United Nations
Educational, Scientific and
Cultural Organization

Natural
Sciences
Sector

UNESCO Science for Sustainable Development

PROMOTING INTERNATIONAL COOPERATION AND CAPACITY BUILDING IN SCIENCE FOR OVER 65 YEARS

UNESCO's Natural Sciences Sector implements major international science programmes aimed at promoting and supporting sustainable development in all its Member States. Programmes are designed to respond to countries' diverse needs, be they the attainment of the Millennium Development Goals or the application of ethics in the practice of cutting-edge science. Programme implementation is increasingly via the UN "Delivering as One" approach.

Africa and Gender Equality are the over-riding priorities.

UNESCO acts as an advocate for science, a platform for generating and sharing ideas and standard setting, and promotes dialogue between scientists and policy-makers. It empowers and catalyses innovative initiatives in the field of international cooperation in science, in particular through networks and capacity building.

In the period 2010-2011, there will be increasing focus on:

- **Science policy and capacity building**
- **Science education**
- **Sustainable management of freshwater resources**
- **Conservation of terrestrial ecosystems**
- **Governance of the oceans and coasts**
- **The climate change knowledge base and adaptation measures**

A LITTLE HISTORY

The 'S' has been an integral part of UNESCO from its foundation in 1945. In its 65 years of existence, UNESCO has acted as a catalyst for the establishment of many, now leading scientific unions and bodies such as the International Union for Conservation of Nature (IUCN, 1948), and the European Organization for Nuclear Research (CERN, 1954) which saw the development of the Internet. Initiatives with far-reaching implications for sustainable human security and well-being – such as the International Hydrological Programme (IHP) or the Man and the Biosphere Programme (MAB) – were launched in the first thirty years of UNESCO's history.

UNESCO NATURAL SCIENCES SECTOR THEMES

Policy and governance
- SCIENCE, TECHNOLOGY AND INNOVATION (STI) POLICY
- SCIENCE GOVERNANCE
- SCIENCE PARKS

Science, technology, engineering
- BASIC SCIENCES
- ENGINEERING
- RENEWABLE ENERGY
- RESEARCH FOR HEALTH

Natural resources and the environment
- FRESHWATER
- OCEANS
- ECOLOGICAL SCIENCES
- EARTH SCIENCES
- REMOTE SENSING

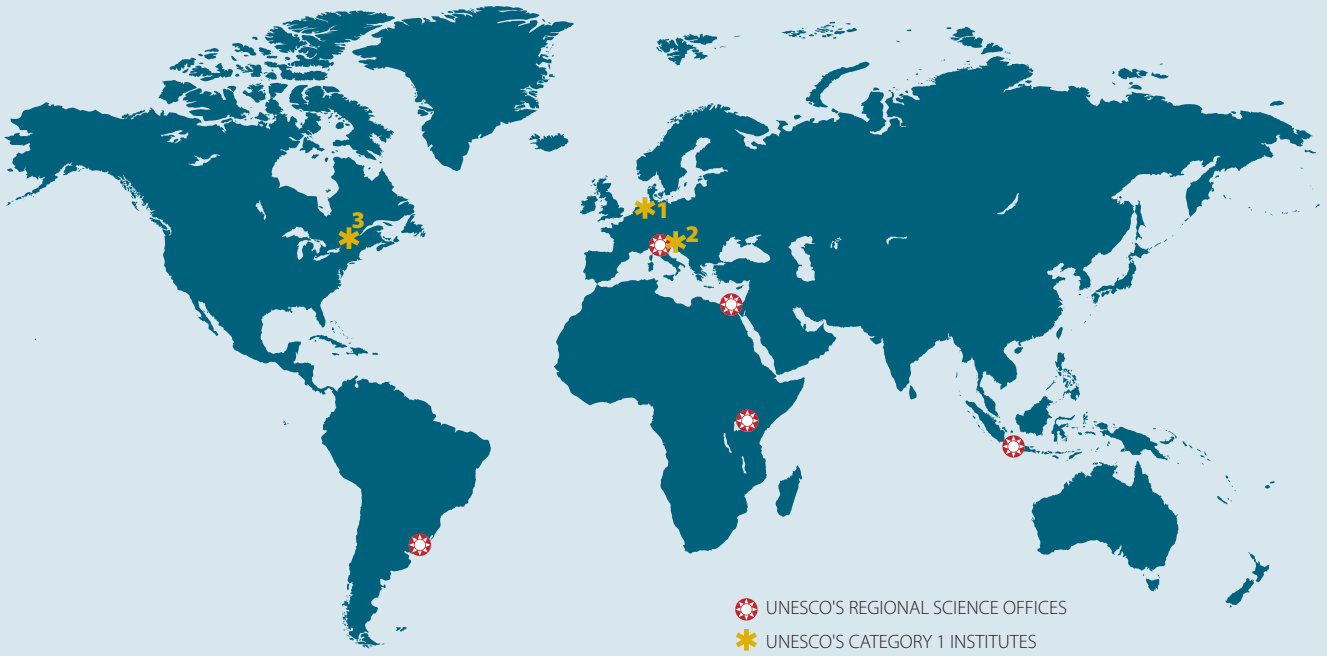
Global challenges
- CLIMATE CHANGE
- WATER CRISIS
- NATURAL DISASTERS
- BIODIVERSITY LOSS
- ENERGY CRISIS

Focus on
- AFRICA
- WOMEN AND GENDER EQUALITY
- SMALL ISLAND DEVELOPING STATES
- LOCAL AND INDIGENOUS KNOWLEDGE SYSTEMS
- YOUTH

All themes contribute to
- POLICY ADVICE AND FORMULATION
- CAPACITY BUILDING
- SCIENCE EDUCATION
- DECADE OF EDUCATION FOR SUSTAINABLE DEVELOPMENT
- POPULARIZATION OF SCIENCE

UNESCO Science for Sustainable Development

THE NATURAL SCIENCES SECTOR: STRUCTURE, NETWORKS, COMMUNITIES



The Natural Sciences Sector, with a staff of around 200, is led by the Assistant Director-General for Natural Sciences. Programmes and activities are implemented through UNESCO Headquarters and the UNESCO Field Office network. **There are five regional UNESCO offices for science: Cairo** (Arab States); **Jakarta** (Asia and the Pacific); **Montevideo** (Latin America and the Caribbean); **Nairobi** (Africa); and **Venice** (Europe and North America). Twenty-three of UNESCO's 52 field offices have a Natural Sciences Sector representative. UNESCO's science programmes are implemented through its network of National Commissions and its multiple networks and partners both in the public and private sectors.

ASSOCIATED INSTITUTES AND CENTRES

Category I Institutes are an integral part of UNESCO:

1. **THE UNESCO-IHE INSTITUTE FOR WATER EDUCATION**, DELFT, THE NETHERLANDS
2. **THE ABDUS SALAM INTERNATIONAL CENTRE FOR THEORETICAL PHYSICS (ICTP),** TRIESTE, ITALY
3. **THE UNESCO INSTITUTE FOR STATISTICS (UIS),** MONTREAL, CANADA

Category II Centres under the auspices of UNESCO:

A network of over 25 centres in the fields of water, renewable energy, science policy, mathematics, physics, biotechnology, the geosciences and remote sensing augment the Regular Programme by carrying out capacity building in their specific areas of competence.

UNESCO CHAIRS IN THE NATURAL SCIENCES

Around 200 of the university Chairs in the UNESCO/UNITWIN Chairs Programme are in science – in the fields of basic and engineering sciences, ecological and earth sciences, science policy and sustainable development, water and ocean sciences.

INTERNATIONAL SCIENCE PROGRAMMES

- INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION (IOC)
- INTERNATIONAL BASIC SCIENCES PROGRAMME (IBSP)
- INTERNATIONAL HYDROLOGICAL PROGRAMME (IHP)
- MAN AND THE BIOSPHERE PROGRAMME (MAB)
- INTERNATIONAL GEOSCIENCES PROGRAMME (IGCP)

UNESCO INTERSECTORAL PLATFORMS LED BY THE NATURAL SCIENCES SECTOR

- UNESCO ACTION TO ADDRESS CLIMATE CHANGE
- SCIENCE EDUCATION
- MAURITIUS PROGRAMME OF ACTION FOR THE SUSTAINABLE DEVELOPMENT OF SMALL ISLAND DEVELOPING STATES

FOR FURTHER INFORMATION:

Executive Office
Natural Sciences Sector
1, rue Miollis
75732 Paris Cedex 15, France
sc.communication@unesco.org
www.unesco.org/science