* ENVIRONMENT AND SUSTAINABLE DEVELOPMENT

UNESCO IMPLEMENTING AGENDA 21

UNESCO AND UNCED FOLLOW-UP

Five years after the United Nations Conference on Environment and Development (UNCED), it can rightly be stated that the Earth Summit has had a profound impact on UNESCO's activities in each area of its competence: education, natural, social and human sciences, culture and communication. This is clearly visible in the Medium-Term Strategy 1996-2001 adopted by the General Conference at its 28th session in 1995. Sustainability has been added as a major strategic goal throughout UNESCO's action. Sustainable development has become a leitmotif of its programmes as well as one unifying link of the follow-up to UNCED and to other major United Nations Conferences addressing various dimensions of development and human society. The programmes of UNESCO and its International Oceanographic Commission (IOC) in environmental sciences and environmental education have been significantly reoriented in order to address priority objectives and to enhance integrated approaches identified in relevant chapters of Agenda 21.

Implementation of UNESCO's programmes is a joint effort of the Secretariat at the Organization's headquarters in Paris, Field Offices in 64 countries, UNESCO National Commissions and the National Committees of the different intergovernmental scientific programmes.



THE YEARS FOLLOWING RIO

Taking the new course of sustainable development implies for each nation and the world community at large that the social, economic, cultural and environmental dimensions of development must be treated in an integrated and balanced way. In the years after Rio, marked by globalization, the development of general political consensus and of strategies at national, regional and global levels aimed at sustainable development, has made further progress. However, a fully operational and action-oriented phase of implementing Agenda 21 and the Conventions is still to come. As a result, UNCED follow-up has not yet brought the expected benefits to the poor and the least developed countries, and the state of the global environment has further deteriorated since the Earth Summit. In a few cases, intervention has however already brought measurable results in environmental sustainability (e.g. reduction of CFC emissions, cleaning up of several major rivers, protection of wildlife). However, the real challenge is to muster the political will, in a participatory and democratic process of decision making, to address the key problems of unsustainable production and consumption patterns, the linkages between poverty, demographic dynamics and environmental degradation, and the need for a "transfer of environmentallysound technologies on concessional and preferential terms" between North and South.

Following UNCED, the UN General Assembly established the **Commission on Sustainable Development (CSD)** to

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provide an intergovernmental forum for monitoring the implementation of Agenda 21 at the national and international levels and to formulate recommendations to Governments, the UN system and other major stakeholders in sustainable development on how best to improve implementation of the UNCED outcomes. During its five years of work, the Commission has reviewed the implementation of all Chapters of Agenda 21 and decided on launching four special work programmes on technology transfer, sustainable production and consumption patterns, indicators for sustainable development, education and public awareness raising. 1997 is witnessing a review by the CSD and the General Assembly at a special session in June 1997 of the overall progress in the implementation of Agenda 21.

Since 1992, the essential roles of education and science for sustainable development have been increasingly recognized at the international level. However, at the national level, the situation is very diverse and to some extent, bleak as regards support for science. While investment in basic education has significantly increased in a number of developing countries, in particular in the nine most populous developing countries following the New Delhi Summit of these countries (1993), the actual amount of money being spent on scientific activities in a majority of both developing and developed countries has declined since 1992. More generally, in most countries public investment in Research and Development is stagnating or even diminishing.

UNESCO AND AGENDA 21

Due to its broad, cross-cutting mandate, UNESCO contributes to a greater or lesser extent to almost ALL of the 40 chapters of Agenda 21.

AREA WHERE UNESCO HAS PARTICULARLY SUBSTANTIAL PROGRAMMES AND THUS PLAYS A PROMINENT ROLE AMONG UN AGENCIES FOR THE IMPLEMENTATION OF THE CHAPTER.

* UNESCO serves as inter-agency "task manager" within the UN system for implementation of the chapter.

SOCIAL AND ECONOMIC DIMENSIONS

CHAPTER 1. Preamble

- 2. International cooperation to accelerate sustainable
- development in developing countries...
- (international trade issues)
- 3. COMBATING POVERTY
 - 4. Changing consumption patterns
- ▶ 5. DEMOGRAPHIC DYNAMICS AND SUSTAINABILITY
- 6. Protecting and promoting human health
- ► 7. SUSTAINABLE HUMAN SETTLEMENT DEVELOPMENT
 - 8. Integrating environment and development in decision making

CONSERVATION AND MANAGEMENT OF RESOURCES FOR DEVELOPMENT

- ▶ 9. PROTECTION OF THE ATMOSPHERE
- 10. INTEGRATED... PLANNING AND MANAGEMENT OF LAND RESOURCES,

At UNCED, Rio de Janeiro, June 1992, Governments adopted Agenda 21 – A Programme of Action for Sustainable Development world-wide into the 21st century, the Rio Declaration on Environment and Development, and the Statement of Principles for the Sustainable Management of Forests. Many governments signed the Convention on Biological Diversity and the Framework Convention on Climate Change on this occasion.

Three other initiatives by the UN General Assembly also represented a direct UNCED follow-up. These were the convening of the Global Conference on the Sustainable Development of Small Island Developing States (Barbados, 1994), the negotiation and coming into force of the Convention to Combat Desertification (December, 1996) and the establishment of an Intergovernmental Panel on Forests.

- ▶ 11. COMBATING DEFORESTATION
- ▶ 12. COMBATING DESERTIFICATION AND DROUGHT
- 13. SUSTAINABLE MOUNTAIN DEVELOPMENT
 14. Promoting sustainable agriculture...
- ▶ 15. CONSERVATION OF BIOLOGICAL DIVERSITY
 - Environmentally sound management of biotechnology
- ▶ 17. OCEANS... COASTAL AREAS AND... SMALL ISLANDS
- ▶ 18. PROTECTION OF THE QUALITY AND SUPPLY OF FRESHWATER RESOURCES
 - 19. Environmentally sound management of toxic chemicals...
 - 20. Environmentally sound management of hazardous wastes...
 - 21. Environmentally sound management of solid wastes and sewage-related issues
 - 22. Safe and environmentally sound management of radioactive wastes

STRENGTHENING THE ROLE OF MAJOR GROUPS

- 23. Preamble
- ▶ 24. WOMEN...
- ▶ 25. CHILDREN AND YOUTH...
- ▶ 26. INDIGENOUS PEOPLE...
- ▶ 27. NON-GOVERNMENTAL ORGANIZATIONS...
- ▶ 28. LOCAL AUTHORIŢIES' INITIATIVES...
 - 29. Workers and their trade unions30. Business and industry
- ► 31. SCIENTIFIC AND TECHNOLOGICAL COMMUNITY
 - 32. Farmers

MEANS OF IMPLEMENTATION

- 33. Financial resources and mechanisms
- ▶ 34. TRANSFER OF ENVIRONMENTALLY SOUND TECHNOLOGY...
- ► 35.*SCIENCE FOR SUSTAINABLE DEVELOPMENT
- ► 36.* PROMOTING EDUCATION, PUBLIC AWARENESS AND TRAINING
- ▶ 37. CAPACITY-BUILDING IN DEVELOPING COUNTRIES
 - 38. International institutional arrangements
 - 39. International legal instruments and mechanisms
- ▶ 40. INFORMATION FOR DECISION MAKING

UNESCO AND AGENDA 21

PRIORITIES FOR UNESCO

UNESCO's activities in relation to Agenda 21 cut across all of its areas of competence (education, natural and social sciences, culture and communication).

This publication summarizes UNESCO's on-going and planned activities in relation to Agenda 21 and the Conventions five years after the Earth Summit.

In contributing to the implementation of Agenda 21, UNESCO's primary goal is to combat poverty, create equitable social and economic conditions, address issues related to population dynamics, human health and settlements and to ensure a healthy environment and the sustainable use of resources for the benefit of present and future generations.

In addressing these overriding concerns, priority is given to eight areas where UNESCO is among the UN agencies making the most substantial contribution:

PRIORITY	CHAPTER	TASK MANAGER
	•	•
▲ Science (incl. social sciences)	35 and 31	8 🔴 - 1
Education, public awareness and training	36 and 25	•
▲ Capacity building in developing countries and	37 and 34	-
transfer of environmentally sound technology		
▲ Oceans, coastal areas and small islands	17 -	•
▲ Freshwater resources	18	-
▲ Biological diversity	, 15	
▲ Land, including combating desertification	10, 11, 12 and 13	
▲ Renewable energy sources	.9, 34, 35 and 37	

Of particular importance are Chapters 35 (Science) and 36 (Education, public awareness and training), for which UNESCO has a mobilizing role as Task Manager for facilitating cooperation within the UN system.

In addition to the reorientation of UNESCO's programmes in environmental sciences and environmental education to address the interrelationships between environment and development, two new strategic lines of action have also been introduced as a follow-up to UNCED: (i) enhanced interdisciplinary cooperation between UNESCO's intergovernmental scientific undertakings (IGCP, IHP, IOC, MAB and MOST) and (ii) several specific new initiatives to enhance transdisciplinary cooperation between the sciences, education, culture and communication, described more fully on pages 13-15.

UNESCO ACTING AS TASK MANAGER FOR CHS. 35 AND 36 OF AGENDA 21

SCIENCE

(CHAPTERS 35 AND 31)

It is no exaggeration to assert that without science, there can be no sustainable development. For many of today's major environment and development concerns, the sciences are essential in detecting and analysing problems, identifying solutions and ensuring scientifically sound actions.

UNESCO is working to:

- Promote the advancement, transfer and sharing of scientific knowledge and science education.
- ▲ Strengthen the scientific and technological basis for sustainable development through internationally coordinated research and training programmes, as well as observation systems and scientific assessments in the natural, engineering, social and human sciences.
- ▲ Promote the development of interdisciplinary sciences for sustainable development, in order to improve the relevance and applicability of scientific knowledge to policy making.
- ▲ Build up scientific capacity, especially in the developing countries, through university-level training programmes and cooperative networks among natural and social scientists, as well as through targeted training activities and support for scientific and training institutions.
- ▲ Improve communication and cooperation between the scientific and technological community, on the one hand, and decision makers, the productive sector and the public, on the other.
- ▲ Ensure scientific input to intergovernmental processes such as the Framework Convention on Climate Change, and the Conventions on Biological Diversity and Combating Desertification.
- ▲ Integrate ethical considerations related to environment and sustainable development into the work of scientists, engineers, educators, and other professional groups, including within university curricula and in-service training (e.g. environmental code of conduct for engineers).

UNESCO ACTING AS TASK MANAGER FOR CHS. 35 AND 36 OF AGENDA 21

EDUCATION, PUBLIC AWARENESS AND TRAINING (CHAPTERS 36 AND 25)

A knowledgeable and informed public is regarded as essential for sustainable development. The capacity of people to address environment and development issues must be increased. The term education is hereby used in its broadest context with particular emphasis on the transition from environmental education to $\bar{}$ education for sustainable development.

UNESCO is working to:

- ▲ Enhance both formal and non-formal education programmes on environment and sustainable development at all levels and for people of all ages (Transdisciplinary Project: Environment and Population Education and Information for Development, EPD).
- ▲ Raise public awareness of sustainable development issues by launching cooperative activities with major groups (the media, the productive sector, youth, indigenous people and women).
- Improve the communication of policy-relevant information to decision makers.
- Promote basic education in general (Education for All) and scientific and technological literacy in particular (Project 2000+).
- Promote reform of education in the perspective of life-long learning as follow-up to the conclusions and recommendations of the International Commission on Education for the Twenty-First
 Century.
- ▲ Increase training opportunities at the university level for educators, scientists and other relevant professionals in developing countries.
- ▲ Foster interdisciplinary training and inter-university networks (UNESCO Chairs, Ecotechnie Chairs and UNITWIN programmes).

CAPACITY BUILDING IN DEVELOPING COUNTRIES AND TRANSFER OF ENVIRONMENTALLY SOUND TECHNOLOGY

(CHAPTERS 37 AND 34)

- ▲ Reinforce endogenous capacity building in developing countries as a priority component of all UNESCO programmes.
- Promote South-South and North-South cooperation in relation to capacity building, including through the UNESCO Chairs and UNITWIN programmes.
- ▲ Promote the use of modern technologies in data collection and processing, research and education (e.g. geographic information system technologies).
- Promote the development and use of renewable sources of energy through the implementation of the World Solar Programme 1996-2005.
- Foster environmentally sound construction through the development of post-graduate learning materials for engineers.
- ▲ Promote interdisciplinary research and training as well as institutional organization to tackle complex environment and development issues.

OCEANS

(CHAPTER 17)

- Promote systematic global observation in order to assess the health of the ocean; marine life and the coastal environment; improve climate models; and improve weather predictions by implementing a Global Ocean Observing System (GOOS) (IOC in cooperation with WMO, UNEP and ICSU).
- Promote ocean science for the management of the marine environment, including through the IOC Regional Programmes.
- ▲ Address critical uncertainties of climate change, by co-sponsoring the World Climate Research Programme (IOC with WMO and ICSU) and contributing to the ICSU International Geosphere-Biosphere Programme.
- Develop national capacities for oceanographic research and observation programmes.
- ▲ Provide the secretariat to the ACC Sub-Committee on Oceans and Coastal Areas (IOC).

UNESCO ACTION

COASTAL AREAS AND SMALL ISLANDS (CHAPTER 17)

- ▲ Promote integrated planning and management of coastal regions and small
 islands through interdisciplinary scientific activities, education and communication using a participatory approach sensitive to cultural diversity (Transdisciplinary Project on Environment and Development in Coastal Regions and Small Islands, CSI).
- ▲ Develop interdisciplinary pilot projects of research training and demonstration (CSI as a platform for cooperation of IGCP, IHP, IOC, MAB and MOST) addressing critical issues such as water management in tropical islands, coastal erosion and marine pollution, conservation and sustainable use of biodiversity in humid tropical coastal ecosystems.
- Support the implementation of
 the Barbados Plan of Action for the sustainable development of small island developing states.

▲ Support regional networks for coastal research, data exchange and monitoring (e.g. of harmful algal blooms and marine pollution).

FRESHWATER RESOURCES

(CHAPTER 18)

- ▲ Promote a preventive approach to the upcoming freshwater crisis (quantity and quality) through integration of scientific, educational, cultural and communication aspects in addressing water management.
- Support the assessment of national water resources and the establishment of water management guidelines, taking into account the impact of human activities on the `hydrological cycle (IHP).
- ▲ Coordinate research to improve the understanding of processes within the hydrological component of the climate system and the impacts of possible climate change on water resources (IHP).
- ▲ Study the impacts of social transformations (e.g. population growth and urbanization) on water quality and quantity (IHP).
- ▲ Support hydrological observation → programmes within the Global Terfestrial Observing System (GTOS).
- Promote participation by developing countries in research and observation programmes related to freshwater by strengthening technical support, post-graduate training for specialists and a lectureship scheme (IHP).
- ▲ Strengthen information for decision makers, education and public awareness programmes about freshwater issues.



BIOLOGICAL DIVERSITY

(CHAPTER 15)

- ▲ Reinforce UNESCO's World Network of Biosphere Reserves aimed at the conservation of biodiversity, the sustainable use of biological resources and related research, monitoring, education and training (Implementation of the Seville Strategy – MAB).
- Enhance world-wide coordinated research on, and inventories and monitoring of, biological diversity (DIVERSITAS Programme – ICSU-IUBS-SCOPE-UNESCO).
- Reinforce the development of natural sites under the World Heritage Convention (WHC).
- ▲ Support Microbial Resources Centres (MIRCENs) and their networking.
- ▲ Support research, monitoring and conservation of marine biological diversity and develop networks of marine research sites (IOC in cooperation with MAB and CSI).
- Promote the conservation and sustainable use of plant genetic resources by supporting and training local ethnobotanists, and preparing guidelines on plant collection (People and Plants Programme – WWF International-UNESCO-MAB-Kew Gardens).
- Train specialists, strengthen institutions and communicate sound scientific information on biodiversity (including through environmental education).
- Provide scientific and technical support to the implementation of the Convention on Biological Diversity.

LAND RESOURCES AND LAND-USE PLANNING

(CHAPTERS 10, 11, 12, 13, 14, 20, 21)

- Provide the scientific basis for integrated ecological approaches for the conservation and sustainable management of land ecosystems and resources, and for combating desertification and deforestation (MAB).
- Promote problem-oriented research on geological processes affecting the environment, land use and causing natural disasters (IGCP/GEO).
- ▲ Develop and coordinate interdisciplinary research and training on sustainable mountain development (MAB, IHP, IGCP/GEO).
- ▲ Assist in the development of national scientific capacities in developing countries, including the strengthening of institutional capacities (MAB, IGCP/GEO, IHP).
- ▲ Support the development of a Global Terrestrial Observing System (GTOS), a joint programme of UNEP, FAO, UNESCO, WMO and ICSU.
- Provide technical support to the implementation of the Convention to Combat Desertification, particularly in Africa (MAB, IHP, IGCP/GEO), and to the Intergovernmental Panel on Forests (MAB).
- Strengthen information for decision makers, education, and public awareness programmes on land resources and land-use planning, particularly in relation to desertification and deforestation.

RENEWABLE ENERGY SOURCES (CHAPTERS 9, 11, 12, 34)

- Promote the development and application of renewable sources of energy through the World Solar Programme 1996-2005.
- ▲ Act as secretariat of the World Solar Commission.
- ▲ Develop a global partnership between the major stakeholders (governments, UN and other intergovernmental organizations, scientists and engineers, the energy industry, NGOs, educators and women) concerned with the implementation of the World Solar Programme.
- Promote the access, transfer and sharing of knowledge on renewable sources of energy by establishing *inter alia* a global information networking system.
- ▲ Assist developing countries in building up national capacities needed for the utilization of renewable sources of energy through educational and training activities.



UNESCO AND THE CONVENTIONS

CONVENTION ON BIOLOGICAL DIVERSITY

The Convention on Biological Diversity came into force on 29 December 1993 and has been ratified by over 165 countries. This Convention provides, for the first time, an internationally agreed legal framework for concerted action to conserve and sustainably use biological diversity.

UNESCO supports the implementation of the Convention as follows:

- ▲ Strengthen the technical and staff capacity of the Secretariat of the Convention.
- ▲ Promote *in situ* conservation and the sustainable use of biodiversity by strengthening the World Network of Biosphere Reserves and the natural sites under the World Hefitage Convention.
- ▲ Support research, monitoring and conservation of marine biological diversity and develop networks of marine research sites (IOC in cooperation with MAB and CSI).
- Promote and facilitate scientific research on biological diversity (DIVERSITAS).
- ▲ Develop education and public awareness programmes related to biological diversity (science and education programmes).
- ▲ Strengthen developing country capacities in the ecological and biological sciences, including taxonomy and biotechnology.
- ▲ Monitor the impacts of global change on biological diversity by supporting the Global Terrestrial Observing System (GTOS) and the Global Ocean Observing System (GOOS).
- ▲ Input scientific data and information needed to implement the Convention, particularly through the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA).

FRAMEWORK CONVENTION ON CLIMATE CHANGE

The Framework Convention on Climate Change came into force on 21 March 1994 and has been ratified by over 160 countries. The purpose of the Convention is to stabilize greenhouse-gas concentrations in the atmosphere at a level that would prevent dangerous human impacts to the climate system.

UNESCO and its IOC support the implementation of the Convention as follows:

- ▲ Co-sponsor the World Climate Programme (WMO, UNEP, UNESCO and its IOC, FAO and ICSU) as part of the inter-agency Climate Agenda.
- ▲ Promote research needed to understand the role of the ocean as a source and sink for greenhouse gases (IOC), the role of the hydrological cycle in the climate system and the impacts of climate change on water resources (IHP).
- Promote systematic observations of the ocean that can be used to improve climate models and monitor the impacts of climate change, by developing a Global Ocean Observing System (GOOS) and sponsoring the Global Climate Observing System (GCOS).
- ▲ Promote systematic observation of terrestrial ecosystems and processes by supporting the development of a Global Terrestrial Observing `System (GTOS).
- ▲ Provide scientific input to the work of the Intergovernmental Panel on Climate Change (IPCC) and the SBSTTA of the Conference of the Parties to the Convention.
- ▲ Strengthen training, education, public awareness programmes and information for decision makers about climate change.

UNESCO AND THE CONVENTIONS

CONVENTION TO COMBAT DESERTIFICATION

The Convention to Combat Desertification was adopted on 17 June 1994 at the 5th session of the Intergovernmental Negotiating Committee held in Paris at UNESCO headquarters. The United Nations General Assembly declared this date World Day for Combating Desertification and Drought, to be celebrated annually.

The Convention was signed at a ceremony organized in October 1994 also at UNESCO headquarters. A total of 115 countries signed the Convention which came into force on 26 December 1996, three months after the submission of the 50th instrument of ratification by a State Party.

With its long tradition in research and studies on arid zones, UNESCO has adapted its programmes concerning arid and semi-arid zones in order to conform to the Convention's objectives and the recommendations of Chapter 12 of Agenda 21 concerning the management of fragile ecosystems, and combating desertification and drought.

UNESCO supports the implementation of the Convention primarily through the following activities:

- Promote problem-oriented research in arid and semi-arid zones in the context of UNESCO's major scientific programmes (MAB, IHP, IGCP/GEO).
- ▲ Support scientific capacity building in countries affected by desertification with priority attention to be given to Africa.
- ▲ Contribute to the collection, analysis and exchange of relevant scientific data and information.
- ▲ Strengthen cooperation with the Sahara and Sahel Observatory (SSO) in various domains of common interest such as: setting up ROSELT, a network of long-term ecological monitoring observatories (MAB), and the study of large aquifers and of problems of water resources management (IHP).
- ▲ Promote education and public awareness programmes and information for decision makers about combating desertification (all programme areas of UNESCO).
- Provide technical support to the Secretariat of the Convention and to its Committee on Science and Technology.

TRANSDISCIPLINARY COOPERATION

The diversity of UNESCO's programmes in environment and development is a great asset for the organization. UNCED follow-up provides an important opportunity to promote interdisciplinary scientific work and intersectoral approaches and activities, and to further interaction between programmes, joint planning, cooperation and cross fertilization between sectors. Although not considered as an objective in itself, this "transdisciplinarity" is viewed as a tool by which complex problems should be addressed where this is the most appropriate method of problem solving, and has been incorporated as a major component of the Organization's Medium-Term Strategy for 1996-2001.

Sustainable development will only be achieved by ensuring that the core issues are addressed from a multi-stakeholder approach. This requires a different working paradigm where new partnerships are sought and different disciplines join forces to bring solutions to complex problems.

UNESCO's transdisciplinary action to follow up UNCED has been enhanced by four organizational arrangements:

- the specific house-wide UNCED follow-up responsibilities entrusted to the Bureau for Coordination of Environmental Programmes;
- the establishment of an interdisciplinary advisory committee to the Director General on UNCED follow-up;
- the institutionalization of regular consultations of the Chairpersons of the scientific coordinating councils of UNESCO's four international scientific cooperation programmes (MAB, IHP, IGCP and MOST) and of IOC, used for promoting cooperation between those five scientific areas;
- the integration of UNESCO's activities in environment, population and development education/information at the programmatic level and in a single management unit (EPD).

The following summary of Projects and activities illustrates transdisciplinarity in action. The Project on Environment and Development in Coastal Regions and Small Islands (CSI), representing one of the major new transdisciplinary endeavours of the Organization, is presented on page 8.

ENVIRONMENT AND POPULATION EDUCATION AND INFORMATION FOR DEVELOPMENT (EPD)

EPD acts as a mobilizing, integrating and innovating project involving all UNESCO sectors and regional offices. The goal of this project is to foster education and information programmes on the interrelated issues of environment, population and development. The specific topics addressed include the social phenomena of population growth and migration, development issues and the broad range of environmental topics. The new integrating concept is that of education for sustainable development.

Project activities focus on improving the quality and relevance of education and public awareness raising by ensuring scientifically sound information and a better understanding of both global interdependencies and specific local contexts. The primary target audiences are teachers, non-formal educators and communicators, decision makers, women and youth. Both formal and non-formal education channels are being used for project implementation, as well as new technologies to improve learning and to provide access to information for all.

EPD provides the technical support for UNESCO's role as inter-agency Task Manager for the implementation of Chapter 36 of Agenda 21. EPD also serves as the focal point for follow-up to the Cairo Conference, for which UNESCO serves as lead agency in certain inter-agency activities.

TRANSDISCIPLINARY COOPERATION

CITIES: MANAGEMENT OF SOCIAL AND ENVIRONMENTAL TRANSFORMATIONS

The goal of this research and action-oriented project is to encourage initiatives aimed at improving the quality of life and to promote the exercise of citizenship in an urban environment.

This project, anchored in the cooperation of the MOST and MAB Programmes, is implemented in partnership with local authorities, NGOs and grass roots organizations. Active participation of other international organizations and of scientific communities is also an important aspect.

The activities of the social sciences are centred on combating various forms of social exclusion and on fostering solidarity and citizens' participation in the face of social dysfunction. The natural sciences provide the scientific support for addressing problems related to water supply and quality, management of urban waste, and the deterioration of the built-up environment linked to urban growth.

CULTURE AND ENVIRONMENT

UNESCO's activities in this field aim to foster a greater understanding of the intimate relationship between human culture and the natural environment, and the recognition that cultural considerations are vital to any enduring resolution of environment and development problems. UNESCO is seeking solutions to environment and development problems not only founded on experimentation and observation, but also embedded in local systems of value and meaning. It promotes the concept that the conservation of biological diversity and cultural diversity must go hand in hand.

Increased attention is being given to the cultural dimension of development in a broad sense and to the cultural acceptability of change brought about by development, globalization and large-scale infrastructure projects.

Several activities are under way, whose long-term aim is to establish a network of pilot projects and researchers promoting the importance of indigenous knowledge in development, and demonstrating practically how this can be approached. The Cultural Dimension of Development and The Cultural Context of Natural Resource Management Project in the Asia and Pacific region are two particular initiatives. Action oriented and aimed at village-level development, their common principle is that they begin from local values, knowledge, cultural practices and beliefs.

UNESCO'S CONTRIBUTION TO THE INTERNATIONAL DECADE FOR NATURAL DISASTER REDUCTION (IDNDR)

The activities of the IDNDR are linked to the implementation of Agenda 21. UNESCO's aims are to promote a better scientific understanding of natural disasters (earthquakes, volcanic eruptions, floods, landslides, tsunamis) and their intensity, to help set up reliable observatory and early warning networks and systems, to encourage the establishment of rational land-use plans, to promote the adoption of suitable building design, to protect educational and cultural buildings, to strengthen environmental protection for the prevention of natural disasters, to enhance preparedness and public awareness, and to foster postdisaster investigation.

While the scientific work is spearheaded by the natural disaster programme in the Earth Sciences, and the intergovernmental scientific programmes (IGCP, IHP, IOC, MAB), activities of all other programme sectors contribute to this endeavour aimed at preventing major human and economic losses.

PARTNERS

Implementation of Agenda 21 marks the beginning of a new era of cooperation and coordination within the UN system, of strengthening established partnerships and developing new ones.

UNESCO works closely with the UN and other agencies in the system, particularly UNEP, WMO and FAO, as well as with the major international scientific, educational and professional associations in the field of environment and development, notably ICSU and its member unions and committees, and the World Conservation Union (IUCN).

Cooperation within the UN system is based on the principle of sharing of responsibilities and acting in partnership for the implementation of programmes and activities at the global, regional and, in particular, national levels. Partnership within the UN system is built on "comparative advantage", notably the specialized competence of each agency leading to a synergy of services linked to Member States from the entire UN system.

UN system coordination is ensured through the ACC Inter-agency Committee on Sustainable Development (IACSD) of which UNESCO is an active partner. IACSD is assisted in its work by inter-agency Task Managers. For each chapter in Agenda 21, a Task Manager has been designated among the UN system organizations.

In the spirit of Agenda 21, UNESCO has enhanced its partnerships with other very important stakeholders.in sustainable development including the private sector and the different components of civil society, including parliamentarians, local authorities, youth, women's organizations, NGOs, etc. Strengthening further cooperation with these non-governmental stakeholders and promoting a participatory approach is another main line of action in UNESCO's contribution to moving towards sustainable development.

Agenda 21 also calls for enhanced cooperation between the UN system and financing institutions (e.g. the World Bank) and mechanisms (e.g. Global Environment Facility) in UNCED follow-up. UNESCO is actively seeking this cooperation including with bilateral donors, foundations and the private sector.

ENVIRONMENT AND SUSTAINABLE DEVELOPMENT AT UNESCO



PRINCIPLES 1 AND 3

Rio Declaration on Environment and Development

"Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature."

"The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations."

Mindful of the ethical and human rights dimensions of these two principles, UNESCO has launched a process of preparing a draft Declaration on the Safeguarding of Future Generations highlighting, amongst others, the responsibility of present generations for the preservation of life on earth, in particular of the genetic heritage of humankind and biodiversity, the protection of the environment and the responsibility to pass on to future generations conditions which are condusive to equitable socio-economic development.

UNESCO ACTORS:

- ▲ INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION (IOC)
- ▲ MAN AND THE BIOSPHERE (MAB) PROGRAMME including the:
 - WORLD NETWORK OF BIOSPHERE RESERVES
- ▲ INTERNATIONAL HYDROLOGICAL PROGRAMME (IHP)
- ▲ EARTH SCIENCES AND NATURAL HAZARDS PROGRAMMES (GEO) including the INTERNATIONAL GEOLOGICAL CORRELATION PROGRAMME (IGCP)
- ▲ ENVIRONMENT AND DEVELOPMENT IN COASTAL REGIONS AND SMALL ISLANDS (CSI) PROJECT

- WORLD SOLAR PROGRAMME 1996-2005 (dealing with all sources of renewable energies), and other activities in engineering sciences.
- ▲ NETWORK OF MICROBIAL RESOURCES CENTRES (MIRCENs)
- ▲、PROGRAMMES IN BASIC SCIENCES
- MANAGEMENT OF SOCIAL TRANSFORMATIONS (MOST) PROGRAMME and other major social sciences activities
- ▲ ENVIRONMENT AND POPULATION EDUCATION AND INFORMATION FOR DEVELOPMENT (EPD) PROJECT
- ▲ EDUCATION FOR ALL (EFA) PROGRAMME
- ▲ SCIENTIFIC AND TECHNICAL LITERACY FOR ALL – PROJECT 2000+
- ▲ UNESCO CHAIRS/ECOTECHNIE CHAIRS AND UNITWIN PROGRAMMES
- ▲ CONVENTION CONCERNING THE PROTECTION OF THE WORLD CULTURAL AND NATURAL HERITAGE (WHC)
- ▲ CULTURE, ENVIRONMENT AND DEVELOPMENT PROGRAMMES
- ▲ COMMUNICATION AND INFORMATION PROGRAMMES
- ▲ UNESCO CLUBS AND ASSOCIATED SCHOOLS
- ▲ PRIORITY TARGET GROUPS for all programmes are:
 - WOMEN
- YOUNG PEOPLE
- AFRICA
- LEAST DEVELOPED COUNTRIES



FURTHER INFORMATION UNESCO

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