisions, 10/13, 12/14, section IV, 13/15, 13/18, section V, 13/28 and 13/29

(b) System-wide strategy

UNEP/GC.10/7, paragraph 323

(c) Implementation of the strategy

(i) Programme strategy of UNEP

UNEP's strategy setting is based on the World Conservation Strategy, the World Charter for Nature and the Action Plan for Biosphere Reserves, which provide a framework for action by Governments, United Nations organizations, governmental and non-governmental organizations, and industry

UNEP acts as co-ordinator and catalyst of governmental and intersectoral co-operation for sustainable development based on environmentally sound management and use of living resources at the country and village level (Cairo Programme for African Co-operation) and the complementary global and regional activities. The activities proposed will be implemented in close co-operation with other related UNEP subprogrammes in the context of an ecosystem-oriented strategy:

- (a) Through assistance to Governments to promote the adoption of national conservation strategies for wildlife and habitats and appropriate policies, principles, guidelines and programmes for the integration of wildlife and habitat conservation into national development plans;
- (b) To promote the conservation of ecosystems and wild animals and plants in selected representative areas of the world's biogeographic provinces through the establishment of operational biosphere reserves;
- (c) To promote the adoption and effective implementation of international conservation conventions;
- (d) To undertake detailed examination of issues and problems in selected national wildlife management programmes constraining the consideration of the wildlife as an essential element in integrated renewable resource use so as to mitigate them;
- (e) To improve management skills of staff of wildlife and national park management organizations through integrated regional training programmes

(ii) Relationship to activities of other international organizations

UNEP co-operates with relevant United Nations organizations and other international and national governmental and non-governmental organizations and exchanges information with them. UNEP's programme activities in the field of wildlife and protected areas are co-ordinated with those of other international organizations through the Ecosystem Conservation Group (UNEP, FAO, UNESCO, IUCN and WWF). Other organizations are invited to ECG meetings, as appropriate, in order to mutually reinforce activities and avoid duplication of efforts

(iii) Activities of UNEP

- A. Rephasings: \$120,000 (C)
 B. Ongoing activities: \$900,000 (C)
 \$180,000 (S)

<u>Activity (implementation, year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
1. Promotion and implementation of the World Conservation Strategy (Governments, FAO, UNESCO, IUCN, WWF, UNDP; 1986)	GEMS (B4); Desertification control (B3); Oceans; Environmental law and machinery (B1); Forest ecosystems (B2); Soils (B3); Genetic resources (B1, D2); Water (B1)	400 (C) 75 (S)	FAO: UNESCO: 100 IUCN: WWF: UNDP: Governments	(ii),(v)	C, S (12),(13)	Advice to Governments; three national conservation strategies adopted; data bases on species, habitats and protected areas; conservation directories; species action plans and guidelines
2. Implementation of the Action Plan for Biosphere Reserves (Governments, EGG, UNESCO, UNDP, IUCN, WWF; 1986)	Forests (B1); Genetic resources (B1, B2, B4); GEMS (B4); Oceans; Environmental education and training (B6); Forests (B2)	130 (C) 20 (S)	Governments: FAO: UNESCO: 500 UNDP: WWF:	(v)	C, S (12),(13)	Advice to Governments on request; operational biosphere reserves in selected representative areas of the world's biogeographic provinces for improved conservation of ecosystems and biological diversity
3. Regional training programmes for the management of wildlife and protected areas in developing countries (Governments, UNDP, UNESCO, FAO; 1986)	Environmental education and training (B6); Genetic resources (B1)	130 (C) 20 (S)	Governments: FAO: UNDP: UNESCO: 400	(v)	C, S (17)	Fellowships for 50 trainees from developing countries to improve management skills in wildlife and protected areas and related living resources conservation activities. Development of training materials and methodologies /...

4.	Implementation of the principles of the World Charter for Nature through continued development and implementation of global and regional conservation conventions on wild animals, plants and habitats (Governments; January 1986)	Environmental law and machinery (B1)	60	Governments	(ii), (v)	C (12)	Advice to Governments on request; increased ratification and application of conservation conventions: CITES, Bonn Convention on Migratory Species of Wild Animals, Ramsar Convention on Wetlands, and the Paris Convention Concerning the Protection of the World Cultural and Natural Heritage
5.	Promotion of wildlands wildlife and protected areas management programmes (Governments, BCG, UNDP)	GEMS; Oceans; Renewable resources management and conservation/ Forests; Desertification control	180 (C) 65 (S)	Governments: FAO: UNESCO: IUCN: WWF:	(v)	C, S (12), (13)	Improved management of particular wildlands including wetlands, wildlife species and protected areas in selected representative areas of the world's biogeographic provinces

C. Unimplemented activities

None

D. New activities

None

(d) Other activities of the United Nations system

Regional commissions

Examination of policies of member States regarding wildlife conservation; implementation of specific conservation-oriented activities; promotion of regional training programmes for wildlife conservation

FAO

Promotion of the conservation and development of protected areas through the formulation and implementation of protected area management plans and the improvement of conservation legislation; conduct of field demonstrations for the development and testing of methodologies for wildlife and habitat conservation, including management and sustained utilization of animal wildlife through ranching, cropping and the incorporation of wildlife and habitat conservation in land-use plans; training of wildlife and national park managers through established regional institutions for training in resource conservation

/...

FAO, UNESCO Surveys of the status and trends of wildlife and habitat, and identification of protected areas (these data can contribute to, or be derived from, the GEMS plant, animal and protected areas data base); development of the interactive data base within GEMS; collection, publication and dissemination of information on the status of wildlife and habitats; promotion of the practical implementation of conservation conventions and provision of advisory services to States parties to them; preparation of national conservation strategies and promotion of their implementation through technical assistance

UNESCO Development and further expansion of the network of operational biosphere reserves as living resource conservation areas and sites for scientific baseline studies of natural ecological processes and life-support systems

ECE Study on the existing approaches, methods and technologies for monitoring flora, fauna and their habitats; assessment of the status of rare, endangered and migratory species in Europe; study on the relationship between economic activities and protection of flora, fauna and their habitats

(e) System-wide budgetary implications in thousands of US dollars

UNEP	Priority C	1 020
	Priority S	180
UNESCO		900 Rb
		1 300 Exb (World Heritage Fund)

FAO

(iv) Genetic resources

(a) Legislative authority

Section III, para 2 (e), and section IV, para. 3 of resolution 1 adopted by the Governing Council at its session of a special character; Governing Council decisions 10/13; 11/7, part six, 12/12, section V, and 13/9 A, paras. 2 (c) and (d), and the recommendations for action contained in UNEP/GC.13/4, part one, paras. 53 (a), (c), (d), (f), (g), (h), (i), and (m), endorsed by the Governing Council in paragraph 1 of its decision 13/9 A

(b) System-wide strategy

UNEP/GC.10/7, paragraphs 334 and 343

(c) Implementation of the strategy

(i) Programme strategy of UNEP

UNEP, in co-operation with relevant United Nations organizations, will promote the concept of integration of conservation of genetic resources in development activities through:

/...

- (a) Exploration, conservation, data collection and management and improved access to the widest genetic diversity of significant, or potentially significant plant, animal and microbial species for socio-economic progress, focusing on conservation and management of crop and tree genetic resources as well as on programmes for the conservation of selected animal breeds;
- (b) The conservation of microbial genetic resources in reliable culture collections and data collection thereon, especially in developing countries, by integrating conservation with the development and application of appropriate microbial technologies for environmental management and through the strengthening, expansion and continuous operation of the regional MIRCEMS;
- (c) Development of manpower training, information exchange and technology transfer on genetic resources in developing countries

(ii) Relationship to activities of other international organizations

The basis of international action in genetic resources is to be found in the World Conservation Strategy and subsequent strategies developed in the Ecosystem Conservation Group and other relevant international entities. Emphasis will be placed on the establishment of inventories and registers of accessible genetic resources and training in genetic resources conservation, management and utilization for the improvement of agriculture, industry, health and environment, through co-operative efforts of a number of United Nations organizations (including FAO, UNESCO, UNIDO, UNU, UNDP and WHO) and other organizations (including IUCN, the International Board for Plant Genetic Resources (IBPGR), the World Federation of Culture Collections (WFCC), the Committee on Data for Science and Technology (CODATA), OAU, and the International Union of Forestry Research Organizations (IUFRO))

(iii) Activities of UNEP

A. Rephasings: \$135,000 (C)

B. Ongoing activities: \$755,000 (C)
\$70,000 (S)

<u>Activity (implementation, year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
<u>Genetic resources conservation</u>						
1. A co-ordinated international programme on crop and tree genetic resources and wild relatives (FAO, IBPGR, UNEP/COM; 1976)	Environmental education and training (B2); Wildlife and protected areas (B1, B2, B3); Forests (B1); Energy (B4)	180	FAO: IBPGR: 150	(i)-(v)	C (4a), (4b) (10), (13) (15), (17)	Crop and tree genetic resources and wild relatives surveyed, collected and/or conserved <u>ex situ</u> and <u>in situ</u> ; some 40 technicians, professionals and decision makers from developing countries trained; illustrative booklet on the needs for <u>in situ</u> conservation; information newsletters

/...

<p>2. A global register and regional gene banks of microbial genetic resources (WFCC, CODATA, WDC, UNESCO, MIRCENS; 1985)</p>	<p>Soils (B5); Industry and transportation (B4)</p>	<p>60</p>	<p>WFCC: 50 CODATA: 50 Host institutions: 2 300 UNESCO: 20</p>	<p>(i),(ii),(iv), (v)</p>	<p>C (3),(10),(17)</p>	<p>A global referral system facilitating information exchange and technology transfer; expanded updated World Data Centre on Micro-organisms (WDC); two specialized catalogues; 20 professionals and technicians from developing countries trained in strain data application in biotechnology</p>
<p>3. Gene banks and registers for animal breeds (FAO; 1983)</p>	<p>Wildlife and protected areas (B1-B3); Environmental education and training (B2, B3)</p>	<p>140</p>	<p>FAO:</p>	<p>(i),(iii), (iv),(v)</p>	<p>C (1),(13),(15) (17)</p>	<p>Regional data banks for animal genetic resources in Africa, Asia, Latin America and Western Asia; a pilot cryogenic centre for conservation of animal genetic resources in Africa; semi-annual information newsletter; 40 technicians and professionals from developing countries trained in conservation and management of animal genetic resources</p>
<p>4. Support for the <u>in situ</u> conservation of plant species, with emphasis on trees. (FAO, IBPGR, UNESCO; 1985)</p>	<p>Forests (B1); Wildlife and protected areas (B2)</p>	<p>Joint funding: 200 (25 from 231/ Genetic resources 320 from 231/ Forests)</p>	<p>200 FAO: 150 IBPGR: 50 UNESCO: 150</p>	<p>(i),(ii), (iii), (iv), (v)</p>	<p>C (4a),(4b) (10),(13),(15)</p>	<p>Registers of endangered tree species; methodologies for <u>in situ</u> conservation and management of forest genetic resources</p>
<p><u>Environmental application of microbial resources</u></p>						
<p>5. Field application of microbial technologies for environmental management, e.g. increased soil fertility, and food production, pest and vector control, mining, crop residue utilization and biodegradation of pollutants (UNESCO, IGEB, UNIDO, MIRCENS; 1985)</p>	<p>Soils (B5); Energy (B2); Environmental health (D1); Environmental education and training (B2, B3); Industry and transportation (B4)</p>	<p>Joint funding: 300 (C) and 70 (S) from 231/ Genetic resources; 30 from 231/Soils</p>	<p>UNIDO: 10 UNESCO: 100 Host institutions: 200</p>	<p>(i),(iii), (iv),(v)</p>	<p>C, S (3),(10),(17)</p>	<p>Pilot applications of relevant technologies by MIRCENS; training of 250 specialists from developing countries</p>
<p>6. Biogeotechnology of metals (UNEP/COM; 1981)</p>	<p>Industry and transportation (B6); Lithosphere (B1)</p>	<p>Multiline funded: 50 from 231/ Genetic resources; 150 from 272</p>	<p>UNEP/COM: 50</p>	<p>(i),(iii), (iv),(v)</p>	<p>C (8), (17)</p>	<p>Guidelines for application and environmental management bio-leaching; biogeotechnology oriented MIRCEN in India; training of 20 technicians from developing countries in microbial mining /...</p>

C. Unimplemented activities

None

D. New activities: \$240,000 (C)
\$100,000 (S)

<u>Activity (implementation, year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
1. Application of genetic resources and bio-technologies for increased food and energy production at the village level and for rehabilitation of arid and semi-arid zones (FAO, UNDP, UNESCO, MIRCENs)	Forests (D1); Environmental education and training (B6); Desertification control (B2); Water (D1); Energy (B2)	Multiline funded: 150 (C) and 100 (S) from 231/Genetic resources; for allocations from other subprogrammes and programme elements, see under relevant activity	FAO: 200 UNDP: 200 Host institution: 300 UNESCO: 30	(i),(ii),(iii) (iv),(v)	C, S (3),(10)	Pilot applications of local genetic resources and skills for rehabilitation of livestock and improved management in arid and semi-arid zones and villages in three African countries selected as follow-up to the First African Ministerial Conference on the Environment
2. National/regional programmes for the exploration, conservation, management and utilization of genetic resources (FAO, UNDP, Governments)	Wildlife and protected areas (B1); Desertification control (B1, B2, B10); Forests (B2)	90	FAO : 200 UNDP: 200 Governments: 750	(i)(ii),(iii), (iv),(v)	C (4a),(4b) (10),(13)	National conservation programmes; an African network for conservation and management of genetic resources; legal instruments for conservation of genetic resources in three African countries (follow-up to the first African Ministerial Conference on the Environment)

/...

(d) Other activities of the United Nations system

- FAO Collection and publication of information on endangered or vulnerable forest tree provenances; servicing of the Panel of Experts on Forest Gene Resources; development and testing of methodologies for in situ assessment and management of forest gene resources, and establishment of experimental conservation schemes for selected crop and woody plants, particularly in protected areas
- Research, surveys and dissemination of information on endangered, uniquely adapted and rare breeds of livestock species, and establishment of regional data banks on animal genetic resources; development, testing and application of wild and domestic animal genetic resources, establishment of gene banks (semen and embryos) and conservation schemes for endangered breeds, especially trypanotolerant ones; provision of technical assistance, advisory services and training of personnel to member States, on request, to catalyse the incorporation of genetic resources management in national planning, and dissemination of relevant information; research on and survey of genetic diversity in fish species, and promotion of better breeding practices in aquaculture; development of ecological criteria for the design and management of freshwater genetic reserves
- FAO, IBPGR Assessment and management of crop genetic resources, their wild relatives and under-utilized species, and dissemination of relevant information; co-ordination and monitoring the uses of a global information referral system; provision of a framework for formulation and conclusion of relevant instruments to govern accessibility to crop plant genetic resources in the World Base Collection
- IAEA Maintaining a data bank for induced mutant germplasm resources, to assist the development and acquisition of skills and capabilities to improve cultivars through mutation breeding and related biotechnological methods
- UNESCO In situ conservation of genetic material, notably through the international biosphere reserve network; increased knowledge in the scientific basis for conserving genetic diversity in situ through field research and training of scientists; promotion of taxonomy and development of herbaria, particularly for tropical zones; promotion of methodology for establishing biological inventories of biosphere reserves and for monitoring information exchange
- Expansion of the existing networks of MIRCENs and transition from the pilot phase to an operation phase in co-operation with FAO, UNIDO, UNDP, UNU and WHO; major programme for the development of research potential and technological capacity in biotechnology and applied microbiology in Africa and the Arab States; development, testing and application of microbial techniques for monitoring pollution in ecosystems; specialist training in and promotion of public awareness of environmental application of microorganisms; promotion of training in the assessment and management of microbial genetic resources, of public awareness of their uses
- UNESCO, WHO Promotion of efforts aimed at pollution control through appropriate waste management incorporating biodegradation of pollutants and destruction of pathogens
- FAO, UNIDO, UNU Promotion of microbial technologies for utilization of agricultural, agro-industrial and organic urban residues for the production and nutritional enrichment of food and for energy conversion; promotion of microbial technologies for biodegradation of environmental pollutants
- FAO, WHO, UNESCO Development, testing, application and dissemination of information on microbiological pest and vector control agents
- FAO, UNDP, IAEA Broader application and co-ordination of microbial technologies for soil fertility in agriculture and forestry, particularly through symbiotic and non-symbiotic nitrogen fixation in tropical and subtropical environments (See subline 231/Soils)
- UNIDO Continued review and assessment of the environmental impact of emerging technologies, particularly in the areas of genetic engineering and biotechnology in co-operation with WHO and ILO; development of risk assessment methodology and safety guidelines for application of genetically engineered organisms and assisting member States in adapting these guidelines to their own needs; promotion of training in research and application of genetic engineering through the International Centre for Genetic Engineering and Biotechnology /...

- UNESCO, WHO
Promotion of efforts aimed at pollution control through appropriate waste management incorporating biodegradation of pollutants and destruction of pathogens
- FAO, UNIDO, UNU
Promotion of microbial technologies for utilization of agricultural, agro-industrial and organic urban residues for the production and nutritional enrichment of food and for energy conversion; promotion of microbial technologies for biodegradation of environmental pollutants
- FAO, WHO, UNESCO
Development, testing, application and dissemination of information on microbiological pest and vector control agents
- FAO, UNDP, IAEA
Broader application and co-ordination of microbial technologies for soil fertility in agriculture and forestry, particularly through symbiotic and non-symbiotic nitrogen fixation in tropical and subtropical environments (See subline 231/Soils)
- UNIDO
Continued review and assessment of the environmental impact of emerging technologies, particularly in the areas of genetic and engineering biotechnology in co-operation with WHO and ILO; development of risk assessment methodology and safety guidelines for application of genetically engineered organisms and assisting member States in adapting these guidelines to their own needs; promotion of training in research and application of genetic engineering through the International Centre for Genetic Engineering and Biotechnology

(e) System-wide budgetary implications in thousands of US dollars

UNEP	Priority C	1 130
	Priority S	170
IAEA		1 940 Rb
		2 925 Exb
UNESCO		700 Rb
		1 100 Exb
FAO		

/...

(v) Bioproductivity research

(a) Legislative authority

Section II, para. 1 (f), of resolution I adopted by the Governing Council at its session of a special character

(b) System-wide strategy

UNEP/GC.10/7, paragraph 205

(c) Implementation of the strategy

(i) Programme strategy of UNEP:

To outline optimal management options for human interaction with the process of photosynthesis

(ii) Relationship to activities of other international organizations

In co-operation with SCOPE and other technically competent environmental research bodies, UNEP collects, analyses and distributes information on critical aspects of element cycling, practical problems of the global environment such as acid rain, deforestation, desertification, soil degradation, the build-up of greenhouse gases and the photosynthetic process as a key factor limiting terrestrial bioproductivity. Close linkages will be forged with the global change programme of ICSU, the decade of the tropics programme of IUBS, and the UNESCO MAB programme

(iii) Activities of UNEP

A. Rephasings: \$ 10,000 (C)

B. Ongoing activities

None

C. Unimplemented activities

None

D. New activities \$200,000 (C)
\$40,000 (S)

<u>Activity (Implementation; year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
1. Relating soil dynamics and soil chemistry to terrestrial bioproductivity (King's College, London, SCOPE, IUBS)	GEMS (B5, D1); Lithosphere, (B1, D2); Soils (B4); Desertification control (B3)	200 (C) 40 (S)	250 (SCOPE: IUBS: King's College:)	(i),(ii)	C, S (3),(15)	Publication addressed to decision makers on the interaction between photosynthesis and key biogeochemical processes in terrestrial bioproductivity and decay

(d) Other activities of the United Nations system

None

(e) System-wide budgetary implications in thousands of US dollars

UNEP Priority C 210
 Priority S 40
WHO See under Environmental health, GEMS, and Energy

2. Programme element: Lithosphere (including biogeochemical cycles) (budget subline 232)

	<u>Total allocation (thousands of US dollars)</u>	<u>Percentage of total budget</u>
1988-1989	600	1
1986-1987	500	0.8

PPSC budget contribution to the implementation of the programme element: \$40,000
Regular budget contribution to the implementation of the programme element: \$40,000

(a) Legislative authority

Paragraph 1 (f), section III, paras. 2 (c)-(i), and section IV, paras. 2 and 3, of resolution I adopted by the Governing Council at its session of a special character; Governing Council decision 10/3

(b) System-wide strategy

UNEP/GC.10/7, paragraph 205

/...

(c) Implementation of the strategy

(i) Programme strategy of UNEP

To contribute to a better utilization of the lithosphere of the Earth and its immediate environment by the preparation and application of guidelines on environmentally sound mineral resources exploitations

To improve the understanding of global cycles for the principal chemical elements, their interaction and changes due to human activity

(ii) Relationship to activities of other international organizations

Close linkages exist with UNESCO's International Geological Correlation Programme, which formulates widely applicable methodologies and techniques; SCOPE's biogeochemical cycles activities and the proposed global change programme of ICSU

(iii) Activities of UNEP

A. Rephasings: \$20,000 (C)

B. Ongoing activities: \$380,000 (C)

<u>Activity (implementation; year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
1. Co-ordination of the international programme on the global biogeochemical sulphur and carbon cycles and their interaction with human activities (SCOPE, Hamburg University, USSR Academy of Science, UNEP/COM; 1982)	GEMS; Water; Industry and transportation (B4) Renewable resources management and conservation/ Genetic resources (B4)	180	820 (SCOPE: 100 Government of the Federal Republic of Germany 600 UNEP/COM: 120)	(i),(ii)	C (15)	Publication of five scientific synthesis reports on the sulphur and carbon cycles. Three workshops on sulphur behaviour in terrestrial and aquatic ecosystems; two workshops on carbon and nutrient cycling in lakes and estuaries in Asia; one workshop on the interaction between the carbon and sulphur cycles (60 participants)
2. Geology and environment: promotion and application of environmentally sound technology in mineral resources exploitation and land-use planning	Environmental education and training	200	1 000 UNESCO: 300 UNEP/COM: 700	(i),(ii),(iv)	C	Guidelines on environmentally sound mineral resources exploitation, to be used by Governments to protect the lithosphere
C. <u>Unimplemented activities</u>						
None						

D. New activities: \$110,000 (C)
\$90,000 (S)

<u>Activity (Implementation; year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
1. Application of guidelines on environmentally sound mineral resources exploitation (UNESCO, UNEPCOM, Governments)	Environmental education and training	50 (C) 70 (S)	200 (Governments) 100 (Co-operating agencies)	(i), (iv), (v)	C, S	Two demonstration areas in developing countries (One C, one S) to apply the guidelines
2. Initiation of a co-ordinated international programme on the phosphorus cycle (SCOPE)	GEMS; Soils	60 (C) 20 (S)	100 (SCOPE)	(i), (ii)	C, S (15)	Proceedings of an international workshop, addressing essential elements of an international phosphorus cycle programme
<u>(d) Other activities of the United Nations system</u>						
DIESA	Expansion of the international data base for deep-sea mineral resources to include metalliferous muds and hydrothermal deposits; in the land-based minerals area, research activities on non-ferrous minerals					
DTCD	Promotion of the development of indigenous raw materials for construction and other industries, and of exploration and exploitation of off shore minerals; strengthening of institutions in developing countries, especially those concerned with small-scale mining; dissemination of information; technical assistance in the elaboration of legislation regulating the mineral sector					
Regional commissions	Establishment and support of multinational mineral resources development centres paying attention to environmental aspects of mineral resources development					
UNESCO	Conduct of international scientific programmes related to the lithosphere, its resources and the impact of their exploitation on the environment, such as the International Geological Correlation Programme, the International Lithosphere Programme and the UNESCO-UNEP project on the protection of the lithosphere; regional geological studies; preparation of geological and geochemical maps on international and national scales and maps of geological factors influencing the environment; training of specialists in these fields					
ECA	Technical assistance to member States for the exploration, exploitation, management and utilization of mineral resources in Africa					

IAEA Preparation of regulatory guidelines for radioactive waste handling and underground disposal, establishment of guidelines for the decommissioning of nuclear installations (\$420,000 Rb) assessment of the radiological and environmental effects of waste disposal techniques; assistance to member States in developing their national radioactive waste management programmes

(e) System-wide budgetary implications in thousands of US dollars

UNEP	Priority C	510
	Priority S	90
IAEA		1 395 Rb
		1 365 Exb
UNESCO		3 000 Rb
		1 500 Exb

D. DESERTIFICATION CONTROL (budget line 24)

Elements

The subprogramme on desertification control constitutes a multidisciplinary programme for the follow-up and co-ordination of the implementation of the Plan of Action to Combat Desertification at national, regional and global levels. It is aimed at assisting national Governments and co-ordinating international efforts, including the mobilization of resources for environmentally sound management of natural resources, such as water, soils, forests, pasture lands etc., in arid and semi-arid areas, with a view to ensuring their sustainable use and to arrest, and wherever possible reverse, the process of desertification. In addition, the Desertification Control Programme Activity Centre (DC/PAC) is responsible for the follow-up of some aspects of the Cairo Programme relating to arid and semi-arid lands and desertification control.

In view of its interdisciplinary nature, this activity involves other subprogrammes, including water, soils, energy, forestry, training, and Earthwatch. Also the programme activities have strong linkages with those of other United Nations agencies (UNESCO, UNDP, FAO, UNSO and WMO), and non-governmental and intergovernmental organizations.

Rationale

The general assessment conducted by UNEP in 1984 on the progress in the implementation of the Plan of Action to Combat Desertification, clearly reveals that 7 years after the United Nations Conference on Desertification, desertification continues to spread at an increasing rate. The achievements in the implementation of the Plan of action remain marginal compared to the magnitude of the problem.

The problem of desertification is aggravated by the continual mismanagement of natural resources and the lack of both clear-cut national policies and programmes for combating it and sufficient funds to sustain effective desertification control.

The main thrust of the Plan of Action is the application of existing knowledge and experience in desertification control, based on comprehensive assessment and planning, sound management of natural resources and appropriate land-use practices, in areas subject to desertification.

Objectives

Activities are directed towards the following objectives:

- (a) To co-ordinate efforts at national, regional and global levels for the implementation of the Plan of Action;
- (b) To assist national Governments of affected countries in establishing national plans of action to combat desertification and designing anti-desertification policies and priority programmes integrated into national development plans;
- (c) To assist in the mobilization of the necessary resources for desertification control activities;
- (d) To follow-up on implementation of the Cairo Programme with respect to arid and semi-arid lands and desertification control;
- (e) To promote sound management of natural resources and appropriate land-use practices through the implementation of community-based and replicable pilot projects;
- (f) To assist in improving local skills and knowledge about desertification control through training and information dissemination.

/...

	Total allocation (thousands of US dollars)	Percentage of total budget
1988-1989	6 000	10
1986-1987	6 000	10

PPSC budget contribution to the implementation of the subprogramme: \$790,000
Regular budget contribution to the implementation of subprogramme: \$160,000

(a) Legislative authority

Governing Council decision 11/7, part seven

(b) System-wide strategy

UNEP/GC.11/7, p. 132 and UNEP/GC.13/8, p. 100

(c) Implementation of the strategy

(i) Programme strategy of UNEP

The subprogramme will be based on the general assessment of the status of desertification in 1984 (UNEP/GC.12/9) and the corresponding corrective measures adopted under Governing Council decision 12/10

To tackle desertification problems in an inter-disciplinary approach taking into account social, economic, political and cultural factors involved including land carrying capacity, overpopulation, tenure systems, energy, food supplies, illiteracy, etc., as they relate to desertification control

Among these factors is the lack of perception of the magnitude of desertification threat by decision makers. The collection, analysis and dissemination of data and information on desertification will be one tool to remedy this situation. Furthermore, efforts will be concentrated in four to six selected countries affected by desertification, in Africa, Asia and Latin America, which will be assisted in re-orienting their development plans towards sustainable development

To assist African countries in the implementation of the Cairo Programme in the areas relevant to the Plan of Action to Combat Desertification

(ii) Relation to activities of other international organizations

As co-ordinator of the implementation of the Plan of Action to Combat Desertification, UNEP will elicit the support of the members of the IAWGD and international organizations in the desertification control programmes within their respective mandates. UNEP will continue to utilise the DESCON mechanism to reinforce effective co-ordination of bilateral and multilateral assistance programmes, particularly in countries selected for concentration of efforts in desertification control. The Desertification Control Programme Activity Centre also sees the IAWGD and DESCON groups as a permanent secretariat

/...

(iii) Activities of UNEP

A. Rephasings: \$350,000 (C)

B. Ongoing activities: \$ 4,700,000 (C)
\$950,000 (S)

<u>Activity (implementation; year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
1. Operation of the Desertification Control PAC (Internal; 1985)	GEMS; Energy; Soils; Water; Forests; Information; Environmental training	520 (C) 150 (S)		(i),(ii), (iii)	C, S (3),(10),(12), (15),(17),(18)	Co-ordination of the UNEP desertification control programme according to the Governing Council decisions and General Assembly resolutions and relevant intergovernmental meetings
2. Establishment of pilot projects in integrated village development and grazing land rehabilitation (including training component) (Governments, bilateral donors, UNDP, UNSO, FAO, UNESCO, IUCN and NGOs; 1986)	Water (D1); Energy (B4); Renewable resources management and conservation/ Soils (B5)/ Genetic resources (D1)/ Forests (D2); Environmental training (B6)	500 (C) 100 (S) from line 24; for allocations from other subprogrammes and programme elements, see under relevant activity	9 800 (Governments UNDP IPF Donors UNSO FAO UNESCO IUCN NGOs)	(iv),(v)	C, S (10)	Six to eight feasibility studies prepared; four pilot projects launched based on previous studies in Africa; guidelines on environmental management methods for grazing lands in African countries; Personnel trained under the pilot projects
3. Identification and development of appropriate technologies for desertification control and economic development (1987)	Industry and transportation (B5)	100 (C) 50 (S)	Governments Bilateral donors	(i),(iii)	C, S	Technologies for the exploitation of water resources for irrigation and domestic use; technologies for development of renewable energy resources for application in land reclamation, food production and domestic use

/...

4.	Assistance to countries in the formulation of national or subregional plans to combat desertification and implementation of anti-desertification projects under the plans (1978)	GEMS; Water (B1, B2, B3); Renewable resources management and conservation/ Soils (B8); Environmental aspects of development planning (B2)	550 (C) 50 (S)	500 (Government UNDP IPF Donors FAO UNESCO IUCN NGOs)	(i), (iii), (iv)	C, S (10), (12), (13)	Four national plans of action in Africa, one in Asia and one in Latin America
5.	Convening of seventh session of DESCON in consultation with co-sponsors (Internal; 1978)		80	-	(i), (v)	C (3)	Approval and funding of priority desertification control projects; information exchange and policy harmonization among DESCON members
6.	Stimulation and co-ordination of desertification control activities of the United Nations system through the Inter-Agency Working Group on Desertification (IAWGD) (1978)		50	100 (IAWGD members)	(i), (ii) (iv)	C (3)	Thematic joint programming and increased co-ordination within the United Nations system and among other international organizations; implementation of projects under the Plan of Action to Combat Desertification
7.	Implementation of the Plan of Action to Combat Desertification in the Sudano-Sahelian region (programme support to UNSO) (1978)		1 200	2 500 (UNDP; UNSO)	(iv), (v)	C (3)	Management of anti-desertification programmes in the sub-region; desertification control projects
8.	Development of a desertification information system in DC/PAC (Internal; 1985)	GEMS; INFOTERRA; Information	250 (C) 100 (S)	-	(i), (ii)	C, S	Operational desertification information system; <u>Desertification Control Bulletin</u> (two issues a year in English and French); two teaching manuals per year; preparation and dissemination of other information materials (films, slides, shows, posters, etc.) for use by Governments, NGOs and research institutions

9.	Development of a methodology for the assessment and monitoring of desertification processes for use by Governments in setting up computerized geographical information systems on natural resources (1979)	GEMS (B3)	250 (C) 100 (S)	3 000 (UNDP FAO: UNESCO Bilateral donors)	(i),(ii), (iv)	C, S (3),(10),(15)	Methodology on monitoring and assessment of desertification based on pilot projects; four to six geographical information systems established in countries or regional bodies for use in planning anti-desertification project activities
10.	International desertification control training courses (Governments, NGOs and IAWGD members; 1979)	Environmental training (B1, B6)	500 (C) 100 (S)	400 IAWGD, (ACSAD, IADIZA, SADCC)		C, S (3),(10),(17)	200 people trained per year in sand dune fixation, afforestation, pasture development and treatment of salinized soils and in the management of semi-arid lands
11.	Establishment of three regional networks of research and training institutions (Governments regional commissions, UNESCO; 1985)	Environmental training (B4)	150 (C) 50 (S)	300 (ESCAP, ESCWA, ECA: UNESCO: 80)	(i),(ii)	C, S (3),(17)	Co-ordinated research and training programmes at the regional level to combat desertification
12.	Support to regional networks for afforestation and sand dune stabilization (Latin America) (FAO, ECLAC; 1985)		50 (C) 50 (S)	200 (FAO: Governments)	(v)	C, S (17)	Institutions in the Latin American region co-ordinating afforestation and sand dune stabilization programmes
13.	Establishment of regional networks of NGOs active in the field of desertification (ANEN, NGOs UNEP; 1985)	Information	150 (C) 100 (S)	200 (NGOs)	(v)	C, S	NGO networks in Africa and Latin American regions contributing to implementation of the Plan of Action to Combat Desertification .

14. Assistance in designing and co-ordination of regional activities and programmes for desertification control in Africa (IGADD, COMIDES, SADCC; 1986)	Water (B1, B2)	350 (C) 100 (S)	1 000 (UNDP IPF Governments IGADD SADCC UNISO FAO UNESCO)	(i), (iv)	C	Three subregional action plans around the Somali-Chalbi, Sahara and Kalahari deserts for common approach in combating desertification, the outputs to be used by Governments and donor countries to implement the United Nations Programme of Action for African Economic Recovery and Development 1986-1990 and the OAU Africa's Priority Programme for Economic Recovery 1986-1990
C. <u>Unimplemented activities</u>						
None						
D. <u>New activities</u>						
None						
(d) <u>Other activities of the United Nations system</u>						
DTCD	Assessment, planning, development and management of water resources, especially ground water, in arid and semi-arid regions					
ECA	Promotion of integrated rural development to solve problems of food production, availability and nutritional value, and development of water resources in drought-affected areas through assessment of surface and ground-water resources; promotion of training workshops/seminars and study tours on desertification control in the Africa region; and application of remote sensing techniques to genesis of desertification in the Sudano-Saharan region					
IAEA	Use of isotopic techniques in ground-water studies for arid and semi-arid regions (see also under Water)					
UNIDO	Technical assistance in the areas of manufacture of equipment for water conservation and for agriculture, water desalination using solar energy, and production of low-cost building materials and animal feed					
UNDP	Financing of pre-investment studies; provision of technical and financial assistance to specific anti-desertification projects, consideration of environmental impacts in development programmes					
ILO	Vocational training for development of skills; special public works programmes to prevent erosion, provide irrigation and improve access by using appropriate technologies and employing local labour					
FAO	Assistance in land-use planning, soil conservation, range and livestock management, forest and watershed management, afforestation; combating desertification through forestry and dune stabilization, shelter-belt plantations and reclaiming marginal lands					

/...

- UNESCO As a component of its MAB Programme, building up scientific bases for integrated development plans and resource management, in arid and semi-arid lands, taking into account traditional resource management systems
- WMO Development of meteorological and hydrological networks, consideration of climate aspects of desertification; executive agency for Agrhymet Centre in Niamey
- ESOWA Assistance in formulation of national plans to combat desertification and formulation of desertification control projects in selected ESOWA countries

(e) System-wide budgetary implications in thousands of US dollars

UNEP	Priority C	5 050
	Priority S	950
UNESCO		800 Rb
		1 200 Exb
FAO		
UNSO/UNDP		

E. ENVIRONMENTAL HEALTH (including agricultural chemicals) (budget line 25)

	Total allocation (thousands of US dollars)	Percentage of total budget
1988-1989	2 100	3.5
1986-1987	2 950	4.9

PPSC budget contribution to the implementation of the sub-programme: \$120,000
Regular budget contribution to the implementation of the sub-programme: \$190,000

(a) Legislative authority

Section III, paras 2 (c), (e) and (g), and section IV of resolution I adopted by the Governing Council at its session of a special character; Governing Council decisions 10/13, 10/15, 10/16, 13/9 A, para. 2 (d) and 13/15; paras. 1 (a), (b) (i-v) and 2.

(b) System-wide strategy

UNEP/GC.10/7, paragraph 310

(c) Implementation of the strategy

(i) Programme strategy of UNEP

Generally, to promote application of environmental measures in controlling agents harmful to human and environmental well-being and to assist in co-ordinating the activities of other sectors which have environmental health implications

Specifically, in relation to developments in agriculture, to promote the concept of integrated crop and animal protection in all the three developing regions whereby environmental and human health hazards of basic crop and animal production will be addressed in a holistic manner through ecologically sound methods and strategies. During this period, two or three countries in each developing region will have in place demonstration projects on these methodologies, with a sufficient cadre of trained technicians and well-informed farmers to implement them

To participate in the promotion of increased compliance with the articles relevant to UNEP of the International Code of Conduct on the Distribution and Use of Pesticides, the recommendations of the thematic joint programming meeting on pesticides to make the use of agricultural and vector control chemicals safer, as well as the recommendations pertaining to increased food production of the Cairo Programme for African Co-operation

In order to achieve the required impact, many of the programmed activities will be implemented with the technical, intellectual and/or financial co-operation of other sections of the Environment Programme, particularly IRPTC, soils, water, genetic resources, the Environmental Education and Training Unit, Earthwatch, and environmental law

(ii) Relationship to activities of other international organizations

UNEP efforts in promoting environmental health and safety are co-ordinated with WHO and ILO, particularly within the context of IPCS and with WHO, and FAO through PEEM. Close relations are also maintained with TDR and the IDWSSD /...

UNEP has initiated, and is involved in the co-ordinated development and implementation of pilot programmes on a regional basis to demonstrate environmentally sound methods and strategies for the control of agricultural pests and has made available methods and strategies for integrated pest control, through training, education, information exchange, manuals and guidelines in co-operation with United Nations agencies, particularly FAO, UNDP, WHO, and various research institutions. In the area of livestock development, UNEP is co-ordinating the different approaches with a view to identifying and filling gaps in knowledge as well as developing a model package for ecological management of the tsetse fly for use by Governments. Furthermore, UNEP collaborates with United Nations agencies to assist Governments' efforts to implement the articles of the International Code of Conduct on the Distribution and Use of Pesticides relevant to its mandate

(iii) Activities of UNEP

- A. Rephasings: \$150,000 (C)
B. Ongoing activities: \$1,150,000 (C)
\$220,000 (S)

<u>Activity (implementation; year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
1. Environmental management for improved biological safety (WHO; 1986)	Water	250	WHO:1/	(iii),(iv)	C (17)	Three pilot demonstration projects on priority environmental measures for control of communicable diseases; manpower trained on community involvement; pilot demonstration project will be replicated in other countries
2. Promotion of chemical safety in developing countries through IPCS (WHO, ILO, FAO, UNEP/COM; 1986)	IRPTC (B4)	550	1 400 (WHO: 900 UNEP/COM: 200 ILO: FAO:)	(ii),(iii)	C (6)	29 criteria documents on the risk evaluation of chemicals, 82 health and safety guides and 200 international chemical safety cards; 120 people trained in assessment of risk of chemicals; guidelines will be used for setting up safety standards
3. Promotion of food safety in selected developing countries (FAO, WHO, UNEP/COM; 1986)		150	300 (FAO: WHO: 100 UNEP/COM: 50)	(iii),(iv)	C (12)	30 specialists trained in control of environmental contaminants of food losses prevention; one set of guidelines on the prevention of food contaminants and losses

1/ To be determined.

4.	Control of selected zoonoses (WHO, FAO; 1987)		50 (C) 220 (S)	450 (FAO; WHO: 150)	(iii),(iv)	C, S	Two field demonstration projects in African countries on control of animal trypanosomiasis
5.	Assistance to selected developing countries of Africa, Latin America, Asia, in promoting the safe application of pesticides (FAO, WHO, ICIPE, UNEP/COM, the Commonwealth Secretariat, Kenya Medical Research Institute; 1986)	Environmental training (B6)	150	150	(i),(iv),(v)	C (17)	Guidelines for use by authorities in developing countries; approximately 150 personnel trained in Asia, Africa and Latin America

C. Unimplemented activities: \$50,000 (C)

<u>Activity (implementation; year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
1. Incorporation of health safeguards in water resources development (Zambezi) (WHO, FAO)	Water (B1, D2); Renewable resources management and conservation/ Soils (D1)/Forests (D2)/Genetic resources (D1); Environmental law and machinery (B1) Desertification control (B14); Environmental training (B7)	50	WHO: 40	(iii),(iv),(v)	C	Two sets of guidelines on the control of water-borne vectors and pests to be used in water resources planning and development

D. New activities: \$440,000 (C)
\$90,000 (S)

<u>Activity (implementation; year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
1. Development and implementation of specific programmes to demonstrate the integrated crop production approach in developing countries (FAO, IAEA, UNDP, United Nations regional commissions)	Renewable resources management and conservation/ Genetic resources (B5)	240 (C) 40 (S)	1 000 FAO: UNDP: Governments:	(i),(iv),(v)	C, S (17)	Pilot projects for replication in different tropical countries; at least 25 people trained; development and implementation of national integrated crop production programmes
2. Environmental health management related to pollution and hazardous substances (WHO, Governments)	GEMS (B7)	200 (C) 50 (S)	1 500 (WHO: 500 Governments:)	(i),(iii),(iv)	C, S (6)	Revision of health-related environmental quality standards; assistance to developing countries in establishing environmental pollution and hazardous wastes control systems

(d) Other activities of the United Nations system

FAO, UNDP Continued development and implementation of the FAO co-operative action for plant health to achieve priority needs of plant protection including forward planning, acceleration of the rate of technology transfer and improvement of mobilization and co-ordination of international resources for plant protection activities; assistance to developing countries in the implementation of the International Code of Conduct on the Distribution and Use of Pesticides; establishment of food information systems at the country level; provision of expert assistance and training in the rational use of resources to expand agricultural production including recycling of organic resources and increased use of biological nitrogen fixation; assessment of land use potential in selected areas in Africa as part of the FAO programme on agro-ecological zoning

Implementation of the programme for the control of African animal trypanosomiasis

WHO Through the IPCS, WHO in collaboration with UNEP and ILO pursues the evaluation of the health and environmental risks of exposure to priority chemicals in all media; provision of evaluated information to member States in the form of environmental health criteria documents, health and safety guides, international chemical safety cards and guidelines; promotion of a methodology for risk assessment; training of manpower; co-operation with member States in chemical emergencies; and the strengthening of national capabilities with respect to the foregoing. Other activities in this area deal with evaluation of health risks of radiation and other physical factors in the environment, and collaboration in national environmental pollution control programme development through guidelines and technical co-operation; strengthening of educational institutions providing instruction in engineering and agricultural approaches to environmental management for disease vector control; preparation of guidelines on environmental management and other health safeguards in water resources development projects

/...

- WHO Technical assistance and advisory services in the establishment and strengthening of national food control and food contamination monitoring systems, and improvement in national food control legislation with increased attention to food control in rural areas and promotion of quality control for export food; training of manpower in food control through support to national and regional training institutions, organization of courses and promotion of technical co-operation between developing countries. Support for national monitoring programmes for environmental pollutants and contaminants based on ensuring system compatibility and data quality analysis of monitoring results at different levels and preparation of comprehensive assessments on a regional and global scale, giving priority to air and water pollutants and food contaminants, food additives and pesticide residues; preparation of recommendations on allowable daily intakes assistance to developing countries in controlling health hazards from environmental agents and preparation of international recommendations for appropriate action
- WHO, IARC Continuing evaluation, as part of IPCS, of the carcinogenic risks of chemicals and occupational exposures, and publication of monographs on individual chemicals
- WHO, ILO Field trials and preparation of guidelines and manuals on simple and cost-effective methods of vector control and on the incorporation of preventive measures in the design of development projects; support for national food safety programmes through identification of priority needs, training, strengthening of institutions and legislation, education and promotion of awareness, and preparation of guidelines on food control and hygienic practices
- WHO, ILO Development, testing and application of improved techniques for assessing total human exposure to environmental pollutants and contaminants and the risks to health, using results of biological monitoring and of epidemiological surveillance
- UNSCEAR Preparation of comprehensive assessments of the health effects of radioactive substances and nuclear technology, including risk estimates
- FAO, WHO Support for the activities of the Codex Alimentarius Commission on the evaluation of food additives, food contaminants and pesticide residues; preparation of food standards and codes of practice and promotion of regional co-operation in food control through regional Codex committees
- FAO, ECA Continued implementation of the FAO action programme for the prevention of post-harvest food losses; assistance to countries in the planning and implementation of national food-loss reduction programmes
- FAO, UNESCO, WHO Monitoring and assessment of the level and impact of pesticides and fertilizers on ecosystem stability, environment and human health
- IAEA Establishment of capabilities for control or eradication of fruit flies and other insect crop pests using the sterile male technique and related biotechnological methods
- IAEA, WHO, ILO, UNSCEAR Development of nuclear techniques for assessing contamination by trace elements (see part I, section A above "Monitoring and assessment") in severe accident conditions: decontamination, over-exposure, epidemiological studies, intervention levels; development of practices for eradication or control of tsetse flies by the sterile male technique and related biotechnological methods
- IAEA, WHO, ILO, UNSCEAR Assistance in establishing capabilities for monitoring pesticide residues in food and the environment
- WHO Assistance to developing countries in the development and implementation of national programmes for the control of health hazards caused by environmental agents
- WHO Continued search for novel tools for the control of sleeping sickness in man both within and outside the WHO action programme on sleeping sickness control

UNDP, WHO, and other members of the Steering Committee for the International Drinking Water Supply and Sanitation Decade

Support for the design of national primary health care plans and programmes, and for project identification and implementation, to reach the objectives of the Decade, and in particular to lower the incidence of diarrhoeal diseases. Such support includes studies of water needs, water uses and excretion patterns; promotion of health education and community participation; strengthening of institutions and training of personnel development and promotion of appropriate technologies; co-ordination of international assistance to the Decade and monitoring of progress towards its objectives

ILO CIS data bank on occupational hazards supported by an international network; International Occupational Safety and Health Hazard Alert System for rapid warning of newly identified hazards; support for IPCS

(e) System-wide budgetary implications in thousands of US dollars:

UNEP	Priority C	1 790
	Priority S	310
WHO		8 000 Rb
		7 000 Exb
IAEA		6 000 Rb
FAO		23 090 Exb

F. PEACE, THE ARMS RACE AND THE ENVIRONMENT (budget line 26)

Rationale

Principle 26 of the Stockholm Declaration, which states that mankind and its environment must be spared the effects of nuclear weapons and all other means of mass destruction, continues to guide UNEP's involvement in this area.

Although the planet has been spared the effects of nuclear war, the world today must confront the consequences of regional and local conflicts, the diversion of massive resources (non-renewable and scarce resources) from economic and social development for military purposes.

Political instability and international tension may also have their roots in competing demands placed on scarce environmental resources, in the face of growing population pressure, causing massive movement of people within and across national boundaries. The problem of environmental refugees needs to be seen in this context.

The proclamation by the United Nations of the International Year of Peace (1986) at its 40th anniversary has provided an added opportunity for more visible action in the cause of peace, the enhancement of the quality of life, and the protection of the environment.

The task of creating awareness on these issues, the promotion of policies leading to the reallocation of resources from arms to environmentally sound development is more urgent than ever.

/...

Objectives

The general objectives of the programme are to:

- (a) Increase awareness of the dangers to the environment of irrational use of resources for the arms race;
- (b) Evaluation of the environmental consequences of local and regional conflicts.

Strategies and implementation

The maintenance of peace, the reduction in the arms race clearly has dimensions which extend much beyond their environmental aspects. Activities in this extend at the national and international levels. They cover the general activities of the United Nations system related to peace, security and development, relevant national activities and activities of non-governmental organizations, and, especially, the mass media, the artists and the scientists. The very limited activities in this subprogramme contribute to the overall cause of peace and security by emphasizing the impact of arms race and arms conflicts on the environment and its natural resource and the quality of life in general because of the deflection of financial and human resources from constructive development to a destructive arms race.

	Total allocation (thousands of US dollars)	Percentage of total budget
1988-1989	350	0.6
1986-1987	360	0.6

PFSC budget contribution to the implementation of the sub-programme: \$20,000
Regular budget contribution to the implementation of the sub-programme: \$70,000

(a) Legislative authority:

Section III, para. 2 (i), of resolution I adopted by the Governing Council at its session of a special character

(b) System-wide strategy

UNEP/GC.10/7, paras. 478-479

(c) Implementation of the strategy(i) Programme strategy of UNEP

Studies of the environmental consequences and impacts of regional or local conflicts

Dissemination of information to Governments and non-governmental organizations on the impact of the arms race on the environment, including the depletion and wasteful use of natural resources

(ii) Relationship to activities of other international organizations

UNEP has collaborated closely with the Stockholm International Peace Research Institute (SIPRI) and the United Nations University (UNU) in the preparation and publication of studies related to the arms race and the environment

(iii) Activities of UNEP

A. <u>Rephasings:</u>	\$30,000 (C)
B. <u>Ongoing activities:</u>	\$270,000 (C)
	\$50,000 (S)

/...

<u>Activity (implementation; year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
1. Effects of military activities on the environment (United Nations organizations and Stockholm International Peace Research Institute)		270 (C) 50 (S)	150	(i),(iii)	C, S	Preparation and dissemination of two studies on the environmental consequences of regional or local conflicts
<u>C. Unimplemented activities</u>						
None						
<u>D. New activities</u>						
None						
<u>(d) Other activities of the United Nations system</u>						
PSCA, DIESA, UNESCO	Preparation of a global study of the interrelationship between the arms race, environment and development					
PSCA, UNITAR, UNSCEAR	Development of an integrated programme for scientific assessment of the environmental impact of arms race activities at the global and regional levels and in the main eco-regions: temperate, tropical, desert, arctic zone, ocean, island, sea-bed, etc					
PSCA, UNSCEAR	Development of methodologies of risk assessment in relation to military activities					
PSCA, UNIVERSITY FOR PEACE	Stepping up of public information, creation of public awareness and mobilization of people on behalf of peace and security; conduct of a global programme to alert world opinion to the arms race					
UNITAR, PSCA	Dissemination of information on techniques for the recovery of areas affected by war					
UNSCEAR	Assessment of the direct environmental impact of weapons testing, especially the testing of nuclear weapons					
PSCA, DTCD, UNITAR, UNSCEAR	Implementation of a major international programme for the evaluation of the requirements of the arms race in utilization of natural resources					
<u>(e) System-wide budgetary implications in thousands of US dollars</u>						
UNEP	Priority C	300				
	Priority S	50				

G. TECHNOLOGY AND ENVIRONMENT (budget line 27)

Elements

This subprogramme includes programme elements on industry and transportation (including working environment), energy, human settlements, and natural disasters. With the exception of the latter, all the programme elements are related to industrialization and its infrastructure (transportation, energy). This is a key element of growth, therefore this subprogramme is of special significance to both developing and industrialized countries. Industrialization has been related to urbanization and the growth of urban industrial settlements.

Rationale

Managing the industrialization process in an environmentally sound and sustainable manner is one of the most complex challenges of development policy. The technological transformation has been very rapid, and the rate of change is projected to increase even more in the near future. In these conditions, many of the economic, social and environmental side-effects of modern technology have been overlooked. Production technology, in particular, has become increasingly resource-intensive, raising the issue of the exhaustion of certain resources, in particular non-renewable ones, in the medium or even short term. At the same time, the degradation of environmental quality, due to industrial production and transport policies and activities has reached dangerous and unacceptable levels and their impact on human health and on ecosystems puts an ever increasing burden on society as a whole. This is particularly the case in the working environment, where new health and safety hazards must be effectively controlled. Development of energy systems leads to considerable risks, as most of the energy sources are not fully clean from the environment point of view, or safe. In addition, the steadily increasing trend in the production, transportation, use and disposal of chemicals, as well as the spread of hazardous industrial installations in developing countries, has led to a significant rise in the number of industrial accidents and spills, some of which with considerable transfrontier impact.

Strategies

UNEP will continue to promote the development and application of low-waste and resource-conserving technologies in the various branches of industry, transportation and the production and use of energy, in close co-operation with industrial organizations and Governments. For this purpose, this subprogramme will intensify the exchange of information to facilitate access to appropriate technology by developing countries, pursue the consultative process with world industry, both at the sectoral and the general levels and encourage related technical co-operation and training activities, particularly in the area of application of environmental consideration in the choice and siting of technologies.

UNEP will address the issue of industrial and energy hazards, in particular problems of risk, transfrontier impacts of accidents and comprehensive approaches to management of complex industrial and energy systems.

UNEP will co-operate with United Nations Centre for Human Settlements (Habitat) in developing methodology and implementing demonstration projects, including manpower training, for the introduction of environmental considerations in the planning and management of large urban settlements.

1. Programme element: Energy (Budget subline 271)

	Total allocation (thousands of US dollars)	Percentage of total budget
1988-1989	700	1.2
1986-1987	900	1.5

PPSC budget contribution to the implementation of the programme element: \$170,000
Regular budget contribution to the implementation of the programme element: \$30,000

/...

(a) Legislative authority

Section III, paragraph 2 (h), and section IV, paragraphs 2 and 3, of resolution I adopted by the Governing Council at its session of a special character; Governing Council decisions 11/7, part eight, section A, para. 1 (g), 11/8, 2 (b), and 13/17

(b) System-wide strategy

UNEP/GC.10/7, para. 446

(c) Implementation of the strategy

(i) Programme strategy of UNEP

To review and periodically update the reports on the environmental impacts of production and use of all sources of energy

To catalyse development and dissemination of new and renewable sources of energy on an environmentally-sound basis in developing countries through field projects

To catalyse adoption of energy conservation measures in developing countries through information dissemination, training and demonstration projects

To establish mechanisms for the management of environmental and health risks resulting from the production and use of energy

(ii) Relationship to activities of other international organizations

UNEP co-operates with the WHO, IAEA, FAO and ILO in the comparative analysis of the environmental impacts of all sources of energy and with all relevant United Nations organizations and international development organizations in the promotion of new and renewable sources of energy and the conservation of energy

(iii) Activities of UNEP

- A. Rephasings: \$70,000
B. Ongoing activities: \$520,000 (C)
\$110,000 (S)

<u>Activity (implementation; year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
<u>The environmental impacts of the production and use of energy</u>						
1. Updating and study of selected energy systems (WHO, IAEA, ECE, and various national institutions; 1987)	Human settle- ments (B1,B3); Environmental health; Industry and transportation	130 (C) 30 (S)	WHO: 50	(i),(ii)	C, S (8),(10)	Three technical reports on various energy systems to be used by decision-makers. One popular book for general audience /...

2.	Assessment and management of the health and environmental risks of energy and other complex industrial systems (IAEA, WHO, national institutions; 1987)	Environmental health; Industry and transportation (B1)	Multiline funded: 80 from 271(C); 20 from 271(S); 50 from 272	2 000 (World Bank, EEC, WHO, IAEA)	(i), (iii), (iv) (v)	C, S (7), (9), (17)	100 trainees in risk management; Report on data and models for risk management for the technical community in developing countries
3.	Environmentally safe nuclear fuel cycles (March-December 1987) (ECE, IAEA and other international and regional organizations; 1987)	GEMS; Environmental law and machinery (B1)	80	-	(i), (iii), (iv)	C	Preparation of legal instruments on various aspects of the nuclear fuel cycle

Promotion of environmentally favourable energy systems

4.	Integrated rural energy development (national institutions, NGOs; 1987)	Renewable resources management and conservation/ Soils (B5)/ Forests (D2)/ Genetic resources (D1); Environmental training (B4); Desertification control (B2); Water (D1); Human settlements (B2)	Multiline funded: 230 from 271(C) 60 from 271 (S); for allocations from other sub-programmes and programme elements, see under relevant activity	-	(i), (iii), (iv), (v)	C, S (3), (10)	Three integrated rural energy projects demonstrating that different activities can be fuelled from environmentally favourable energy systems. 250 trainees from pilot villages and pastoral zones in sustainable utilization of renewable energy Regional network on new and renewable sources of energy in Africa
----	---	--	--	---	-----------------------	----------------	--

C. Unimplemented activities

None

D. New activities

None

(d) Other activities of the United Nations system

ECA	Promotion of multinational co-operation in the field of environmentally sound energy development
ESCWA	Studies on environmental aspects of energy planning and development, and energy from waste
ESCAP	Support for development of indigenous energy sources and research and development of non-conventional energy sources

/...

- UNU Training and research in the development of non-conventional sources of energy
- FAO Technical assistance in the areas of wood energy, draft animal power, biogas, solar and wind energy in agriculture and agroforestry programmes, and increasing the efficiency of production and use of fuelwood
- ECE Energy conservation policies; new and renewable sources of energy; studies on environmental implications of underground coal mining; interrelationships between environmental and energy policies, impact of power stations and gas industry on the environment; control technologies for sulphur and nitrogen compounds emissions from power stations
- UNESCO Training courses in new and renewable energies; workshop for energy planners integrating the socio-cultural aspects of energy utilization and conservation; promotion of interdisciplinary research on new and renewable sources of energy; development of information exchange and information systems on new energies; energy component also included in most integrated pilot projects under the MAB programme, including fuelwood
- WMO Support to applications of climate knowledge to energy management, and application of climate knowledge to new forms of energy, in particular solar and wind energy
- WHO Assessment of health hazards associated with energy production and use, including the indoor air pollution caused by biomass fuels
- IAEA Case-study of potential low-temperature heat applications of nuclear power (\$135,000 Rb); nuclear safety research (\$1,200,000 Rb; \$1,200,000 Exb); nuclear safety principles and regulatory organization (\$1,150,000 Rb; \$1,000,000 Exb); guidance and assistance for probabilistic safety assessment (\$650,000 Rb; \$885,000 Exb); safe siting, design and construction of nuclear power plants (\$793,000 Rb; \$2,190,000 Exb); guidelines for safe operation of nuclear power plants (\$720,000 Rb; \$230,000 Exb); operational safety reviews (OSART) (\$276,000 Rb; \$732,000 Exb); incident reporting system (\$440,000 Rb; \$142,000 Exb); emergency preparedness for accidents at nuclear facilities
- Studies on global issues of energy demand and supply and related environmental impacts; studies on new and renewable energy sources
- UNIDO Provides technical assistance to developing countries in the field of industrialization and energy as follows: integrated industrial/energy planning; energy self-sufficiency and development of energy-based resources; capital goods manufacture for the energy sector; industrial energy efficiency and conservation; industrial and domestic energy conservation, including the development and manufacture of equipment; development and use of solar energy and other new and renewable forms of energy, and the development and manufacture of equipment using these forms of energy
- ILO Manpower and training assessments in the energy sector; training in the occupational safety and health aspects of (energy policies, projects and programmes (coal-mines, petroleum, and radiation protection); employment, social and environmental impact assessment of energy investment projects; role of energy in sustainable rural development

(e) System-wide budgetary implications in thousands of US dollars

UNEP	Priority C	590
	Priority S	110
WHO		300 Rb
IAEA		5 360 Rb
		6 380 Exb
ILO		1 200 Rb
		4 000 Exb

2. Programme element: Industry and transportation (including working environment) (budget subline 272)

	Total allocation (thousands of US dollars)	Percentage of total budget
1988-1989	3 000	5
1986-1987	2 770	4.6

PPSC budget contribution to the implementation of the programme element: \$190,000
Regular budget contribution to the implementation of the programme element: \$40,000

(a) Legislative authority

Section III, paras. 2 (i) and 2 (g) of resolution I adopted by the Governing Council at its session of a special character; Governing Council decisions 11/7, part two, section A, 12/12, section VII, and 13/1, section II, subsection 1, paras. 1 and 3

(b) System wide strategy

UNEP/GC.10/7, paragraphs 460 and 468; UNEP/GC.11/7, pp.25-26 and 147-148; UNEP/GC.13/8, p. 23

(c) Implementation of the strategy

(i) Programme strategy of UNEP

Industry and transportation

To deal with the environmental management of the industrial sectors of relevance to the developing countries and to implement the recommendations of the World Industry Conference on Environmental Management (WICEM), held at Versailles, France, in November 1984, the following strategy is proposed:

- Catalyse and co-ordinate the preparation of technical publications, using to the fullest extent possible, the United Nations system, Governments, NGOs and industry, in the industrial sectors of greatest importance to developing countries
- Assist six developing countries in environmental management of their industries
- Apply UNEP guidelines for environmentally sound management of industry in two developing countries, in two different regions
- Increase by 45 per cent the capacity of the existing information system on industry and environment, using to the greatest extent possible, the existing data bases of the United Nations system and industry (primarily through the International Environment Bureau) and its international associations
- Train approximately 200 managers and trainers from developing countries annually on cross-sectoral topics such as institutional arrangements for environmental management of industry, as well as on sectoral topics based on existing guidelines (e.g. pulp and paper, iron and steel, agro-industries, transportation) drawing particularly on the expertise of industry and international organizations
- Follow-up to WICEM, particularly through technical assistance, training, information exchange, case-studies and environmental audits /...

Working environment

Prevention of occupational accidents and diseases and improvement of physical, mental and social well-being of workers in all occupations through:

- The strengthening of the capacity of countries to design and implement policies and programmes for the improvement of the working environment, in conformity with their national needs, following international standards and guidelines
- Promotion of the control of occupational health risks in the modern and the informal sector and the economy
- The improvement of occupational safety, as shown by internationally comparable indicators on frequency and severity of accidents and injuries, with special regard to the needs of industrializing countries
- The promotion of and support for (at the national, regional and international levels) the improvement of working conditions and welfare of workers, including work organization, working time and worker's participation

(ii) Relationship to activities of other international organizations

Industry and Transportation

UNEP through its Industry and Environment Office (IEO) in Paris, collects and disseminates information on the sound environmental management of industry, including resource conservation, discharge of pollutants and occupational health and safety. O works very closely with the members of the United Nations system, especially UNIDO, WHO, ILO, FAO, IAEA and IMO, and with the international trade/industry associations (e.g. IPIECA, IPAI, IISI, GIFAP, ICC, etc.), regional associations (e.g. CEFIC, etc.), some national trade/industry associations (e.g. QMA, JQMA, JMVA, etc.) and, more recently, with the new International Environment Bureau (IEB), established in 1986

Working Environment

Activities in the field of working environment are carried out by ILO, WHO, IAEA, and UNIDO, the UNEP role being one of co-ordination

(iii) Activities of UNEP

- A. Rephasings: \$100,000 (C)
- B. Ongoing activities: \$2 450,000 (C)
\$450,000 (S)

<u>Activity (implementation; year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
<u>Industry and Transportation</u>						
1. Operation of the Industry and Environment Office (1975)	IRPTC (B5); INFOERRA (B3); Environmental training; Information	1,500 (C) 100 (S)	In kind	(i),(ii),(iii), (iv),(v)	C, S (7),(8),(9)	Continued operation of the Office

2.	Preparation of new technical publications, and updating of existing ones (sectoral or cross-sectoral) (Internal, United Nations system, industry associations, IEB and individual companies; 1985)	IRPTC (B8)	200 (C) 50 (S)	In kind	(i), (ii), (iv)	C, S	Technical publications, and guidelines published for non-ferrous metals, petroleum, aluminium, sugar production, textiles or tanneries, cement, environmental impact assessment of industrial complexes, chemicals, urban transportation and electroplating. Used by governments and industry to improve environmental management
3.	Support for training activities and, on request, technical assistance in various industrial sectors or cross-sectors (Internal, in co-operation with aid agencies, regional commissions, United Nations agencies, industry; 1979)		250 (C) 250 (S)	60 (cash and services in kind)	(i), (iv), (v)	C, S (17)	Trained personnel (300 to 350), environmental problems diagnosed and solved in at least six developing countries
4.	Publication and dissemination of the quarterly review <u>Industry and Environment</u> (Internal, with co-operation of IRPTC and all regional offices; 1978)		200 (C) 40 (S)		(ii)	C, S (18)	Four issues per year in English and French (C), Spanish (S)
5.	Follow-up to the World Industry Conference on Environmental Management (Internal, Governments, IEB and industry; 1985)		100	Services in kind	(iv), (v)	C (17)	Publications (six case studies and six environmental audits), problems diagnosed and solved, trained personnel (six countries, 20 to 25 trainees in each of six countries)
6.	Biogeotechnology of metals (UNEP/COM; 1981)	Renewable resources management and conservation/ Genetic resources (B6); Lithosphere (B1)	Multiline funded: 150 from line 272	200 (UNEP/COM)	(i), (iii), (v)	C (17)	Guidelines for application and environmental management of bioleaching; training of 20 technicians from developing countries in microbial leaching

Working Environment

7.	Control of major hazards in industry (ILO, WHO; 1987)	Environmental health	50 (C) 10 (S)	60 (WHO: 30 ILO: 30)	(iv)	C, S (9)	Guidelines to develop measures for the prevention and control of major hazards in industry
----	--	----------------------	------------------	----------------------------	------	-------------	--

C. Unimplemented activities

None

D. New activities

None

(d) Other activities of the United Nations systemIndustry

FAO	Incorporation of environmental considerations in the development of the forestry products in industry; continued stimulation of agricultural residue utilization; continual updating of the compendium and other related activities
ECE	Continuation of compilation of the <u>Compendium on Low and Non-waste Technologies</u> and related evaluation work. Studies on: recovery, recycling and re-utilization of industrial wastes; treatment and final storage of hazardous wastes; application of biotechnology in the treatment of industrial wastes; air pollution emissions from stationary sources; recycling of waste rubber; disposal and re-use of waste materials from phosphoric acid and titanium dioxide production; wastes from coal mining and preparation; rational use of water in industrial processes; treatment of domestic sewage and industrial waste water; cost-effective evaluation of energy - and resource-saving technologies; socio-economic and ecological implications of low-waste technology; low-calorific solid fuels technology
ESCWA	Continued development and application of methodologies for industrial environmental impact assessment and siting of industry in Western Asia
WHO	Continued development and publication of environmental health criteria for industrial pollutants; continued review of occupational health and safety as well as working aspects of specific industrial sectors; establishment of guidelines; training of field personnel
ILO	In the areas of occupational safety and health and working environment main activities include setting of international standards, preparation of codes of practice and guides, information dissemination and technical co-operation activities within the framework of the International Programme for Improvement of Conditions of Work. Inter-agency project implementation like IPCS which involves continued establishment and publication of environmental health criteria for industrial pollutants. Continued review of occupational health and safety as well as working environmental aspects of specific industrial sectors and establishment of guidelines. Within the framework of ILO's industrial committees environmental questions continue to be studied and discussed for sectors like mining, petroleum, transport, building and construction and manufacturing. Energy related activities focussed on human resources development and socio-economic analysis including environmental impact assessment. Promotion of environmental training of workers, foremen, managers, policy guidelines and manuals on environmental management. Orientation and training of representatives of workers and employers organizations on environmental aspects

/...

Promotion of environmentally sound manufacturing processes and technologies in small-scale and informal sectors. Provision of advisory services to promote employment and generate incomes through application of farm equipment innovations and local manufacture of selected equipment for small farmers. Policy guidelines training manuals and pilot projects on road construction and maintenance

- IAEA Comprehensive programme covering all environmental impacts of the nuclear power industry (see section on energy, lithosphere, and environmental health)
- UNCHS Encouragement of the effective and environmentally sound use of resources for the development of the construction industry in promoting the growth and sustenance of human settlements
- UNIDO Introduction of environmental assessment and management considerations into all industrial sectors covered in industrial development studies and into all technical assistance programmes; industrial emergency contingency planning; technical assistance in areas of environmental training, pollution control, manufacture of equipment for pollution control, use of agricultural wastes and other biomass in production of biogas, alcohol and compost, use of industrial wastes; development of environmental management guidelines for use in industries; compilation of information on and evaluation of low-and non-waste technologies and pollution control technologies; introduction of environmental considerations into the programme for the industrial development decade for Africa
- World Bank Promotion of manual (through training courses) on the safe disposal of hazardous wastes; development of an industrial safety audit system; development of a design manual on industrial biological treatment processes

Transportation

- United Nations, UNIDO, Regional commissions Introduction of environmental components into the transportation development strategies of the United Nations; introduction of environmental considerations into the programme for the Transport and Communications Decade in Africa, and laying of foundations for similar initiatives elsewhere
- ECE Setting up of international regulations on road vehicles emissions, fuel consumption and alternate fuel developments, as well as on transport of dangerous goods, including hazardous wastes, studies on measures and technologies for the control of air pollution emissions from mobile sources
- ICAO Protection of the human environment from the effects of aircraft noise and aircraft engine emissions; updating of regulatory documents as appropriate; provision of guidance in the form of circulars and manuals
- ILO Continuation of the assessment of existing rural transport strategies; promotion of environmental training for motor vehicle maintenance personnel; pilot projects on road construction and maintenance
- IMO Development of international conventions, regulations, codes, procedures, guidelines and recommendations for ensuring environmentally sound maritime transport and related marine activities; the provision of technical advisory services; implementation of programmes aimed at enhancing the capabilities of, in particular, developing countries to prevent, control and combat marine pollution from ships and disposal of waste at sea; review of deficiencies of ships and action taken, contraventions, and penalties imposed
- IAEA Regulations for the safe transport of radioactive material - maintenance and revision; assistance to member States in implementation
- WHO Health aspects of pollutants associated with transportation sources, including criteria and health-based standards; accident prevention

/...

General policies for the improvement
of the working environment

- WHO Field studies, role of health services, psycho-social factors in injuries at work; development of primary health care for the working population; development of collaborating centres in occupational health
- ILO Promotion of occupational health and safety policies at the national level; International Occupational Safety and Health Safety and Health Hazard Alert System; assessment of cost of accidents and their prevention, implications of new technologies, hazards resulting from shift in energy sources, social security and employment conditions of seafarers. International Safety and Health information Centre (CIS); revision of the French version of the ILO Encyclopedia on Occupational Safety and Health
- ILO, WHO Technical co-operation in developing countries

Occupational safety

- WHO Human aspects of accident prevention
- ILO, WHO Prevention of occupational injuries
- IAEA Nuclear safety
- UNIDO Working environment component of field projects in India, Kuwait, and Qatar
- ILO Training modules on occupational safety and health; occupational safety and health for workers with non-ionizing radiation; safety in mines
- IMO Safe transport, handling and storage of dangerous substances on ships and in port areas

Occupational health

- IAEA Radioactive contamination and protection
- WHO Primary health care workers; selected occupational health hazards; specific groups of workers; work related diseases; workers health monitoring, hazards control, delayed chronic effects and occupational exposure limits
- ILO Occupational safety and health problems of office workers, with emphasis on visual display terminals
- ILO, IMO, WHO Medical care of seafarers on board ships
- ILO, WHO Joint studies on psycho-social stresses; occupational health risks for women workers
- ILO, WHO, IAEA Radiation exposure control in mining and milling
- WHO Technical co-operation

Working conditions

- ILO Working time; welfare related facilities and services; work organization, work content and technology; clearing-house for dissemination of information on conditions of work; training activities
- WHO, ILO Application of ergonomics in developing countries
- ECE New production methods and forge and pressing equipment; studies on improved working conditions

Under-serviced workers

- WHO Research, and development and training in occupational health of under-serviced workers; health conditions of employed children
- ILO Protection of working children, and workers lacking social protection in industrialized countries; problems of the urban informal sector

(e) System-wide budgetary implications in thousands of US dollars

UNEP	Priority C	2 550
	Priority S	450
IAEA		820 Rb
		420 Exb
WHO		
ILO		

3. Programme element: Human settlements (budget subline 273)

	Total allocation (in thousands of US dollars)	Percentage of total budget
1988-1989	1 200	2
1986-1987	1 380	2.3

PPSC budget contribution to the implementation of the programme element: \$240,000
Regular budget contribution to the implementation of the programme element: \$40,000

(a) Legislative authority

Governing Council decision 13/12

(b) System-wide strategy

UNEP/GC.11/7, p. 152

/...

(c) Implementation of the strategy

(i) Programme strategy of UNEP

To co-ordinate and catalyse activities leading to the inclusion of environmental considerations in human settlements planning and management

To catalyse and co-ordinate activities for the provision of basic shelter, infrastructure and services in rural and urban settlements in an environmentally sound manner

To provide specialized training in waste management and integrated planning of human settlements

(ii) Relationship to activities of other International organizations

UNEP collaborates closely with the United Nations Centre for Human Settlements (Habitat) in the development of guidelines for environmentally sound planning and management of human settlements and their application at local, national and regional levels. UNEP also collaborates with the Centre and UNESCO in promoting specialized training in those fields. In collaboration with WHO, UNEP supports improving environmental health conditions in human settlements, particularly through environmental management of large urban areas in developing countries

(iii) Activities of UNEP

A. Rephasings: \$90,000 (C)

B. Ongoing activities: \$650,000 (C)

<u>Activity (implementation; year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
1. Application of guidelines on the Environmental aspects of human settlements planning and management in large metropolitan areas (UNCHS, WHO, UNESCO Governments; 1985)	Environmental aspects of development planning (B1)	200	600 (UNCHS: 50 WHO: 150 Governments: 240 UNESCO: 160)	(i), (v)	C (11)	Case-studies and application of environmental guidelines in support of sound planning and management of seven selected large metropolitan areas
2. Promotion of environmental aspects of rural settlements planning and management (UNESCO, UNEP/COM, Government of Ethiopia; 1986)	Energy (B4); Water (B5)	250	220 (UNEP/COM: 150 Government of Ethiopia: 50 UNESCO: 20)	(iv)	C	One demonstration project: integrated development of rural settlements for self-sufficiency in energy, water, recycling wastes

3.	Training of specialists in environmentally appropriate waste management in settlements (Regional commissions, UNEPCOM; 1986)	200	100 (UNEPCOM)	(i)	C (17)	100 technicians trained in appropriate solid, liquid and gaseous waste management; trained technicians will in turn initiate training in waste management in their own countries
----	--	-----	------------------	-----	-----------	--

C. Unimplemented activities: \$260,000 (C)
\$200,000 (S)

<u>Activity (implementation, year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
1.	Pilot demonstration project on environmentally sound waste management in human settlements (WHO, UNCHS, UNDP, Governments; 1985)	260 (C) 200 (S)	600 (Governments: 525 UNCHS: 75)	(iv)	C, S	Three pilot demonstration projects, one each in urban areas in Africa, Asia and Latin America

D. New activities

None

(d) Other activities of the United Nations system

UNCHS	<p>Analysis of settlements policy and planning methods for balanced social and economic development, bearing in mind environmental quality requirements</p> <p>Research and demonstration projects on the expanded use of indigenous materials for housing and the use of renewable energy sources in and for building; provision of technical assistance and training in the use and improvement of indigenous building materials</p> <p>Development of strategies and methods for the provision and improvement of shelter and community services for rural and urban low-income groups</p>
FAO	<p>Assistance to countries in integrating environmental considerations in curricula for home economics specialists and grass-roots workers; assistance to Governments in the implementation of the Programme of Action of the World Conference on Agrarian Reform and Rural Development</p>

/...

- UNESCO Within the framework of the Man and the Biosphere programme, development of ecological approaches to and modelling of policy selection alternatives in urban and regional planning, including a network of integrated demonstration projects and the development of policy guidelines and simulation models, emphasizing flows of energy and materials and interactions of urban systems of varying size and complexity with their rural hinterland; preparation of guidelines and assistance to Governments in identification and preservation of unique landscapes and historical monuments; assistance to institutions in training planners and managers and development of training programmes for the improvement of marginal settlements and the sound environmental management of coastal and island settlements
- ESCWA Strengthening of urban environmental management
- ECE Integrated physical, socio-economic and environmental planning; energy issues in urban and regional planning; energy conservation in buildings; urban renewal
- ECA Development of strategies to enable member States to cope with water-borne diseases, community waste disposal and sanitation problems in relation to the International Drinking Water Supply and Sanitation Decade and the Global Strategy for Health for All by the Year 2000
- WHO Promotion of housing, water supply and sanitation, control of pollution and other agents in the environment in order to attain health. Activities include assembling and disseminating relevant health information through national collaborating centres and other means; preparation of environmental health criteria for planning and development of human settlements; support to member States in the development of human resources; applied studies; and development of relevant methodologies, e.g. environmental health impact assessment
- ILO Training in the management of development schemes; development of entrepreneur skills in the construction sector; assistance to Governments in enhancing vocational skills through, *inter alia*, the provision of training materials and modules; assistance to Governments in the employment aspects of appropriate technologies in housing, human settlements and rural road construction; technical assistance in special public works
- WMO Development of guidelines for the application of meteorological data and proven methodology in connection with the environmental, social and economic aspects of the urban environment and in building design, construction and operation

(e) System-wide budgetary implications in thousands of US dollars

UNEP	Priority C	1 000
	Priority S	200
WHO		1 500 Rb (rural and urban development and housing)
UNESCO		900 Rb
UMHS		150

4. Programme element: Natural disasters (budget subline 274)

	Total allocation (in thousands of US dollars)	Percentage of total budget
1988-1989	0	0
1986-1987	0	0

PPSC budget contribution to the implementation of the programme element: \$10,000
Regular budget contribution to the implementation of the programme element: \$10,000

(a) Legislative authority

Governing Council decision 11/7, part one, para. 4(c)

(b) System-wide strategy

UNEP/GC.11/7, p. 41

(c) Implementation of the strategy

(i) Programme strategy of UNEP

To promote, through catalysis of the agencies, implementation of policies and measures for preparedness, prevention and mitigation of damage caused by natural disasters

(ii) Relationship to activities of other international organizations

Guided by the 1978 memorandum of understanding, UNEP has collaborated with UNDRO, WMO, UNESCO, WHO, FAO and UNDP in carrying activities related to prevention and mitigation of natural disasters

(iii) Activities of UNEP

None

(d) Other activities of the United Nations system

WMO, UNDP	Further development and practical application of existing knowledge and techniques in the field of early warning systems
UNCHS, UNDRO, FAO, UNDP, WMO	Evaluation of risks of natural disasters in connection with regional and national socio-economic development activities, providing guidance to decision makers in disaster-prone developing countries, enhancing public awareness and introducing disaster prevention and preparedness as permanent concerns at all levels of society
UNDRO, UNCHS, UNIDO	Development and dissemination of guidelines and standards to promote the application of disaster-resistant technologies in developing countries
UNDRO	Provision of advice and assistance to Governments in the formulation of policies and programmes to prevent or mitigate losses from natural disasters, risk evaluation, vulnerability analysis and other aspects of disaster management and in the incorporation of those techniques into general physical planning process. Assistance to Governments in strengthening national disaster relief institutions and improvement of disaster preparedness

/...

UNESCO Study of the mechanisms underlying geological and geophysical hazards; evaluation of historical data on natural disasters; improvement of earthquake and volcanic activities prediction; mitigation of natural hazards in low-cost housing, major engineering works and monuments; assessment of peoples perceptions and attitudes; specialized training; tsunami warning system in the Pacific; development of seismological networks

(e) System-wide budgetary implications in thousands of US dollars

UNEP	Priority C	0
	Priority S	0
UNESCO		1 500 Rb
IOC		2 300 Exb
UNDRO		180 Rb (UNESCO)

III. SUPPORT

A. SUPPORT MEASURES (Budget line 31)

Elements

There has been a steady growth in general awareness of environmental issues, the sensitivity of sectoral planners to environmental concerns and the institutional, legislative and the human resource capabilities to deal with environmental problems. Progress in these areas remains, however, far short of needs. A major challenge is how to inculcate an anticipatory and sectorally co-ordinated approach to environmental management, given the constraints, risks and possibilities. Short-term interests have to be seen in relation to long-term ones, so that the policy sources of the environmental issues are addressed. Attitudes and skills formation, legislative frameworks, institutional arrangements, methodological application and information flows are part of this process. Against this background, this chapter presents under the heading of "Support measures" the programme elements concerning "Education and training" (subline 311), "Public information (subline 312), "Environmental law and machinery" (subline 313) and "Environmental aspects of development planning and co-operation" (subline 314).

Rationale

The programme elements presented in this chapter are all cross-sectoral in character, and are united by their common theme of strengthening the effectiveness of the Environmental management and Earthwatch subprogrammes. They aim at providing the instruments with which to further other subprogramme objectives while helping create frameworks conducive to environmentally sound development.

UNEP's original mandate to increase public awareness of environmental issues and concerns is contained in recommendation 97 of the Stockholm Conference. The volume and variety of information about the environment has greatly increased over the years, and the perception of its significance has changed. The task of synthesizing information and presenting it to the public has become increasingly complex. The communications revolution has made available a multiplicity of channels and media for information and news presentation. UNEP acts as a moderator for environmentally significant facts and contributes to shaping opinion, attitudes, and hence actions, conducive to improving the environment. A basic task here is to help create an environmentally informed citizenry.

Another critical task is environmental education. Human needs and aspirations cannot be satisfied in sustainable ways unless people appreciate, in their daily lives, the essential links between human needs, satisfaction and environmental change. They also need to acquire the knowledge of how environmental management can help further social and economic wellbeing. Further, people practising their various occupational skills (e.g. industrial workers, farmers, technicians, managers) have to understand the bearing of their occupational practices on the state of the environment. Specialized training needs to embed a sensitivity towards environmental protection and improvement. UNEP, therefore, has to play an increasingly prominent role in furthering such environmental training.

/...

Legislative frameworks and environmental machineries are essential to bring about observance of standards and directives for environmental management and consideration of the environmental implications of development policies and programmes. Most developed countries already have extensive legislation and administrative structures to enforce regulations and directives relating to major environmental issues. Many developing countries have established institutional machineries to deal with environmental matters, and enacted environmental legislation. The main task of the programme element is to help accelerate this process, provide guidance on principles and legislative frameworks, and the means of their implementation and promote international co-operation in this field. The establishment of frameworks for international co-operation for environmental management and major problem areas is an abiding challenge.

The main thrust of the programme element concerned with the environmental aspects of development planning and co-operation is to establish systematic approaches to analysing social and economic significance of environmental changes and measures so as to facilitate the integration of environmental considerations in development decision-making. The methodologies of environmental impact assessment, environmental risk assessment and management, social cost-benefit analysis, environmental accounting and integrated environmental and economic planning all help to bring action for the environment into the mainstream of policy formulation and planning for social and economic development. Moreover, they improve inter-departmental co-ordination for environmental measures, and help resolve conflicts of interests among population groups and among sectors, as regards environmental change. They also help promote the systematic consideration of the environment in development co-operation, encompassing trade, investments and aid.

Strategies

In public information, priority will be given to building public awareness in respect of six environmental issues: soil loss, destruction of tropical forests, desertification, the "greenhouse effect", environmentally sound management of water resources, and toxic chemicals. UNEP will also assist selected developing countries in launching information campaigns on specific environmental challenges. In this process, the links of the information activities with the rest of the Programme will be systematically strengthened.

In environmental education the emphasis on making environmental education an integral part of general education will be continued by way of appropriate curricular development and promotion in the developing countries. This will also involve encouraging interaction and co-ordination between educational systems at various levels - pre-primary, primary, secondary, higher and adult education. During the biennium, UNESCO will remain UNEP's main partner in this work.

In environmental training, the approach will continue to be catalytic and multi-disciplinary emphasizing the introduction of environmental components into specialized training programmes and into the curricula of training institutions; UNEP will collaborate with ILO, UNIDO, UNESCO, FAO and UNDP in order to train about 5,000-7,000 people during the biennium. Since a good part of specialized environmental training is provided under individual subprogrammes, effort will be made to ensure co-ordination with a view to achieving programme-wide training objectives with maximum efficiency. In particular, all UNEP-supported training will be oriented toward achieving substantial multiplier effects.

In environmental law and machinery, the emphasis will remain on the drafting and promoting adoption of legal instruments (conventions, protocols, guidelines, etc.) dealing with environmental problems of international significance. As before, in response to requests from Governments, assistance will be made available to develop and implement environmental law and machinery.

In development planning and co-operation, the emphasis will be on testing and application of methods of analysing environmental aspects of development projects and programmes, and building up institutional capabilities and skills in the developing countries for environmentally-informed decision-making on development. In particular, attention will be given to making the development planning process sensitive to environmental constraints and potentials. Through its catalytic and co-ordinating function, the programme element will also seek to strengthen the consideration of the environment in bilateral and multilateral development co-operation.

1. Programme element: Environmental education and training (budget subline 311)

	Total allocation (thousands of US dollars)	Percentage of total budget
1988-1989	3 750	6.3
1986-1987	3 720	6.2

PPSC budget contribution to the implementation of the programme element: \$180,000
Regular budget contribution to the implementation of the programme element: \$40,000

(a) Legislative authority

Governing Council decisions 11/7, part three, sections A and B, 12/16 A and B, 13/19, 13/20, and 13/21

(b) System-wide strategy

UNEP/GC.10/7 para. 71

(c) Implementation of the strategy

(i) Programme strategy of UNEP

Education

Environmental problems require cross-sectoral and inter-disciplinary solutions, therefore our fundamental task is to educate people so that they see themselves and what they do as part of a larger system which links man to his environment, and to past, present and future generations

A first element of the strategy is the incorporation of environmental education at all levels of general education. Since 1978 environmental education has been incorporated through the International Environmental Education Programme into the curricula in some 45 countries, and it is expected that a further 15 countries will follow during the biennium 1988-1989

Other elements of the strategy are the introduction of environmental education into universities and into non-formal education. UNEP will catalyse and co-ordinate the systematic introduction of environmental education in at least two selected universities per region. With regard to non-formal education, the incorporation of environmental education into adult education and also into pre-school education is anticipated. These will be achieved through co-operation with NGOs

Training

UNEP Environmental Training Policy. In promoting sustainable development, UNEP attempts to enhance the capabilities of countries, particularly developing countries, to deal with the environmental concerns by providing them with trained decision makers, advisors and educators who will be able to assist their respective Governments in incorporating an environmental dimension into their development policies, plans and activities, as well as to obtain the incorporation of environmental components into the training activities of United Nations agencies, other intergovernmental organizations, regional and national institutions and NGOs. This involves general training. (The specialized environmental training of professionals is dealt with in most other subprogrammes)

/...

(ii) Relationship to activities of other organizations:

Education

It is essential for UNEP to play a catalytic role in disseminating widely those environmental concepts and technical skills which are concentrated here. This is one of the roles of environmental education. The main tool for the implementation of the above strategy is the UNESCO/UNEP International Environmental Education Programme (IEEP). Additionally, UNEP will provide catalytic assistance to Governments in developing regions for the implementation of regional action plans for environmental education and training

Training

To achieve the above policy UNEP will collaborate, in particular, with ILO, UNIDO, UNESCO, FAO and UNDP. A training institution in each region will have been identified and strengthened as a centre of excellence, to be used for regional environmental training activities as part of a network

Specific activities to implement the above policy will include the introduction of environmental components into various training programmes and curricula of training institutions assisted by the United Nations system, and the organization of short-term and post-graduate courses in environmental management at international, regional and national levels

(iii) Activities of UNEP

- A. Rephasing: \$355,000 (C)
 B. Ongoing activities: \$2,615,000 (C)
 \$460,000 (S)

<u>Activity (implementation/ year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
<u>Education</u>						
1. Further implementation of the International Environmental Education Programme with UNESCO (May 1986) (Phase V: May 1986- May 1988 VI: June 1988- Dec. 1989)	Renewable resources management and conservation; GEMS; Water (B5); Desertification control (B10)	1100	UNESCO: 1100	(ii)	C (16)	Incorporation by 15 countries of environmental education dimension into the educational secondary levels. Systematic incorporation of environmental education into curricula of two universities per region; 2,000 participants in specialist seminars; publication and dissemination of about 30 /...

						documents on curricula, pilot projects and seminars; publication and dissemination of eight issues of the <u>Connect</u> newsletter; review of the progress in the implementation of the strategy for the development of environmental education in the 1990s as follow up of the Moscow Congress. Development of environmental education prototype programme and materials for technical, vocational and non-formal education. Adaptation of technical environmental materials from UNEP, UNESCO, ILO, IUCN and other international organizations for use as basic teaching materials	
2.	Support for regional action programmes for environmental education and training in developing regions (Internal, in co-operation with UNESCO and Governments; 1984)	Regional offices will identify elements for regional action Plans. Environmental education components to be dealt partly under activity 1 above	210 (C) 160 (S)	(i),(iv)	C, S	Technical co-operation among countries and exchange of experience and information; 1,000 trained educators in selected environmental education institutions within each region, to serve as catalytic focal points for environmental education	
3.	Programmes of environmental awareness for pre-school and primary school children (UNICEF, NGOs; 1980)	Information	95 (C) 50 (S)	50 (UNICEF)	(iv)	C, S (16)	Environmental games and environmental education magazines for pre-school and early primary school children in a further five countries

Training

4. Development of regional networks of environmental training institutions (Internal, in co-operation with UNESCO and Governments; January 1983)	Links with all areas of programme which have specialized environmental training components, in particular: Water (B5); Desertification control (B4); Environmental aspects of development planning (B4); Energy (B4)	480 (C) 100 (S)	650 (Governments)	(iv),(v)	C, S (17)	Further development of regional training networks for Latin America and the Caribbean, West Asia, Africa, Asia and the Pacific; the networks will co-ordinate training and serve for the exchange of information and methodologies. At least one leading institution (centre of excellence) in each developing region will become operational. 5,000 technical people will be trained in environmental fields through the networks
5. Incorporation of environmental components into training programmes for decision makers and professionals (ILO, UNIDO, UNESCO, Governments and other international organizations; 1984)		420 (C) 50 (S)	800 (ILO UNIDO UNESCO)	(iv),(v)	C, S (17)	1,000 trainees in priority areas. Key professionals trained in dealing with the environmental dimension of their work. New training materials developed and transferred to other potential users
6. Support for training components of projects in other areas of the Programme (Internal; October 1980 - December 1989)	Links with all subprogrammes and programme elements, in particular GEMS (B7, B9); IRPTC (B4); Water (B1, B2); Desertification control (B10); Environmental health (B5)	310 (C) 100 (S)	-	(i),(iv),(v)	C, S (17)	500-600 trained specialists associated with technical projects in UNEP's programmes (e.g. Water, Soils, Oceans, Desertification, Environmental law, and Health). Production of training materials for transferrable use
C. <u>Unimplemented activities</u>						
None						
D. <u>New activities:</u>	\$220,000 (C) \$100,000 (S)					

<u>Activity (implementation; year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
<u>Education</u>						
1. Promotion of non-formal environmental education activities for adults (Internal, with the co-operation of NGOs and Governments)	Health; Human settlements; Energy; Industry and transportation	120 (C) 100 (S)		(iv)	C, S	Incorporation of environmental education into non-formal adult education in at least three countries per developing region

Training

2. Introduction of environmental components in training programmes for employers, technicians and trade unionists (ILO)		100	150 ILO	(i), (iv)	C (17)	350 trainees to serve as trainers and promoters of environmental concepts, and their application; training materials
---	--	-----	------------	-----------	-----------	--

(d) Other activities of the United Nations system

Education

UNESCO

The UNESCO/UNEP International Environmental Education Programme (IEEP) is a co-operative response to the pressing concern of nations about their threatened environment. It is directed at the general public, but also at specific occupational or social groups. It involves the promotion of general environmental education at the national, regional and global levels through workshops, seminars, technical assistance, studies, publications and production of teaching materials; environmental education and training of engineers, economists and lawyers at university level; study of environmental perceptions and promotion of general awareness of the relationship between man and biosphere for decision makers; environmental education as a contribution towards conservation of the natural and cultural heritage

Phase VI of the IEEP will, among other things, summarize all the achievements of the Programme to date, in readiness for the 1990s

UNU

Incorporation of environmental dimension to university level education

Training

ILO

Introduction of environmental components in training programmes organized for workers and employers

Elaboration and use of training modules on environmental management

UNESCO

Organization of post-graduate courses on environmental management of natural resources at the international and regional levels, including short training courses on water, soil and energy resources, engineering and management

/...

Regional Commissions, UNDP, FAO, UNIDO

Introduction of environmental components into the curricula of training institutions assisted or supported by the United Nations system

(e) System-wide budgetary implications in thousands of US dollars

UNEP	Priority C	3 190
	Priority S	560
UNESCO		1 400 Rb
ILO		

2. Programme element: Public information (budget subline 312)

	Total allocation (thousands of US dollars)	Percentage of total budget
1988-1989	4 550	7.6
1986-1987	4 680	7.8

PPSC budget contribution to the implementation of the programme element: \$650,000
Regular budget contribution to the implementation of the programme element: \$80,000

(a) Legislative authority

Governing Council decisions 12/15, 13/13 and 13/22

(b) System-wide strategy

UNEP/GC.10/7, para. 82

(c) Implementation of the strategy

(i) Programme strategy of UNEP

Within an information policy geared to concentration in focal areas, targeted to the needs of the countries and to respond quickly to changes in environmental perceptions, the programme strategy of UNEP is aimed at:

- (a) Co-operating with developing countries in launching specific information campaigns to raise environmental awareness;
- (b) Developing programmes on major environmental issues: desertification, tropical forests, soils, freshwater, greenhouse gases and toxic chemicals;
- (c) Targeting the UNEP publication programme to specific audiences;
- (d) Developing an audio-visual programme to increase UNEP's visibility and to foster awareness of critical environmental problems, and promoting UNEP's role as a catalyst for new productions with well established producers;

/...

(e) Promoting a better understanding among NGOs of UNEP, its programmes and activities; encouraging co-operation and networking among NGOs, research institutions, Governments and the United Nations system; and, providing financial inputs to enable NGOs to carry out environmental projects;

(f) Increasing co-operation with the mass media, motivating a core group of journalists and providing a data base on environmental and developmental issues

(ii) Relationship to the activities of other international organizations

Through the Division for Economic and Social Information (DESI), the United Nations Department of Information (DPI) is assisting UNEP in identifying target audiences for environmental information and in the systematic collection and assessment of information on environmental trends, perceptions, developments and events of particular concern or relevance to target audience groups in all regions

UNEP co-operates with the United Nations Office in Geneva (UNOG), under an agreement signed in 1985 between UNEP and UNOG under which all UNEP publications are to be marketed, sold and distributed by UNOG

(iii) Activities of UNEP

A. Rephasings: \$300,000 (C)

B. On-going activities: \$3,570,000 (C)
\$680,000 (S)

<u>Activity (implementation; year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
1. Co-ordination of development and production of environmental information materials for use by agencies of the United Nations system and for significant target groups (United Nations Information Centres, DESI, Development Forum, Governments, IPS, PFA, Al Ahram, AOYE, IIED, ENDA, ANEM)	All subprogrammes and programme elements	500 (C) 70 (S)	670	(ii)	C, S (18)	Identification of target audiences; information on developments and events of particular concern; Co-production of information materials on major environmental issues with other United Nations agencies

<p>2. Production of: (a) UNEP News; The Siren; (b) Publications (UNOG and UNEPCOM); (c) Audio-visual materials (TVE); (d) Information material for World Environment Day and other international events (Internal; 1976, 1977, 1978)</p>	See above	1 200 (C) 400 (S)	590	(i), (ii)	C, S	<p>Production of <u>UNEP News</u>; and <u>The Siren</u>, in English, French, and Spanish; production in various languages of approximately 20 publications; the Exhibits and displays; 20 radio programmes and interviews, 6 video programmes in Arabic, English, French, and Spanish; film catalogues; media kits for World Environment Day and other international events</p>
<p>3. Regional information support activities (Internal, in conjunction with Governments, NGOs, IGOs, media, in the respective regions; 1977)</p>		900 (C) 150 (S)	550	(i), (iv)	C, S (18)	<p>Six newsletters issued quarterly, bi-monthly or monthly; environmental news clippings (6 services); press releases, features</p>
<p>4. Production and distribution of information materials in various languages (Internal, in co-operation with non-governmental organizations, ELC; 1975)</p>	See above	410 (C) 60 (S)	830	(i), (iv)	C, S	<p>Increased co-ordination and participation of NGOs in the dissemination of information on UNEP and the environmental impact of development projects; co-ordination of NGOs activities to WED events</p>
<p>5. Media support programme (Internal, in co-operation with IPS, PFA, Al Ahram, AOYE, IEED; 1974, 1983, 1985)</p>	See above	570	(i), (ii)	C	<p>Coverage of environmental issues by the world's media, more environmentally informed media personnel, and greater awareness of UNEP's objectives, achievements; establishment of media networks in specific regions</p>	

C. Unimplemented activities

None

D. New activities

None

/...

(d) Other activities of the United Nations system

- JUNIC Definition of a system-wide environmental information policy related, *inter alia*, to the evolving new world information and communications order, to new development support communication concepts, and to the rationalization of system-wide information distribution methods and procedures
- Establishment of a permanent task force to co-ordinate the implementation of the long-term system-wide environmental information policy and to promote co-operative information projects between UNEP and selected agencies
- General assistance in the implementation of all elements of the strategy as outlined in the "Public information" section of the system-wide medium-term environment programme document (UNEP/GC.10/7)
- DESI/DPI Assistance in the identification of target audiences for environmental information and of effective channels and techniques of mass communication, and in the systematic collection and assessment of information on environmental trends, perceptions, developments and events of particular relevance to target audiences in all regions
- Assistance in the development of a quality information exchange between United Nations agencies and the public at large through the UNIC network, government information agencies, the NGO Liaison Service in New York and Geneva and the Development Education Group
- Development of environmental information components in current or proposed DPI projects, i.e. (a) the Editorial Reference Service; (b) the Central Feature Service; (c) the common system of feed-back of information on shared areas of concern; (d) joint (system-wide) operations to improve the quality and relevance of information material; (e) the proposed system for monitoring and responding to the media, including provision of environmental information press clips and UNIC reports services; and (f) the Outreach Services, in particular the media motivation, education, and visiting fellowships aspects

(e) System-wide budgetary implications in thousands of US dollars

UNEP	Priority C	3 870
	Priority S	680

3. Programme element: Environmental law and machinery (budget subline 313)

	Total allocation (thousands of US dollars)	Percentage of total budget
1988-1989	1 250	2.1
1986-1987	960	1.6

PPSC budget contribution to the implementation of the programme element: \$120,000
Regular budget contribution to the implementation of the programme element: \$120,000

(a) Legislative authority

Governing Council decisions 10/21, 10/24, 11/7, 12/14, and 13/18

/...

(b) System-wide strategy

UNEP/GC.10/7, paras. 56-57

(c) Implementation of the strategy

(i) Programme strategy of UNEP

Drafting and adoption of legal instruments (conventions, protocols, guidelines, etc.) addressing important environmental problems of international scope

Assistance to developing countries in the development and implementation of environmental law and machinery

(ii) Relationship to activities of other international organizations

UNEP's programme activities in the field of environmental law and machinery are co-ordinated with international organizations dealing with specific subject areas (WMO, WHO, UNDR0, FAO, IAEA, United Nations regional economic commissions, OECD, IUCN, ICC, UNIDROIT, OMEA, EEC)

(iii) Activities of UNEP

A. Rephasings

None

B. Ongoing activities \$1,060,000 (C)
\$190,000 (S)

<u>Activity (implementation; year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
1. Preparation and implementation of international agreements, and principles as follow-up to the Montevideo Conference (1981)	IRPTC (B7, B8); Water (B1, B2); Environmental aspects of development planning and co-operation (B2); Industry and transportation/ Hazardous wastes; GEMS (B6, B9); Atmosphere (B2); Energy (B2)	900 (C) 100 (S)	100 (Governments)	(i), (ii), (iii) (iv)	C, S (1), (2), (6), (7), (8)	Entry into force of the Vienna Ozone Convention and adoption of a protocol on CFCs; principles on environmental impact assessment; draft conventions for environmental management of international water systems, preparation of agreements, guidelines and preparatory documents on soil conservation, environmental emergencies, and prevention and redress of pollution damages, to be used by /...

						Governments and international organizations in preparing national legislation and international agreements. Outputs will also include the 1989 edition of the "Register of international treaties and other agreements in the field of the environment"	
2.	Environmental legislation in CMEA countries (UNEP/COM, IUCN; 1987)	INFOTERRA	100	50 (UNEP/COM/IUCN)	(i),(ii),(iv)	C, S	Compendium of environmental legislation for use as a reference source and preparation of educational materials for developing countries
3.	Technical assistance to developing countries for the improvement of environmental legislation and machinery (1987)		60 (C) 90 (S)		(iv)	C, S (14)	Effective environmental legislation and machinery in developing countries
C.	<u>Unimplemented activities</u>						
	None						
D.	<u>New activities</u>						
	None						
(d)	<u>Other activities of the United Nations system</u>						
United Nations, Regional Commissions UNDP, ILO, FAO, WHO, IMO, IAEA, others	Systematic collection and dissemination of information on environmental law in their respective fields						
United Nations, Regional Commissions, FAO, WHO, WMO, IMO, IAEA, ILO	Preparation of draft international agreements, principles, guidelines and background papers for consideration by Governments for the control of specific environmental problems, including problems of the international commons and mutual assistance in emergencies. Legal and technical expert groups to determine the scope, types and content of such legal and supporting measures; promotion of intergovernmental consultations to formulate and adopt the necessary legal instruments; development of programmes at both international and national levels to promote the application of legal measures through training and technical co-operation						

UNDP, UNITAR,
ILO, FAO, WHO,
IMO, UNESCO,
IAEA, others

Legal studies, technical assistance and training for the development of environmental legislation and machinery

United Nations,
Regional
Commissions,
FAO, UNDP, WMO,
WHO, IMO, IAEA,
ILO, UNESCO,
others

Promotion of the adoption and implementation of international agreements

(e) System-wide budgetary implications in thousands of US dollars

UNEP	Priority C	1 060
	Priority S	190
WHO		100 Rb

4. Programme element: Environmental aspects of development planning and co-operation (budget subline 314)

	Total allocation (thousands of US dollars)	Percentage of total budget
1988-1989	1 700	2
1986-1987	1 620	2.1

PPSC budget contribution to the implementation of the programme element: \$180,000
Regular budget contribution to the implementation of the programme element: \$40,000

(a) Legislative authority

Section III, paras. (f), and (i), and Section IV, paras. 1 (b) and 2 (b) and para. (c) (i) and (ii) of resolution I adopted by the Governing Council at its session of a special character; Governing Council decisions 12/5, 13/9, paras. 4-6, and 13/16

(b) System-wide strategy

UNEP/GC.11/7, p. 159, and section IV, paras. 2 (b) and (c) (i) and (ii) of resolution I adopted by the Governing Council at its session of a special character

(c) Implementation of the strategy

(i) Programme strategy of UNEP

To strengthen the capacities of developing countries by demonstrating the application of environmental analysis in decision-making on development; providing methodological and procedural guidance for the above; training and building up institutions for environmental planning and management

/...

To reinforce the environmental dimension in development programmes of United Nations organizations and development assistance agencies, through the application of environmental management methods, exchange of experience, and the co-ordination of policies

The following activities (ongoing or new) fall basically into one of the two elements of the strategy indicated above. They were designed to meet the targets proposed for this programme element

(ii) Relationship to the activities of other international organizations

Development assistance as well as information and guidance on development provided by the United Nations system and aid organizations must respond to the growing needs of countries in respect of environmental management for sustainable development, using the existing framework of technical co-operation. The programme element plays a catalytic role in developing and applying the methodology needed for the purpose

(iii) Activities of UNEP

A. Rephasings: \$70,000 (C)

B. Ongoing activities: \$950,000 (C)
\$130,000 (S)

<u>Activity (implementation; year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
1. Integrated physical, socio-economic and environmental planning (UNCRD, (UNDTCD) UNEPCOM; 1984)	Water (B1,B2); Oceans/Global marine environment (B1); Human settlements (B1)	150 (C) 30 (S)	125 (UNCRD: 50 UNEPCOM: 75)	(iv),(v)	C, S (12)	Case-studies from Japan (1986-1987) and the CMEA countries (1988-1989) with the focus on integrated physical planning for reconciling economic, social and environmental concerns. The studies are to be used in training personnel from developing countries and in technical co-operation, and for a better information exchange and improved co-operation between the centrally-planned and market economies

/...

2.	Promotion of environmental impact assessment and social cost-benefit analysis methodologies applied to development projects/programmes (Governments of Australia, Jamaica, Zambezi basin countries; 1987)	Desertification control (B4); Environmental law and machinery (B1); Renewable resources management and conservation/ Soils (B4)	150 (C) 50 (S)	300 (UNDP: 50 Common: 100 USAID: 50 NORAD: 50 CIDA: 50)	(ii), (iv)	C, S (12)	Executive management guidelines, technical manuals and case-study analyses for dissemination, to be used in training workshops and courses, in technical co-operation and as publications, as well as in technical co-operation with Jamaica and Zambezi Basin countries
3.	Strengthening of institutional capabilities to integrate environmental considerations in development policy and planning	Technical and regional co-operation	150	50 (Governments)	(iv)	C (12)	Demonstration of the feasibility of inter-departmental co-ordination of governmental policies and mutual support between sectoral programmes. Establishment of mechanisms for ascertaining the socio-economic significance of changes in the environment and natural resources and for the design of development plans to reflect environmental concerns and objectives. The outputs are for use in technical co-operation and training
4.	Promotion of training in the integration of environment and development (University of Aberdeen, UNEPCOM, centres of excellence in environmental training; 1986)	Environmental education and training (B4)	250 (C) 50 (S)	100 (UNEPCOM)	(iv), (v)	C, S (17)	(a) Curricula and course materials for application of analytical methods to considering the environment in project and programme appraisal; (b) Training of planners, project analysts and decision makers in considering the environment in development; (c) Wide dissemination of outputs to ensure broad-based applications and multiplier effects

/...

5. Monitoring environmental aspects of development assistance (CIDIE members, including UNDP, IFAD)		100		(iv)	C	(a) Better information on and co-ordination of policies and procedures for considering the environment in development financing; (b) Increased allocation of aid to environmental rehabilitation and improvement
6. Demonstration of an integrated approach to people, resources, environment and development (Internal, in co-operation with national and international institutions; 1987)	Renewable resources management and conservation; Desertification control	150	-	(iv), (v)	C (12),(18)	(a) Information network in the Himalayan region; (b) Case-study analyses of successful projects; (c) Analytical reports on changes in the environment and development with emphasis on people-environment-development interactions Outputs to be used for improved environmental management of fragile ecosystems under population pressure

C. Unimplemented activities

None

D. New activities: \$425,000 (C)
\$125,000 (S)

<u>Activity (implementation; year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
1. Application of regulatory instruments to promote environmentally sustainable development	Technical and regional co-operation	50		(ii), (iv)	C (12)	Analysis and guidance on economic policy instruments to bring about sustainable development. Outputs to be used in (a) Technical co-operation for the establishment of policy instruments in selected countries; (b) Technical co-operation among developing countries
2. Incorporation of environmental considerations in international trade and investments (UNCTC, UNCTAD, International Trade Centre, GATT)	-	100		(iv)	C	Analysis of success stories, guidelines and model agreements on environmentally responsible trans-national investments; frameworks of trade negotiations to reflect international environmental co-operation; assistance to developing countries in meeting the environmental standard, of importing countries
3. Support to strengthen sustainable development orientation in sectoral environment programmes	Water; Desertification control; Renewable resources management and conservation; Energy	275 (C) 125 (S)	-	(ii), (iv)	C, S	Pilot projects aimed at environmental and developmental objectives based on application of environmental impact assessment, cost-benefit analysis and integrated physical planning measures. Use in bilateral and multilateral technical co-operation and strengthened national institutional capabilities /...

(d) Other activities of the United Nations system

DIESA	Monitoring and analysis of global development trends and development policy and planning practices
DTCD	Technical co-operation, including advisory services on development policy and planning
UNCRD	Training in regional development planning
FAO	Policy advice and co-ordination of inter-agency rural development activities
ILO	Design and implementation of public works programmes for employment generation and infrastructure improvement
WHO	Promotion of environmental health impact analysis as part of socio-economic development projects
UNCTC	Information dissemination on transnational corporate investments and promotion of a code of conduct for transnational corporations
UNCTAD	Monitoring of trends and analysis of practices of international trade and development. Periodic review of the implementation of the Substantial New Programme of Action for the Least Developed Countries
UNDP	Inclusion of environmental guidelines in the manual for development of country development programmes and technical co-operation activities. Periodic audits of projects for their environmental significance
UNIDO	Environmental impact assessments of planned industrial activities; elaboration of environmental planning concepts
World Bank	Environmental appraisals of development assistance projects. Policy-oriented lending to developing countries for structural adjustments and sustained economic growth
IFAD	Project aid to improve productivity and incomes of small farmers
WFP	Food aid for relief as well as improving environmental and natural resource conditions in developing countries
ECE	Regional strategy for environmental protection and rational use of national resources. Frameworks and methodologies for environmental impact assessment. Application of environmental impact assessment to economic planning and development. Environmental dimension of the overall economic perspective of the ECE region. Cost benefit analysis of air pollution control programmes. Transfer of pollution control technology

(e) System-wide budgetary implications in thousands of US dollars

UNEP	Priority C	1 445
	Priority S	255
WHO		500

B. TECHNICAL AND REGIONAL CO-OPERATION (budget line 32)

Given its catalytic and co-ordinating nature, the Programme's work in the field of technical and regional co-operation has largely involved responding to the needs of countries identified by regional offices of UNEP and the United Nations regional commissions. Over the last decade the Programme has provided institutional support to establish, strengthen and sustain the arrangements necessary to integrate regionally responsive environmental activities into the programmes of the regional commissions. It also responded, through the regional offices, to requests for technical expertise, training support and advisory services from the countries essentially in the areas of environmental monitoring, assessment and management. Moreover, it sought to strengthen co-operation on environmental matters among countries at regional and subregional levels.

/...

Over the past years, regional solidarity and co-ordination on environmental matters have considerably increased with the adoption of agreed priorities, plans of action and programmes for environmental protection and improvement. The main focus of the proposed programme is to respond to the needs for assistance in implementing these various actions. The emphasis will be on ensuring that the benefit will be tangible and of practical value to the countries concerned.

It is also intended to discontinue support of a purely institutional nature and concentrate instead on assistance to projects and activities involving an integrated, interdisciplinary approach to environment and development, in line with the needs and priorities of developing countries. This strategy is expected to make for the optimal use of the very limited programme resources for the benefit of the countries concerned, within the framework of regional and subregional co-operation on environmental matters.

	Total allocation (thousands of US dollars)	Percentage of total budget
1988-1989	5 100	8.5
1986-1987	5 160	8.6

PPSC budget contribution to the implementation of the subprogramme: \$10,000
Regular Budget contribution to the implementation of the subprogramme: \$20,000

(a) Legislative authority

Governing Council decisions 11/7, part eight, 12/16, 13/6, 13/32; resolution 1/1 of the African Ministerial Conference on the Environment

(b) System-wide strategy

UNEP/GC.11/7, p. 159

(c) Implementation of the strategy

(i) Programme strategy of UNEP

To provide technical assistance, promote skills formation and further regional and subregional co-operation to deal with major environmental concerns, and to advance environmentally sound and sustainable development

To support practical activities instead of institution-building

To encourage design and implementation of projects of a multi-disciplinary character exemplifying integrated environmental management and planning

(ii) Relationship to activities of other international organizations

The subprogramme is intended to play a catalytic and co-ordinating role in promoting regional and subregional co-operation in responding to the major environmental needs

(iii) Activities of UNEP

A. Rephasings: \$10,000 (C)

B. Ongoing activities: \$2,000,000 (C)

<u>Activity (implementation; year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
Support for regional and liaison offices of UNEP (Internal)		2 000		(iv),(v)	C	Technical assistance for environmentally sound development and environmentally sound training

C. Unimplemented activities

None

D. New activities: \$2,230,000 (C)
\$770,000 (S)

<u>Activity (implementation; year of commencement)</u>	<u>Interlinkages</u>	<u>Allocation from the Environment Fund 1988-1989 (thousands of US dollars)</u>	<u>Counterpart contribution 1988-1989 (thousands of US dollars)</u>	<u>General criteria in decision 13/15, para. 1 (b), to which activity is related</u>	<u>Priority and, if applicable, corresponding target</u>	<u>Expected output and its use</u>
1. Support for regional activities under:	Desertifica- tion control	1 630 (C) 520 (S)		(iv),(v)	C, S	Programmes at national, subregional and regional levels to address environmental priorities identified by Governments
(a) Gairo Programme for African Co-operation	Environmental aspects of development planning and co-operation; Water; Environmental education and training					Technical co-operation among countries. Institutional capabilities and skill formation

(b) Latin American and the Caribbean regional environmental programmes

(c) Subregional environmental programmes of SACEP, ASEAN and the South Pacific Plan of Action

(d) Plan of Action of the Arab Ministerial Conference on Environment and Development (October, 1986)

(e) Environmental programmes of regional commissions developed in consultation with the regional offices of UNEP

(United Nations agencies, Governments, scientific and community groups)

2.	Technical co-operation with and among developing countries to meet their environmental needs (Internal)	Clearing-house	600 (C) 250 (S)
----	---	----------------	--------------------

C, S

Demonstration projects on replicable methodologies related to environment and development, implemented with the support of the Clearing-house mechanism

(d) Other activities of the United Nations system

Each United Nations agencies has its own technical co-operation programme including environmental components

(e) System-wide budgetary implications in thousands of US dollars

UNEP	Priority C	4 330
	Priority S	770

/...

Annex

UNEP/GC.14/16

Annex

Page 1

ABBREVIATIONS

ACSAD	Centre for the Study of Arid Zones and Drylands
AGFUND	Arab Gulf Programme for United Nations Development Organizations
AGRIS	International Information System for the Agricultural Sciences and Technology (FAO)
ALECSO	Arab League Educational, Cultural and Scientific Organization
ANEN	African Non-governmental Organizations Environment Network
AOYE	Arab Office of Youth and Environment
ASFIS	Aquatic Sciences and Fisheries Information System (FAO/IOC)
AVHRR	Advanced very-high-resolution radiometer
BAPMON	Background Air Pollution Monitoring Network
BPICA	International Permanent Bureau of Automobile Manufacturers
CA	Cadmium Association
CARICOM	Caribbean Community Secretariat
CATIE	Tropical Agricultural Research and Training Centre (Costa Rica)
CCA	Caribbean Conservation Association
CEFIC	European Council of Chemical Federations
CGIAR	Consultative Group on International Agricultural Research
CIDIE	Committee of International Development Institutions on the Environment
CIS	International Occupational Safety and Health Information Centre (ILO)
CLIMNF	Comité de Liaison des Industries des Métaux Non-ferreux
CMA	Chemical Manufacturers' Association (United States)
CMEA	Council for Mutual Economic Assistance
CODATA	Committee on Data for Science and Technology (ICSU)
COMIDES	Ministerial Conference on Desertification (Dakar)
COSPAR	Committee on Space Research (ICSU)
CPPS	Permanent Commission for the South Pacific
DDA	Department for Disarmament Affairs, United Nations
DESCON	Consultative Group for Desertification Control
DIESA	Department of International Economic and Social Affairs, United Nations
DPI	Department of Public Information, United Nations
DTCO	Department of Technical Co-operation for Development, United Nations
ECA	Economic Commission for Africa
ECCMF	European Council of Chemical Manufacturers' Federations
ECE	Economic Commission for Europe
ECG	Ecosystem Conservation Group
ECLAC	Economic Commission for Latin America and the Caribbean
EIA	Environment impact assessment
ENDA	Environmental Development Action in the Third World
ESCAP	Economic and Social Commission for Asia and the Pacific
ESCWA	Economic and Social Commission for Western Asia
ETH	Eidgenössische Technische Hochschule, Zurich
FAO	Food and Agriculture Organization of the United Nations
GEMS	Global Environmental Monitoring System
GESAMP	Joint Group of Experts on the Scientific Aspects of Marine Pollution
GIFAP	International Group of National Associations of Manufacturers of Agrochemical Products
GIS	Geographic Information System
GRID	Global Resource Information Data Base

/...

Annex (Cont'd)

HOMS	Hydrological Operational Multi-purpose Subprogramme (WMO)
IADIZA	Argentina Institute for Arid Zone Research
IAEA	International Atomic Energy Agency
IAHS	International Association of Hydrological Sciences
IAMAP	International Association of Meteorology and Atmospheric Physics
IARC	International Agency for Research on Cancer
IAWGD	Inter-Agency Working Group on Desertification
IBPGR	International Board for Plant Genetic Resources
ICAO	International Civil Aviation Organization
ICC	International Chamber of Commerce
ICGEB	International Centre for Genetic Engineering and Biotechnology
ICIMOD	International Centre for Integrated Mountain Development
ICIPE	International Centre of Insect Physiology and Ecology
ICRAF	International Council for Research in Agroforestry
ICSU	International Council of Scientific Unions
IDWSSD	International Drinking Water Supply and Sanitation Decade
IFAD	International Fund for Agricultural Development
IGADD	Intergovernmental Authority for Drought and Development
IHO	International Hydrographic Organization
IIASA	International Institute for Applied Systems Analysis
IIED	International Institute for Environment and Development
IISI	International Iron and Steel Institute
ILCA	International Livestock Centre for Africa
ILEC	International Lake Environment Committee
ILO	International Labour Organisation
ILZRO	International Lead and Zinc Research Organization
IMO	International Maritime Organization
INDIS	Industrial Information System (UNIDO)
INFOCLIMA	World Climate Data Information Referral Service (WMO)
INFOTERRA	International Environmental Information System
INIS	International Nuclear Information System (IAEA)
INRES	Information Referral System (UNDP)
INSTRAW	United Nations International Research and Training Institute for the Advancement of Women
INTIB	Industrial and Technological Information Bank (UNIDO)
IOC	Intergovernmental Oceanographic Commission
IPAI	International Primary Aluminium Institute
IPCS	International Programme on Chemical Safety
IPIECA	International Petroleum Industry Environmental Conservation Association
IPS	Inter-Press Service
IRPTC	International Register of Potentially Toxic Chemicals
ISRIC	International Soil Reference and Information Centre
ISSS	International Society of Soil Science
IUBS	International Union of Biological Sciences
IUCN	International Union for Conservation of Nature and Natural Resources
IUFRO	International Union of Forestry Research Organizations
IUMS	International Union of Microbiological Societies

Annex (Cont'd)

IWC	International Whaling Commission
IWRA	International Water Resources Association
IWRB	International Waterfowl Research Bureau
JAMA	Japan Automobile Manufacturers Association
JCIA	Japan Chemical Industry Association
JUNIC	Joint United Nations Information Committee
MAB	Man and the Biosphere Programme (UNESCO)
MARC	Monitoring and Assessment Research Centre
MEDI	Marine Environmental Data and Information System
MED POL	Long-term Programme for Pollution Monitoring and Research in the Mediterranean Sea
MIRCENs	Microbiological Resources Centres
NASA	National Aeronautics and Space Administration, United States of America
NGOs	Non-governmental organizations
OAS	Organization of American States
OAU	Organization of African Unity
OECD	Organisation for Economic Co-operation and Development
PADIS	Pan-African Documentation and Information System
PAHO	Pan-American Health Organization
PEEM	Panel of Experts on Environmental Management for Vector Control
PERSGA	Red Sea and Gulf of Aden Environment Programme
PFA	Press Foundation of Asia
PRED	People, Resources, Environment and Development
PSCA	Department of Political and Security Council Affairs, United Nations
ROPME	Regional Organization for the Protection of the Marine Environment
SACEP	South Asia Co-operative Environment Programme
SADCC	Southern African Development Co-ordination Conference
SCOPE	Scientific Committee on Problems of the Environment
SIDA	Swedish International Development Authority
SPC	South Pacific Commission
SPEC	South Pacific Bureau for Economic Co-operation
SPREP	South Pacific Regional Environment Programme
TDR	Special Programme for Research and Training in Tropical Diseases (UNDP/World Bank/WHO)
TVE	Television Trust for the Environment
UNCHS	United Nations Centre for Human Settlements (Habitat)
UNCRD	United Nations Centre for Regional Development
UNCTAD	United Nations Conference on Trade and Development
UNCTC	United Nations Centre on Transnational Corporations
UNDP	United Nations Development Programme
UNDRO	Office of the United Nations Disaster Relief Co-ordinator
UNEP/COM	USSR Commission for UNEP
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFFA	United Nations Fund for Population Activities
UNHCR	Office of the United Nations High Commissioner for Refugees
UNICs	United Nations Information Centres
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization

Annex (Cont'd)

UNITAR	United Nations Institute for Training and Research
UNSCEAR	United Nations Scientific Committee on the Effects of Atomic Radiation
UNSO	United Nations Sudano-Sahelian Office
UNU	United Nations University
WDC	World Data Centre on Micro-organisms
WFCC	World Federation of Culture Collections
WFEO	World Federation of Engineering Organizations
WFP	World Food Programme
WHO	World Health Organization
WICEM	World Industry Conference on Environmental Management
WIPO	World Intellectual Property Organization
WMO	World Meteorological Organization
WRI	World Resources Institute
WTO	World Tourism Organization
ZDA	Zinc Development Association
