

Section 4 : Means of Implementation

Chapter 35

SCIENCE FOR SUSTAINABLE DEVELOPMENT

A. Strengthening the scientific basis for sustainable management

Objectives

To:-

- strengthen research in areas relevant to environment and development.
- improve interactions between science and decision making.
- use indigenous and local knowledge to achieve sustainable development.
- improve cooperation between scientists and promote interdisciplinary research.

Activities

Countries should:

- prepare an inventory of their natural and social science data
- coordinate their research efforts with those of other countries
- monitor quality of life and environment indicators
- concentrate on scientific research which meets the needs of sustainable development
- link current science with indigenous knowledge.

B. Enhancing scientific understanding

Objectives

To improve understanding of the linkages between human and natural environment systems.

Activities

- Expand the global monitoring network and the use of remote sensing, robotic monitoring and computer modelling to study global systems.
- Present the results of global monitoring in a publicly accessible form.
- Develop the capacity to predict ecosystem responses to the threats posed by climate change and loss of biodiversity.

C. Improving long-term scientific assessment

Objective

To assess current trends in environment and develop issues to assist in the formulation of long term policy.

Activities

- Coordinate existing systems that gather data and statistics on development and environment issues.
- Develop methods to carry out regional, national and international audits on development.

D. Building up scientific capacity and capability

Scientists have an increasingly important role to play in issues dealing with development and the environment.

Objective

To improve the scientific capacities of all countries.

Activities

- Increase the involvement of scientists in national, regional and global environment and development programme.
- Promote education and training of scientists.
- Strengthen scientific infrastructure in schools, universities and research institutions.
- Expand national scientific and technological databases.
- Expand and increase access to scientific and technological information networks.
- Compile, analyse and publicise indigenous environment and development knowledge.
- Create conditions (e.g. salaries, equipment and libraries) to ensure that scientists will work in their home country.
- Increase national, regional and global capacity for carrying out scientific research on environmentally sound sustainable development.