

REPORTS

OECD/WHO-ECEH WORKSHOP ON ENVIRONMENTAL AND ENVIRONMENTAL HEALTH INFORMATION TO SUPPORT NATIONAL ENVIRONMENTAL ACTION PROGRAMMES (NEAP) AND NATIONAL ENVIRONMENTAL HEALTH ACTION PLANS (NEHAPS): USING DATA AND INDICATORS

Budapest, 22 and 23 May 1997

Report by the Chairman and the Rapporteur

OPENING AND INTRODUCTION

1. The workshop was hosted by the Hungarian Ministry for Environment and Regional Planning, the Ministry of Welfare, the Institute for Environmental Management, and the National Institute of Public Health. It was organised in co-operation with UNEP/GRID (Arendal).

2. More than 90 experts took part. They included representatives from 25 countries, 10 international agencies and financial institutions, 2 NGOs, independent experts and consultants. The participants were welcomed by Mr. Pál Bozó (Hungarian Ministry for Environment and Regional Planning) and by Dr. Alán Pinter, on behalf of the Johan Belá National Institute for Public Health; Dr. Alexander Kuchuk of WHO-ECEH and by Mr. Brendan Gillespie of OECD.

3. Mr. Gillespie introduced the Workshop and set out its objectives as:

- To improve the use of data for priority setting in NEAPs and NEHAPs;
- To assist and promote the development of indicators to help monitor NEAPs and NEHAPs;
- To consider key areas for improving environmental and environmental health information.

4. For the benefit of those who had not been present, a short account was given of the Chairman's draft conclusions from the OECD Seminar on Environmental Indicators in Central and Eastern European Countries, which had taken place the previous day (21 May).

5. The participants elected Prof. S. Tarkowski (Poland) as the overall Chairman and Dr. Norman J. Kings (U.K.) as Rapporteur of the Workshop.

STRUCTURE OF THE WORKSHOP

6. As well as the opening and concluding sessions, there were plenary sessions covering four related themes. Each of these sessions was introduced by an overview paper followed by accounts by representatives of countries with experience of each theme.

7. The four plenary themes were:

- (i) "Information for setting NEAP and NEHAP priorities" which covered the types of information needed and the extent to which these were available in countries in transition.
- (ii) "Indicators to monitor NEAP and NEHAP progress" which covered how countries could use environmental and environmental health indicators to help monitor the implementation of NEAPs and NEHAPs.
- (iii) "Using economic data and indicators" which covered methods for estimating the economic costs of health effects and how these can be used in setting priorities for NEAPs and NEHAPs.
- (iv) "Improving environmental and environmental health information systems" which covered the objectives and principles for improving such information systems.

8. Each plenary session included periods of three discussion to exchange information and experience and to discuss and debate points made in the formal presentations. In addition, for one session, the participants formed two working groups for more detailed discussions. The results of all these discussions are presented in the "Conclusions" and "Recommendations" sections of this Report.

9. In the concluding session of the workshop the Rapporteur presented his draft Conclusions and Recommendations for consideration by the participants. Comments and suggestions for amendments and additions have, where possible, been included in this Report. On the proposal of the overall Chairman, it was agreed that the Rapporteur's revised report would be submitted to and cleared by the overall Chairman as the Chairman's Report of the Workshop.

CONCLUSIONS

General

10. Implementation of NEHAPs will be largely at the local level. Successful implementation of NEAPs will also depend on actions taken at the local level. To increase the effectiveness of implementation, integration of the NEAP and NEHAP processes at this level is advisable. In many cases, those responsible for implementing NEAPs and NEHAPs at the local level will wish to operate a single programme which incorporates the relevant actions from both plans. In such cases, local integration of the NEAP and NEHAP processes will be inevitable.

11. In developing NEAPs and NEHAPs several countries have been developing indicators to measure progress and such work should continue. In particular, targets and indicators may have to be developed which reflect local circumstances and needs. As yet, few countries have considered how this will be done, how local targets and indicators will relate to national ones and the extent to which national co-ordination of indicators relevant to the local level will be necessary.

In relation to information

12. Information on environmental factors with a known relationship to human health is more valuable in the context of NEAPs and NEHAPs, than information on factors with an hypothetical relationship. This is an important consideration in priority setting for NEAPs and NEHAPs. In addition, health risks are a powerful



argument when seeking the resources needed to initiate action. In CCEE/NIS countries, air quality and water quality were generally the environmental issues of greatest concern in terms of health impacts.

13. National information systems exist and have generally improved in these countries, despite severe economic constraints. They are usually good enough for initial decision-making on national priorities.

14. Centrally collected and aggregated information is not generally sensitive enough for setting priorities for local action. However, such information is often based on data collected at the local level which may therefore be available. Alternative sources of disaggregated data and of more detailed information (e.g. in academic institutions) should also be investigated, as well as data from similar situations elsewhere in the country or extrapolation of data from other countries may assist in setting local priorities.

15. In many countries there are still problems in sharing information between agencies, and greater dialogue between data collectors and those using the data (e.g. for decision-making) is needed to ensure the continuing relevance of the data collected.

16. Data quality is a common but difficult issue. In general, the starting point must be what already exists. Even if the quality of the existing data is considered inadequate for research purposes, it may still be good enough for initial priority setting. Nevertheless, environmental and health authorities need to ensure that their data is of good quality as basing policy decisions on poor data can be both dangerous and costly and can lead to loss of credibility and public confidence.

17. When considering data relating to exposure, there is usually a hierarchy of value. In decreasing relevance this is:

- measurements of internal dose in man (or other target);
- measurements of individual exposure (personal exposure);
- ambient concentrations in the environmental medium concerned;
- emission data.

18. Determining pathways of exposure can:

- help determine the relative importance of different sources;
- pinpoint populations or targets most at risk;
- better focus data collection;
- show where control actions will be feasible and effective.

19. Children may be at particular risk because of their sensitivity to environmental hazards and because morbidity arising from exposure in childhood can have long-term consequences. Therefore, information relating to exposure of children could be particularly important in decision making and priority setting.

20. Geographic Information Systems have great potential as tools for manipulating large amounts of data and for using it in spatial analysis. It can also have an important role in presenting the results and conclusions drawn from such analyses in ways which are attractive and easily understood by the public and other stakeholders. However, in seeking simplicity and attractiveness, care is needed to ensure that bias is not introduced and that important aspects of the information are not diluted or obscured.



Indicators to monitor NEAP and NEHAP progress

21. The OECD core set of indicators is a reasonable starting point for many of the issues likely to be addressed in NEAPs and NEHAPs. Where other indicators need to be developed, the OECD model of pressure/state/response provides a useful framework.

22. Indicators should reflect policy needs, be based on the best available science and be consistent with the level at which is proposed (international, national, local). Scientific rigour in the choice of indicators is particularly important if a consistent approach to monitoring progress is to be maintained in circumstances where political commitment is liable to change. However, programmes change and scientific understanding improves. Hence there is a need for flexibility to modify indicators so that they remain soundly based and relevant to policy needs.

23. Where possible, numerical indicators should be used, but some issues are not readily quantifiable. This is a particular problem where the health impact of environmental factors has not been rigorously established.

24. While all the presentations recognised the difficulties in developing indicators for monitoring progress towards environmental health objectives, the consensus was that some indicators of this kind were possible. A few countries have proposed some, particularly in relation to air quality and the microbiological quality of drinking water.

25. Mortality has limited value as an end-point for environmental health indicators. Countries want to make more use of morbidity data but there are difficulties in doing this. Thus the data is often of poor quality because of difficulties and imperfections in its collection. In addition, it is often difficult to relate such data to environmental exposure because of confounding socio-economic factors. Prolonging a good quality of life to later ages rather than extending the life-span of their citizens is the realistic goal in most OECD countries. However, in many central and eastern European countries, life expectancy remains significantly lower than in OECD countries; here, extending life expectancy remains an important policy goal.

26. International harmonisation of indicators used for monitoring progress would facilitate the sharing of experience and the comparison of the progress between countries. It may also increase public confidence in the indicators and the results which they produce. The OECD Core Set provides a basis for harmonising national environmental indicators but more work is needed to develop international consensus on a comprehensive set of environmental health indicators. Each country will determine its own priority issues and actions to deal with them so complete harmonisation of national indicators will not be possible.

Communicating information to the public and other stakeholders

27. While national governments are responsible for developing NEAPs, the process involves identifying and reaching a consensus on priorities and ensuring that problems are tackled in the most cost-effective way by those best placed to deal with them. There must be a strong political input but the process also requires information dissemination and consensus-building among a range of stakeholders if all these are to contribute to policy development and decision making. Information needs to be tailored to suit the needs of the different stakeholders who will have different degrees of knowledge and experience and most of whom will be interested in

specific parts of the NEAP or NEHAP. This introduces the danger of selective provision of information leading to bias and manipulation. Incorporating clear targets and well-chosen indicators for monitoring progress will help understanding and reduce such dangers.

28. Information dissemination to the public and other stakeholders is not well developed in all countries. To overcome this problem some countries may have to change existing administrative structures while others will have to devote more resources to dissemination.

29. Public perceptions of issues and relative priorities do not always reflect science. The quality, quantity and relevance of information available to the public on a specific issue are important factors in determining the public's perception of the issue. Hence public perception should be an important consideration when designing public information campaigns.

Economic analysis and economic indicators

30. Tools now exist for the effective economic analysis of some environmental and environmental health issues where adequate data exist. Such analysis can be valuable:

- in comparing options for action;
- as a contribution to priority setting;
- as a contribution to decision making;
- in designing least-cost risk reduction and risk prevention programmes;
- in indicating where there are gaps in knowledge.

RECOMMENDATIONS

It is recommended that countries:

31. Review the effectiveness of their environmental and health-related information systems for:

- priority-setting;
- developing targets;
- developing indicators for monitoring progress in implementing their NEAPs and NEHAPs and for achieving sustainable development;
- determining pathways of exposure and populations most at risk (children, the elderly etc.);
- economic analysis.

32. Encourage at the national and local levels, moves towards improved data quality and more integrated information systems to handle NEAP and NEHAP needs and all priority sustainable development issues in a co-ordinated, unified manner.

33. Seek opportunities to integrate the implementation of NEAPs and NEHAPs at the national and local level; address the information and co-ordination needs of local programmes for implementing NEAPs and NEHAPs.

34. While recognising the difficulties, develop indicators (and methodologies for measuring them) which bridge environment and health issues and share their experience with other countries.

35. Work with their neighbours in developing common indicators and in measuring programmes for shared problems.

36. Develop, as an integral part of their implementation strategy for NEAPs and NEHAPs, information on current public perceptions of the issues identified in these plans. Develop public information campaigns to improve the information available to the public and develop indicators which measure changes in public perceptions. Experience exists in some existing international programmes and in some countries of these issues which countries can draw on.

It is recommended that OECD, WHO, UNEP and other relevant international agencies and funding institutions

37. Strengthen their joint efforts in support of countries in improving their environment and health information systems including financial and technical assistance and capacity building at the national, regional and local levels. First steps might be to organise joint workshop to review the effectiveness of specific national systems in meeting the demands of the NEAP and NEHAP processes and to determine how international action can help improve data quality.

38. Facilitate the sharing of experience of those countries currently developing indicators which bridge environmental and health issues as part of their implementations strategies for NEAPs and NEHAPs. In the first instance this might take the form of a joint workshop.

39. Consider a joint initiative to explore with countries the scope for harmonising indicators for priority setting and for monitoring progress in implementing NEAPs and NEHAPs.

40. Consider jointly how they can work with Governments to facilitate local implementation of NEAPs and NEHAPs and the sharing of experience between countries.

41. Promote the application of economic analysis to environmental and environmental health problems. In particular, facilitate the dissemination of case studies where economic analysis has been applied successfully to environmental and environmental health problems. Consider using such studies to help train professionals in relevant techniques so that these are applied to a wider range of problems in more countries.