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# **ECONOMIC PERSPECTIVES ON ENVIRONMENT AND HEALTH**

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## Executive summary

This document describes the main lessons that can enrich our understanding of environment and health issues when economic aspects are included. There are three points at which economics and environment and health touch, and these can stimulate the authorities in charge of health and of the environment to develop their capacities to carry out economic analysis.

First, policy in many sectors affects environmental health, and economic analysis can express costs in explicit terms and hence encourage decision-makers to take them into account. Using economic analysis can be a powerful tool in intersectoral cooperation with sectors such as agriculture, transport, energy, industry and tourism. It will be one key element for successful implementation of national environmental health action plans, in partnership with various economic sectors. However, there will still be uncertainties about the extent of some risks, as well as in some economic evaluations related to the environment and health. In this context, countries' commitment to the precautionary principle will be crucial.

Second, economic analysis can assist in the setting of priorities with regard to risk reduction, by assessing the cost-effectiveness of such measures. It can therefore help to make better use of resources devoted to the implementation of local and national environment and health programmes.

Third, economic instruments can sometimes be efficient policy tools for improving health and the environment, and it is possible to make far more use of them in the European Region. There is increasing interest in policies that rely on economic instruments, since they are appropriate to meet new challenges to environment and health such as the rise of new patterns of pollution and the increasing privatization and liberalization of economic activities. Economic instruments such as environmental taxes or tradable permits are promising ways of advancing the internalization of environment and health costs, as is the removal of subsidies that support practices harmful to the environment and health. Such new policies will require greater coordination between countries, in order to avoid distortions of competition. Finally, the place of economic instruments seems bound to grow within European Union policies, and thus also in the context of the accession of new members. Future environmental health status in the Region will depend largely on progress in pricing goods and services at their real costs, and on the preparation of strategies for achieving this. The authorities in charge of health and of the environment should try to play a pro-active role in this field. That implies building up a common understanding with the authorities in charge of fiscal policy and of the reform of economic regulation.

Several international organizations have already been working in this area and have built up knowledge which can be instrumental in promoting movement in each of these three directions. This experience offers countries a solid basis for sustaining policy changes that will improve environment and health. Future efforts should be made in full partnership with the health sector, since improved wellbeing of the population, including better health, is the ultimate objective.

Relevant organizations, including the Organisation for Economic Co-operation and Development, the United Nations Development Programme, the United Nations Economic Commission for Europe, the United Nations Environment Programme, the World Bank and WHO, should increase their cooperative efforts to strengthen the use of economic analysis and economic instruments, to the benefit of environmental health in the countries of the European Region. Suggestions for such cooperative efforts are given in the conclusion of this document.

## Mandate

1. The Environmental Health Action Plan for Europe, adopted during the Second European Conference on Environment and Health (Helsinki, June 1994) stated (paragraph 338):

The integration of environmental health policies in economic sector policies is a common problem to all countries in the Region and applies to agriculture, energy, industry, tourism and transport. ... One of the tasks of the European Environment and Health Committee will be to explore, in partnership with the United Nations Economic Commission for Europe (UN/ECE) and the European Commission (EC), the possibilities for cooperative action with other relevant international organizations aimed at helping countries arrive at policies which adequately protect the environment and health without preventing economic development.<sup>1</sup>

## The economic dimensions of environment and health issues

### The economic benefits of mitigating health impacts

2. Reducing environment-related health problems could make people in the Region much better off. These problems do have economic repercussions: they generate additional costs for patients and the social welfare system, they lead to lost productivity and profits for industry, and they often result in lost income for individuals. Last but not least, people assign considerable value to reducing health risks.

3. Work has recently begun on calculating what would be the economic benefits of solving such problems. Though still imprecise, these calculations already show that current economic losses may be considerable (see Box 1). This is a further argument in favour of policies aimed at mitigating environment-related health problems.

#### **BOX 1. AIR POLLUTION: THE COST**

Urban air pollution is increasingly due to road traffic and is a growing environmental problem in many countries. Epidemiological studies have found statistically significant links between air pollution and indicators of both acute and chronic ill health. The resulting annual health costs and loss of wellbeing have surprised many observers: figures of FF 50 000 million (EUR 7600 million) have been put forward for France, while the figure for Switzerland is Sw.fr. 1600 million (EUR 1000 million).

Recent studies on particulate matter confirm the concern about the economic costs of the impact of this pollution on health. For the Paris region alone, they amount to around FF 12 000 million (EUR 1800 million), while for England and Wales estimates are up to £5 300 million (EUR 7 700 million).

*Source:* Chanel, 1998 (1) Chanel, 1996 (2); Cohen de Lara and Dron, 1998 (3); ECOPLAN, 1996 (4); Maddison, 1998 (5).

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<sup>1</sup> *Environmental health action plan for Europe*. Copenhagen, WHO Regional Office for Europe, 1994 (document EUR/ICP/CEH 212(A)).

## Economic determinants of environment and health issues

4. Analysis of environment-related health problems reveals the fact that economic activities are overwhelming contributors to them. This is particularly true when producers and consumers do not compensate for the economic losses which result from the impact of their activities on the environment. In fact, they have no incentive to reduce this impact, or to take it into account in their investment decisions and lifestyle choices. Yet the decisions taken today set patterns of production and consumption that will be irreversible for several years. In the long run, this can result in an exacerbation of environment-related health problems. Box 2 gives examples of the perverse incentives found in the transport sector, but the same applies to agriculture, the energy sector, etc. These problems are made even worse by the existence of grants and subsidies which directly favour activities that already have an excessive impact on the environment and health.

### **BOX 2. AIR POLLUTION: THE CAUSE**

In addition to the morbidity and mortality it causes through air pollution (see Box 1), road traffic leads to noise stress, loss of quality of life, water pollution, etc. Various economic evaluations show that the costs of its overall impact are far greater than the additional taxes paid by road transport (through fuel tax, registration, etc.). In other words, road traffic does not pay for the social costs it generates, which is tantamount to its being subsidized. This favours a pattern of transport development, and especially that of road transport, which is accompanied by excessive impacts on the environment and health.

Another example is the continuing low level of petrol prices in the United States of America and Canada compared with western Europe, which has certainly contributed to the higher north American reliance on car transport and kilometric consumption, both detrimental to the environment and especially to air quality.

## Economic instruments for protecting the environment and health

5. This analysis suggests that one way of addressing environment and health problems is to ensure that economic actors compensate more fully for all the costs resulting from their activities, including environment and health costs. Such an approach can be summarized in the two principles of “the polluter pays” and “the user pays”. In the case of environment and health costs, the phrase “internalization of external effects” is often used, since it is a question of making economic actors take account of costs that were “external” to their decision-making.

6. For environment-related health costs, this can be done by means of such economic instruments as environmental charges and taxes. When these costs are high, it may be unreasonable to charge the full amount immediately. Nevertheless, adopting plans to do so progressively sends a clear signal to the various economic actors. This will modify their anticipation of future prices, as they know they will have to pay, in the future, for the health costs that they will engender. As a result, this will drive them to design their long-term choices and strategies in an environmentally friendly way (see Box 3).

### **BOX 3. THE REAL PRICE OF ROAD TRANSPORT**

In the case of transport, economic instruments such as fuel taxes, urban tolls and parking fees can be used to modify the price of road transport, so that it reflects more accurately the full social costs of the impact on environment and health. For instance, the United Kingdom introduced a fuel tax “escalator” that has increased the tax on road fuels by 5% every year since 1993. In the Netherlands, constitutional barriers have been lifted to allow for a national road toll system, which could be operating in a few years. These initiatives could help the economic actors adapt their behaviour and make structural changes that would support a sustainable transport system.

## **Examples of the use of economic instruments and methods**

### ***Priority-setting and demonstration of economic benefits***

7. Economic analysis, by providing arguments for environmental health improvements, can help set priorities for policies and actions. The Republic of Moldova’s national environmental action plan, supported by the World Bank, used economic analysis for priority-setting. In particular, it applied cost-benefit analysis to establish environmental priorities, including health improvements as well as natural resource conservation and ecosystem preservation. The World Bank currently applies cost-benefit analysis to estimate the environmental health benefits that may be expected from investment projects. Such analysis was applied in the Slovenia environment project, which provides financing for households and small industries to convert from highly polluting energy (coal, wood or high sulfur fuel oil) to natural gas or liquefied petroleum gas.

### ***Environmental fiscal reform***

8. In 1991, Sweden was the first country to initiate environmental fiscal reform. Others, such as Denmark, the United Kingdom and now France, are following at different paces. Environmental fiscal reform consists in progressively replacing the traditional fiscal charges with targeted charges designed to make the economic actors compensate for all the costs generated by their activities, in particular for the environment and health costs. Environmental fiscal reform often offers the double dividend of positive effects on both the economy and the environment. On the one hand, the traditional charges (taxes on income, labour, consumption, etc.) often act as brakes on economic activity in general, and reducing them therefore fosters such activity. On the other hand, environmental taxes are an incentive to economic actors to make more efficient use of natural resources and to develop environmentally and health-friendly patterns of production and consumption. Finally, the reduction of environment and health pressures lowers the costs carried by the community. The research already carried out in this subject area (e.g. by the Organisation for Economic Co-operation and Development (OECD)) is extensive.

### ***The climate change negotiations***

9. Recent negotiations (in Kyoto in 1997 and in Buenos Aires in 1998) have increased the focus on economic instruments, and especially on flexibility mechanisms such as tradable permits and on fiscal policy (through a carbon tax), as a means of coping with the issue of climate change. This should benefit the search for similar solutions to other environment and health problems.

10. Energy is a major source of pollution (both local and global) and a potentially stable source of tax revenue. Therefore, restructuring energy taxes and prices is one of the most promising paths to environmental fiscal reform. A first step is the removal of subsidies. The Intergovernmental Panel on Climate Change's Working Group III recommends phasing out existing distortionary policies and practices that increase greenhouse gas emissions, such as some subsidies and regulations, as well as the noninternalization of environmental costs and distortions in transport pricing.

### ***The use of economic instruments in the WHO European Region***

11. Even if many countries make some use of economic instruments in their environmental policy, their implementation is rarely aimed at (or sufficient for) making the economic actors take account of environment and health costs. In many countries of WHO's European Region (members of the European Union, countries of central and eastern Europe, newly independent states and others), the incentive function of economic instruments often attracts only limited interest or understanding from the authorities, including ministries of the environment and of health. On the whole, little progress has been made on implementing policies to internalize environment and health costs. Environment-related health problems can thus be expected to increase.

## **The input of economics to the agenda of environment and health authorities**

### **Join forces and implement action plans**

#### ***Bring together environment and health requirements***

12. In many instances, environment and health requirements are complementary. Both can gain greater recognition thanks to comprehensive approaches that span the health, natural resources and economic benefits of environmental investments. For instance, the World Bank applied cost-benefit analysis to air pollution control investments in a cement factory in Estonia. Although the health benefits of these investments were significant, the largest share of estimated environmental benefits had no bearing on health. Only by combining health and non-health benefits could the investments be justified by the cost-benefit analysis.

#### ***Use economics for national environment and health plans***

13. Using economic arguments will be the key factor in advancing the implementation of national environmental health action plans (NEHAPs).<sup>2</sup> To gain more attention and financing, many targets defined in a country's NEHAP need to be supplemented with: (a) clarification of the economic benefits of the proposed improvements; (b) identification of possible sources of finance in connection with these economic benefits; and (c) definition of the proper mix of economic instruments and regulatory measures that will make the improvements effective at the least cost and simplify their enforcement. In that respect, coordination with the national environmental action plans (NEAPs) could be particularly beneficial, as these points have usually been included in these plans.

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<sup>2</sup> See also: *Implementing national environmental health action plans in partnerships* (EUR/ICP/EHCO 02 02 05/10).



## Cooperate with other ministries

### *Find intersectoral solutions for intersectoral issues*

14. Many environment and health issues stem from economic activities that are under the responsibility of authorities other than those dealing with health or the environment. For that reason, the development of NEHAPs has involved at least four or five economic sectors, such as agriculture, transport, industry, energy and tourism, in addition to the environment and health sectors.

15. The joint efforts of environment and health departments in developing NEHAPs have resulted in a common position on environmental health problems and actions to resolve them. Unfortunately this has not been the case with other economic sectors, and many of the critical questions relating to the integration of environmental health considerations into the long-term strategies of the other economic sectors remain unresolved. In fact, sectoral policies very often continue to ignore environment and health considerations. Economic instruments are one means of attaining this integration; in general, they come under the responsibility of the ministry of economy/finance or at least need its agreement to be put into effect.

16. The challenge is to bring the relevant sectoral authorities and the finance/economy ministry to an understanding of the environment and health problems, and to involve them in identifying the appropriate instruments to address them.

#### **RECOMMENDATION A**

European Member States should strengthen the skills of their environment and health authorities in economics, so that they can more successfully ensure that environment and health considerations are taken into account.

### *Clarify the stakes*

17. The barrier to intersectoral understanding is that the different partners often have potentially conflicting interests. In many countries, this has often led to political choices being made by arbitration rather than negotiation. This has often been to the disadvantage of environment and health status, which is not sustainable in the long run.

18. One of the appeals of economic analysis is its capacity to serve as a vehicle for such negotiations. The framework of economic analysis helps clarify the stakes, as it draws a broad picture of the consequences, positive and negative, of the different options. This makes the various stakeholders involved reveal their preferences and valuations and open them up to debate. The economic evaluation of these impacts provides a practical basis for comparing the different choices and trade-offs they imply. It also offers a rationale for compensating or mitigating negative impacts on economic sectors or on environment and health. Nevertheless, environment and health authorities have to become familiar with the pitfalls of economic analysis, in order to make the best use of such negotiations.

### **RECOMMENDATION B**

European Member States are recommended to ensure that intersectoral debates take place between the economic sectors and ministerial departments about the sectoral policies that have an impact on the environment and health. These debates should help to build a common understanding of the issues at stake. In particular, strategic scenarios should be developed using economic analysis and describing possible health impacts.

19. Most countries need to establish an intersectoral mechanism that would allow them to build a common understanding and a common language among the sectors. Nevertheless, environment and health authorities have to become familiar with the pitfalls of economic analysis, in order to make the best use of such negotiations.

## **Meet the challenges of liberalization and of the new patterns of pollution**

### ***Treat liberalization with caution***

20. The world economy is experiencing a continuing trend towards liberalization and deregulation. Privatization of much state-controlled activity is part of this trend. This raises concern that control over polluting activities is also looser, as private investors may pay even less attention to environment and health considerations than the state did in the past. Conversely, liberalization increases the role of prices and, in turn, this magnifies the effectiveness of incentive policies that have an effect on prices (such as environmental taxes). Liberalization can therefore be used both as an opportunity and a rationale for using economic instruments on a larger scale to integrate environment and health into the economic choices of investors and consumers.

### ***Cooperate with trade partners and economic sectors***

21. One of the main obstacles to advancing internalization is the concern about international competitiveness. This is because, in some economic sectors, an otherwise desirable increase of environmental and health taxes would tend to increase the costs of production. Cooperation with economic sectors can help to balance this effect, by identifying acceptable compensatory measures. Besides, trade partners often share the same concerns about environment and health damages resulting from economic activities. Coordination of their policies, and especially of regulatory measures and economic instruments, contributes to avoiding trade distortions among them. Achieving such coordination is one of the major areas of work of the EC.

### ***Adapt instruments to new pollution patterns***

22. The current mechanisms of pollution control/regulation were tailored to past characteristics of pollution sources. Large industrial plants have long been responsible for the major share of pollution. Control and the enforcement of standards were adequate measures, as the number of such sources was limited. Economic instruments were also used, but on a limited scale.

23. This is particularly true in the countries in transition, where the current economic instruments were developed in the 1970–1980s to finance environmental investment funds. In the context of centrally planned economies and prices, economic instruments could not provide a market incentive to improve the environment, so no experience was gained in that area. Today,

the current level of taxes/charges is far from reflecting the full environment and health costs. They also tend to be too low to provide significant incentives for mitigation.

24. Most countries in the Region are now faced with a growing burden of non-point and small pollution sources, for which control and standard enforcement are inadequate owing to the large number of actors involved (users of fertilizers and pesticides, users of motor vehicles, and small-scale industry, for instance). Economic instruments are more suitable for managing this type of pollution.

#### **RECOMMENDATION C**

European Member States should, so far as is practicable:

- (a) advance the internalization of environment and health costs, and the preparation of strategies for achieving this;
- (b) screen and revise the subsidies that encourage practices detrimental to the environment and health;
- (c) coordinate their efforts in these directions through the relevant intergovernmental and international bodies, such as the European Commission and the European Environment and Health Committee (EEHC).

#### **Keep the focus on poverty and equity issues**

25. One objection to the internalization of health and environment costs is that it will result in an increase in some prices and that the poorest people will be affected. Like others, the less affluent derive part of their wellbeing from activities that degrade the environment. This is often less by choice than the result of ill-designed incentives: for instance, in some transition countries, energy consumption is subsidized. In some western European countries, the lack of a substantial policy of social housing in densely populated urban areas means that low-income families have to live in remote suburbs. They therefore depend on road transport for travel between home and work. Since charges for the use of cars in urban areas do not cover their full social costs, this is supposed to help these families. These two examples demonstrate subsidies that the rich also benefit from, often to a large extent.

26. Compensation targeted at low-income households is more efficient; examples include paying social benefits or lowering taxes with regressive effects (such as value-added tax on essential goods or social charges on low salaries). The revenue for such compensation can be provided through environmental taxation or the reduction of inappropriate subsidies. In turn, the burden of the impact on environmental health will be lowered.

27. All measures to reduce environmental health impacts, including regulatory measures, have potential redistributive effects. For instance, to reduce air pollution in cities, the regulatory measure of limiting access to urban centres to low-emission vehicles in fact excludes the poor who cannot buy up-to-date vehicles. While economic instruments such as an urban toll also raise the price of driving and reduce traffic, they also produce fiscal revenue (mainly from the rich) that can be returned to the poor through fiscal reductions, more public transport, and social benefits.

## Combine approaches

### *Use with caution*

28. The input of economics to environment-related health issues leaves much room for improvement. Insufficient data as well as research evidence make it difficult to quantify environmental health impacts. Evaluation issues, lack of data, and political considerations make it difficult to rank priorities across health, social and economic objectives. Besides, interactions between economic policy and the environment are often very complex and the dynamics difficult to trace, so that clear policy lessons are hard to derive.

29. In most cases, economic analysis cannot provide final answers, partly because of problems associated with evaluating some health impacts (such as changes in life expectancy), and partly because of inadequate understanding of the impact of environmental degradation on health, as well as the impact on the environment of economic policies. Many environment-related health issues are fraught with uncertainties. The economic approach to some issues also gives rise to scientific controversy. In such cases, the precautionary principle is sound, recognized guidance for decision-making. However, this still leaves an important role to be played by economics analysis – it can clarify the stakes around different hypotheses or scenarios. It is therefore a particularly helpful tool for fostering the debates that are needed to prepare for making the decisions.

### *Policy mix*

30. In the choice of solutions – both technical and human – preferences, lifestyles and cultural references should receive greater attention. Moreover, in rapidly evolving situations, solutions are often short-lived and need to be flexible. Economic instruments can be integrated into broader policy packages that include regulations and voluntary schemes to reduce environmental impacts.

#### **RECOMMENDATION D**

European Member States are recommended to:

- (a) ensure that research on the health risks of environmental conditions is designed so that it results can be used to demonstrate the potential economic impact of these risks;
- (b) assess the implicit degrees of willingness to pay for reducing health risks that can be derived from the health measures taken by the various government authorities;
- (c) apply policies based on the precautionary principle when serious health risks are suspected.

## Take advantage of the accession partnership

31. The revised Treaty establishing the European Community (Title XIII, Article 152) underlines that “A high level of human health protection should be ensured in the definition and implementation of all Community policies and activities.” This has been reflected in the partnerships created as part of the process of accession to the European Union (EU). The 10 countries with an accession partnership (Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia) share the environmental objective that:

“Environmental protection requirements and the need for sustainable development must be integrated into the definition and implementation of national, sectoral policies”

32. (6). In particular, it is stated that emphasis should be given to drinking-water, wastewater, the waste sector and air pollution, as well as to environmental aspects of agriculture and biodiversity.

33. The process of accession to the EU also requires countries to apply and develop their capacity to enforce the current EU environmental policy. This policy is still very much based on standards and a “command and control” approach, and this focuses attention on investments and revenue-raising to meet these regulations. Some estimates suggest that up to 120 billion ecus are required for water, air and waste for the 10 accession countries. This does not take into account the alignment of labour and occupational health and safety legislation that is also required in the accession partnerships. In addition, EU accession implies reforming the current environmental charges/funding mechanisms of the accession countries. The fund resources are understood by EU legislation to be state aid and are strictly regulated within the EU. The same problem arises with tax exemptions.

34. For these two reasons, new approaches must be adopted to environment and health regulations. The role of some economic instruments, such as environmental taxes, is likely to grow, as is also expected to be the case for the current member countries of the EU. Such instruments meet the need to raise revenue for the state budget and provide signals that direct economic choices towards sustainable paths.

## **Cooperative efforts to use economics to advantage**

### **Countries' objectives**

35. In the Helsinki Declaration, ministers of the environment and of health of WHO's European Region recalled “the need to integrate health, environment and development goals and activities” and “the need for better utilization of the limited resources available” (7). This stimulated the interest of environment and health authorities in developing their capacities to carry out economic analysis. Practically speaking, environment and health authorities in WHO's European Region should increasingly be in position to take advantage of economic analysis for:

- (a) improving the use of resources devoted to the implementation of local and national environment and health programmes, in particular through the prioritization of environment and health problems and through the design and selection of corrective measures;
- (b) enhancing cooperation among them as well as with agriculture, transport, energy, industry and tourism; a main objective of this cooperation is the development of policies that take into account the impacts on environment and health;
- (c) building a common understanding with authorities in charge of fiscal policy and of the reform of economic regulation. The aim here is to advance the pricing goods and services at their real costs, focusing on internalization of health and environmental costs, and in particular on application of the polluter-pays and user-pays principles; and
- (d) promoting cooperation among countries on transboundary issues.

## Scope for cooperation among international organizations

36. The United Nations agencies and financial and other international or nongovernmental organizations have converging objectives: to improve health, alleviate poverty and advance economic efficiency. Their approaches to the environment and health issues faced by countries are also converging: to promote the use of economic instruments in increasingly market-driven economies and to correct distorted economic mechanisms. They believe that the use of economic analysis and an understanding of the interactions between economic policy and environmental health can make a valuable contribution to environmental health improvements.

37. The international action programmes that already support countries in one or more of the tasks (a) to (d) above tend to be conducted in partnership with environmental authorities and try to pay attention to the health outcome. The Environment Action Plan Task Force for the countries of central and eastern Europe and the transboundary programmes of the United Nations Economic Commission for Europe (ECE), in particular, place emphasis on economic analysis and instruments.

38. Nevertheless, the involvement of health authorities and the use of health expertise are often inadequate to address environmental health issues. International organizations now need to cooperate even more closely to help environment and health authorities to join forces to solve environmental health problems and influence sectoral decision-making.

## Areas for developing cooperative efforts

### *Area 1: Improvement and dissemination of knowledge, guidance and methodology*

39. The target is to make the knowledge accumulated by international organizations readily available and accessible to environment and health authorities, as well as to economic sector ministries and finance ministries.

40. In this area of action, cooperative efforts should concentrate on:

- the development and application of environmental health impact assessment techniques at national and local levels in countries with economies in transition;
- the methods of valuation of the full impacts (costs and benefits) of development projects on the environment and health and their inclusion in routine economic analyses;
- the use of economic instruments to promote environmental health;
- intercountry estimation and comparison of willingness-to-pay for selected environmental health improvements;
- criteria for investing in environment and health, for example reference levels of cost-effectiveness for environment and health improvements.

41. Countries will be invited to identify, in partnership with the cooperating organizations, their needs for information relative to environment and health economics. Projects will be prepared for the priorities selected. Cooperating organizations will identify and select the relevant material in international organizations and in countries. Together with the countries, subjects that need to be further addressed will be identified. Projects in this area of cooperation

will benefit from regular evaluation of pilot projects (the third area of cooperation) and of the methods used.

42. Two main types of document will be produced. Policy notes or pamphlets would describe how economics can be used for approaching environment and health issues, based on the work developed by the international organizations. Technical guidance would address issues such as environmental health impact assessment, improvement of the collection and formatting of epidemiological and toxicological data, for their further use in economic analysis, etc.

### ***Area 2: Providing expertise to actors and processes addressing environmental health issues***

43. The targets are to provide economic arguments to environment and health authorities and to facilitate interaction among interest groups on the economics of environment and health.

44. This area of cooperation would rely on the constitution of a network able to answer economics-related questions on environment and health issues and on their economic dimension. This network would consist of experts in health, environment and environmental health economics. They would be identified in international organizations, as well as in local and national authorities. This network could be directly accessible (but with restrictions) through a list or newsgroup on the Internet. It could be subdivided by areas of environmental risk. Expected users would be primarily environment and health authorities, as well as national or intercountry processes that need to sharpen their focus on health outcomes in dealing with environment and health issues. Requests or questions formulated would be forwarded to the network for identification of the source, person or institution able to provide the answer. If the answer required up to five days' work, a cooperative project could make some financing available to some selected countries or country groups. For heavier requests, specific projects could be elaborated, for example as part of the third area of cooperation (pilot projects).

45. The services required will include the identification of resource people who can be approached on environment and health subjects, and possible financial support for access to such experts' services.

### ***Area 3: Conducting pilot projects***

46. The targets are to increase capacities in countries (through learning by doing), to make better use of resources, and to build a common understanding and partnership among environment and health authorities as well as other ministries.

47. In this area of action, cooperative efforts will take the form of active participation in pilot projects that are driven by the countries. This participation will consist in technical support for conducting the project and for carrying out one or more of the following tasks (e.g. by providing epidemiologists, economists, etc.):

- demonstrating the economic benefits of national/local environmental health improvements, including evaluations of health benefits;
- prioritizing actions in national action plans, in particular NEAPs and NEHAPs, by using cost-benefit analysis;
- making a feasibility study of various options for improving the environment and health and identifying possible in-country and/or external sources of finance;

- making a cross-country epidemiological study compatible with further economic evaluation of the impacts of environmental factors;
- evaluating environmental health policy in the light of these tasks;
- evaluating investments projects, with economic analysis of environmental health impacts.

48. Possible topics for the pilot projects could be the impact on health of infrastructure planning in urban or rural areas, with attention to water supply, housing and transportation. This area of cooperation should also include participation in pilot projects involving several countries around a common or transboundary, environmental health issue.

49. Pilot projects will be undertaken at the request of countries expressing a strong commitment to participate in the tasks supported. Where beneficial, training will be organized for national staff of the relevant participating authorities (see the fourth area of action). Participation should include environment and health authorities, as well as relevant sector ministries. Possibly, the ministry of finance and stakeholders from nongovernmental organizations and from the private sector will also participate. An important feature of the pilot projects is country ownership.

50. In addition to the technical outcomes, pilot projects will provide policy-makers with practical solutions as to how to use economic analysis to plan policy change, select economic instruments and implement specific investment projects that can be supported by international financial institutions or donors.

51. At the end of the project, a workshop would be organized to discuss and draft a report on the project, with input from all the government authorities involved. The report would include an assessment of the output delivered and the support given; an assessment of the role of the country and how the plans translated into action; and an assessment of the transferability of the experience to other countries or programmes.

#### ***Area 4: Improving national/local capacities***

52. The targets are to increase the national capacities of the health, environment, and relevant sector authorities to apply economic analysis and instruments to environmental health concerns; and to build a common understanding among national authorities.

53. In this area of action, cooperative efforts could consist in delivering training in the application of economic analysis and instruments. The training sessions would be undertaken jointly by international organizations with extensive experience in this area. This activity will be largely coordinated with the pilot projects (third area of action). The participation of experts from the target country or other countries will be encouraged. The training will use examples of environmental health issues identified in cooperation with the country and will aim to foster a common understanding, by bringing together officials from different authorities, such as ministries of the environment, health and economy/finance and relevant economic sectors.



## Perspective for the next 3–4 years

### **RECOMMENDATION E**

Relevant international organizations, including OECD, United Nations Development Programme (UNDP), UN/ECE, United Nations Environment Programme (UNEP), the World Bank and WHO, should develop their cooperative efforts to strengthen the use of economic analysis and instruments in environmental health in the European Region. Such efforts could be based on the following principles:

- (a) to support development of the capacities of environment and health authorities to use economic analysis;
- (b) to sharpen the focus on health outcomes in, or intercountry processes dealing with, environment and health issues. This would include the contribution of health expertise in these processes and the use of economic arguments to advantage;
- (c) to exchange information early in the planning process of their respective programmes that use economic tools for addressing environment and health issues;
- (d) to further coordinate their current and future activities in support of the use of economics in environment and health issues.

They should select projects for cooperative efforts that relate to the priorities laid down by this Conference.

The European Environment and Health Committee should assist in the coordination of these efforts and ensure that full consideration is given to projects that contribute to the implementation of NEAPs and NEHAPs.

European Member States should participate actively in these efforts and ensure that the relevant actors provide the requisite support and commitment.

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