

## DISCUSSION ON INTER-REGIONAL CO-OPERATION

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### ABSTRACT

The action plans have provided a strong base of sub-regional co-operation upon which existing inter-regional co-operation has been built in such areas as reports on the state of the marine environment and the effects of climate change, scientific organizations, methodology and intercalibration, and participation in international scientific activities. Other UNEP-supported inter-regional activities are planned between secretariats and in the creation of regional analytical centres.

The regions highlighted needs for better information exchange; research co-operation on El Nino, coral reefs, red tides, etc.; joint preparation of environmental impact assessment guidelines, bioassay techniques, and audio-visual training materials; development of regionally appropriate environmental control technologies and waste disposal options; inter-regional training activities, internship programmes and expert reviews; combined approaches to problems such radioactive pollution, seabed mining, protection of the high seas, and marine park management; and continued inter-regional scientific meetings.

In the light of the presentations of the scientific accomplishments of each of the regional action plans, the participants were invited to discuss ways in which co-operation could be further developed between the regions in the interests of the protection and management of the whole Pacific Ocean, and eventually of all the seas of the world.

The discussion was opened by Stjepan Keckes, who reviewed the progress on inter-regional co-operation to date. Each action plan provided the basis for good sub-regional co-operation under the control of the governments concerned. UNEP will continue to support such co-operation both at the government level and among scientists. The regional reports on the state of the marine environment (including 4 in the Pacific), now being prepared, will contribute to the global report to be issued in 1989. Reports are also being prepared on the potential ecological and socio-economic effects of long-term climate change, which risks being a bigger environmental disaster than any other today. Advisory nongovernmental organizations of scientists or scientific institutions have been created in the East Asian Seas and the South Pacific. The intercomparability of data is essential, requiring continuing efforts to harmonize methodological approaches through such activities as joint meetings on methodology and intercalibration. Scientists in developing countries lack proper exposure to international science; these links are being forged through participation of scientists from the regions in GESAMP, and in the Pacific Science Congress and other international meetings.

All these activities will need to be continued in the future. There will also need to be meetings of secretariats and regional co-ordinators to try to improve the flow of information. For world-wide joint programmes like the mussel watch of GESAMP, it will be necessary to establish some regional analytical centres in each ocean to monitor and co-ordinate measurements of chlorinated hydrocarbons on a global scale. Discussions are now underway to explore the adoption of an action plan for the North-West Pacific which up to now has not been part of the UNEP-sponsored Regional Seas Programme. A large-scale conference on interdependence of environment and development may be organized for the Pacific region with UNEP support in 1990 or 1991. The Pacific is not presently threatened by radioactivity, but the Chernobyl accident has shown the danger of neglecting the capacity to monitor

radioactive pollution; an independent regional centre for such monitoring may be needed to serve the island states.

The regional co-ordinators then reviewed the ideas and priorities for inter-regional co-operation as seen from their regional perspective. For the South-East Pacific, the following subjects were suggested:

- joint research and exchange of information on the physical oceanographic and meteorological phenomena associated with the El Nino-Southern Oscillation;
- co-ordination at both a technical and political level of actions concerning marine radioactive pollution;
- adoption of regionally-appropriate guidelines for environmental impact assessments, including socio-economic aspects, suitable for developing countries;
- preparation of protocols for bioassay testing techniques using Pacific organisms;
- production of audio-visual training materials on Reference Methods for Marine Pollution Studies;
- studies of seabed mining and its environmental implications;
- development of appropriate environmental control technologies suitable for environmental management in the Pacific;
- exchange of experience and assistance in marine park management;
- better exchange of information, such as that appropriate for regional newsletters;
- determination of the appropriate forum for discussions of subjects of common interest, and for making joint declarations.

The co-ordinator for the South Pacific Regional Environment Programme endorsed the suggestions for inter-regional co-operation given in the paper opening the session by A. L. Dahl. There is a particular need for a greater transfer of information and knowledge such as at the present meeting, but perhaps every 2 years, so that environmental scientists can catch up with progress elsewhere, and can look for ways to help those that are lagging behind. Directories and other ways of encouraging a wider association of scientists are also useful. It is also necessary to investigate means of protecting the high seas in the Pacific, since the present regional agreements cover only the 200 mile exclusive economic zones. The pockets of high seas within and between East Asia, the South Pacific and the South-East Pacific are of particular concern.

For the East Asian Seas, most needs had already been suggested in the preceding discussion. In the area of information exchange, it is very important to improve communications among scientists and institutions, such as through joint training courses and workshops which could involve all three regions. On-the-job training through an internship programme would allow trainees to spend a few months working with laboratories and researchers in another region; the regional secretariats could exchange information on such opportunities. Where the regions share common ecosystems such as coral reefs, networks should be formed involving researchers in all the regions concerned; the coral taxonomy training course was a good recent example of such co-operation. Red tides are an increasing problem in the East Asian Seas that would benefit from co-operation with other regions with similar problems. It was pointed out that East Africa and the Caribbean also suffer from red tides, but that research on such approaches as a rapid test for contaminated fish had not yet produced satisfactory results.

In the general discussion that followed, a number of additional points were raised. There is a need to integrate the work of visiting scientists more carefully into national research priorities, both to increase interaction with local scientists and to control the few scientists that do not always respect national regulations. It is important for scientists to be committed to transferring knowledge to other countries where they are working.

It was pointed out that the regional programmes were not well known among outside scientists, even where they had been in existence for ten years, and that more could be done to promote them within the scientific community.

More could also be done in all the regions to develop methods to justify the protection of ecosystems, such as by converting ecological value to economic value. Many countries also faced similar problems in the ultimate disposal of wastes collected in pollution control or reception facilities. Many laboratories would benefit from the visit of an expert who could recommend improvements. Inter-regional discussion on how to fix suitable environmental quality standards appropriate to local conditions would also be useful.

Apart from the specific points mentioned above, the theme most frequently raised in the discussion was the need for wider exchanges of appropriate kinds of information between programmes and scientists. UNEP is making some plans to encourage this, but much depends on the efforts and initiatives of the regional programmes and the individual scientists themselves.

It was clear from the reactions of those present that the regional programmes already underway and the continuing UNEP efforts to stimulate inter-regional co-operation are gradually building into a larger co-ordinated effort to protect the marine and coastal areas of the Pacific, and indeed of the whole world.