

WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT

SECOND MEETING

WCED/85/9

Jakarta, 27-29 March 1985

Item 6.5 of the Provisional Agenda

DRAFT WORK PROGRAMME

DECISIONS SUPPORT SYSTEMS

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DECISION SUPPORT SYSTEMS

Note by the Secretary General

1. The Commission will wish to explore in some detail the cross cutting management issues which underlie the ability of society to choose paths of development which are sustainable. Among these, some of the more important are the institutional and information supports (including the methodological instruments and conceptual tools) needed by decision-makers at all levels for arriving at environmentally sound choices.
2. At its first meeting, the Commission recognized the need to strengthen the capacity of governments and the international community in the area of global environmental monitoring and reporting or, more generally, in the broad area of decision support systems for environmental management. Decision-making on environmental and development issues requires information which is context-specific regarding both local resources and the needs of particular socio-cultural target groups. The new technologies of remote-sensing information processing and communication open a whole new array of possibilities for rapidly gaining both a large scale and a localized understanding of environment resource and related societal issues, and thus to facilitate improved decisions.
3. In developing the draft programme of work in this area, it has become clear that it should embrace several activities between monitoring and reporting, including, processing, analysis and assessment, as well as presentation and reporting. It should examine the potential inherent in decentralized communication networks, made possible by microprocessors, distributed data links, etc. to that inherent in the rapidly evolving related fields of satellite monitoring and

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remote sensing. It should look at the policy, legal, institutional and other constraints in realizing the potential and set out recommendations that the Commission could consider.

4. In doing so, there are a number of critical questions that the Commission will need to address, including:

Decision Support Systems for Environmental and Resource Management

- What types of information relevant to environmental and resource management are used by decision-makers, scientists and the public at local, national and international levels?
- What is the potential for more effective environmental and resource management at local, national and global levels inherent in the
 - a) decentralized communication networks made possible by personal computers, data links, etc. and
 - b) rapidly evolving techniques of satellite monitoring and remote sensing?
- What are the principal legal, institutional and policy constraints in realizing this potential and how may they be overcome?

Technical Information Systems

- What are the major technical information systems relevant to environmental and resource management today at the international level, national and local levels?
- What is the potential for new and more effective means of assessing, presenting and reporting this information?
- What are the constraints, and how may they be overcome?

Accessibility and the Right to Know

- What are the more important issues of accessibility to information concerning environmental and resource management?
- Where and to what extent is the "right to know" the quality of the ambient environment built into conventions, international agreements, national laws, collective bargaining agreements, etc?

- What is the potential in current and projected technologies for monitoring and reporting to extend the "right to know" to all levels on a cost-effective basis?
- What are the principal constraints preventing an extension of the "right to know" at international, national, local and factory level?

Indicators, Norms and Standards

- What specific indicators can be developed to represent
 - . environmental quality
 - . status and trends of specific resources
 - . carrying capacity and resilience of specific ecosystems
 - . the capacity of institutions to respond to environmental and resource management needs
 - . the level of environmental intervention in development planning?
- What are the normative measures against which the status and trends of selected indicators can be assessed?
- How well do current norms and standards represent desirable goals and strategies for achieving sustainable development?
- What generalized methods are available or should be developed for designing norms, codes, standards etc., so as to permit adaptation of these to local needs and resource constraints?

Tools for Evaluation

- How effective are the various tools for assessment of environmental impact risks and hazards technology etc.?
- What additional tools exist or are needed to improve environmental decision-making?

5. DRAFT WORK PROGRAMME

5.1. Decision Support Systems Required for Environmental and Resource Management

This work will examine the major instruments and tools required for environmental and resource management in both developed and developing countries. In particular, it will examine the potential inherent in new information and communication technologies to increase the range and power of relevant information available to decision-makers and the public in these countries. The constraints in realizing this potential will be considered and conclusions and recommendations will be drawn on how to overcome them.

5.2. Technical Information Systems

This work will identify the major information systems relevant to environmental and resource management and available at local levels. It will also identify the major gaps in the existing information systems and consider the potential for new and more effective means of assessing and reporting this information.

5.3. Accessibility and the "Right to Know"

This work will identify the more important issues concerning the accessibility of governments, institutions, industry and the public to information concerning environmental and resource management. It will explore the potential in future technologies to give expression to the "Right to Know" at all levels, and draw conclusions and recommendations on how such rights may be extended.

5.4. Indicators, Norms and Standards

This work will consider specific indicators, norms and standards needed for more effective environmental and resource management, the capacity to produce them and changes needed to augment that capacity.

5.5. Tools for Evaluation

This work will consider the various approaches to evaluation used in different parts of the world, and draw conclusions and recommendations on their adequacy and means to improve them.

6. PHASED APPROACH TO THE WORK

The following draft programme summarizes the timetable of the Panel's activity:

Phase I: March to July 85'

The first phase activities will include: identifying more precisely the papers to be written; scoping the subjects to be covered; preparing outlines and identifying right contributors and working group members for peer review.

Phase II: June 85' to March 86'

The second phase activities include: drafting, re-drafting and preparation of specific reports.

Phase III: August 85' to July 86'

Workshops, peer group reviews, preparation of visuals and diagrams, drafting of final versions of synthesis papers. Presentation of report to the Commission.