

SESSION I

INTEGRATED APPROACH TO TRANSBOUNDARY WATER MANAGEMENT

UNEP Global Programme of Action and the UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes

Martin Adriaanse

GPA Coordination Office, United Nations Environment Programme, P.O. Box 16227, 2500 BE, The Hague, The Netherlands
e-mail: m.adriaanse@unep.nl, web site: <http://www.gpa.unep.org/>

Introduction

The Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA) was triggered by the deterioration of the quality of oceans, seas and coastal areas. The major threats to the health, productivity and biodiversity of the marine environment result from human activities on land: in coastal areas and further inland. Some 80% of the pollution load in the oceans originates from land-based activities. This includes municipal, industrial and agricultural wastes and run-off, as well as atmospheric deposition. Contaminants affect the most productive areas of the marine environment, including estuaries and near-shore coastal waters. The marine environment is also threatened by physical alterations of the coastal zone, including destruction of habitats of vital importance to maintain ecosystem health.

Presently, about 50% of the world's population lives within 200 km of the coast, and 60% of cities with population above 2.5 million are coastal cities. There is a continuing trend towards a concentration of population in coastal regions. Estimates show that almost 50% of the world's coasts are threatened by development-related activities. The health, well-being and, in some cases, the very survival of coastal populations depend upon the health and well-being of such coastal systems, such as estuaries and wetlands. The intensive pressures put on the coastal systems require serious commitment and preventive action at all levels: local, national, regional and global.

The Global Programme of Action

Some milestones

In response to these major problems, the policy objective related to the Global Programme of Action as stated in Agenda 21, and agreed upon by Governments at the United Nations Conference on Environment and Development (UNCED) in 1992, is "to prevent, reduce and control degradation of the marine environment so as to maintain and improve its life-support and productive capacities".¹

In 1995, 108 Governments and the European Commission declared their commitment to protect and preserve the marine environment from the adverse environmental impact of land-based activities. With the Washington Declaration², the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities was adopted. UNEP was tasked to lead the coordination effort and establish a GPA Coordination Office.

The comprehensive, multi-sectoral approach of the GPA also reflects the desire of Governments to strengthen the collaboration and coordination of all agencies, which address through their mandate issues of relevance to GPA, and to invite them to participate in a global action programme.

In 1996, the United Nations General Assembly adopted the institutional arrangements for the implementation of GPA and in 1997/98 UNEP in Governing Council's decisions agreed on the global and regional implementation of GPA.

In November 2001, the first intergovernmental review meeting took place in Montreal. The meeting was very successful and resulted in the Montreal Declaration on the Protection of the Marine Environment from Land-based Activities, which was signed by representatives of 98 countries.

¹ Agenda 21: Programme of Action for Sustainable Development. The final text of agreements negotiated by Governments at the United Nations Conference on Environment and Development (UNCED). 3-14 June 1992, Rio de Janeiro, Brazil. United Nations, New York.

² Washington Declaration on the Protection of the Marine Environment from Land-based Activities. Washington D.C., United States, 1 November 1995.

Objectives

The policy objective of GPA is to prevent, reduce and control the degradation of the marine environment from land-based activities by assisting countries in taking actions individually or jointly within their respective policies, priorities and resources, to control and/or eliminate degradation of the marine environment as well as recovery from the impact of land-based activities.

This overall objective is translated into objectives at national, regional and global levels:

- *At the national level*, to develop comprehensive, continuing and adaptive programmes of action within the framework of integrated coastal management, harmonized with river basin management and land use plans;
- *At the regional level*, to strengthen and, where necessary, create new regional cooperative arrangements and join actions to support effective action, strategies and programmes at the national and regional levels;
- *At the international level*, to strengthen existing, international cooperation and institutional mechanisms and, where appropriate, to establish new arrangements, in order to support Governments and regional groups to undertake sustained action to address the impact of land-based activities on the marine environment.

Recommended approach

The GPA aims to prevent the degradation of the marine environment from land-based activities by facilitating the duty of Governments to preserve and protect the marine environment.

The recommended approach consists of seven steps:

- Identify and assess *problems and causes* (nature and severity, contaminants, physical alterations, sources of degradation and vulnerable areas);
- Establish *priorities for action*, especially related to such aspects as food security, public health, coastal and marine resources, ecosystem health, and socio-economic benefits;
- Set *management objectives* for priority problems on the basis of established priorities;
- Identify *strategies and measures* to achieve these objectives;
- Develop *criteria for evaluating the effectiveness* of strategies and measures;
- Make *programme support elements* available to ensure that the necessary administrative and management structures are in place to support the programme (legal and financial mechanisms, contingency plans and public participation measures);
- Arrange for formal endorsement at the national and sub-national levels.

Practical implementation

Governments, through National Programmes of Action, implement the Global Programme of Action via the Regional Seas Conventions. The GPA Coordination Office is supporting this process by means of guidance and expert services, via networking with relevant UN agencies and with its clearinghouse activities.

Integrated management of river basin and coastal area

Shifting paradigms

Since 20 years a widening of the scope of water management can be noticed, going from integrated water management including water quality and water quantity, integrated water resources management including a multi-sectoral approach, integrated coastal zone management, the approach of the river basin district including part of the coastal zone, to the integrated management of river basin and coastal area.

It can take quite a time before the agreed and advocated principles of a new approach are brought into practice and are implemented. In the last decade, significant progress has been made with Integrated Water Resources Management and Integrated Coastal Zone Management. However, successful examples of the integrated management of river basin and coastal area are scarce.

In theory

The Global Programme of Action and the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention) have no formal relation, but the functional relations are clear. The formal texts of both the Washington Declaration and the Water Convention include the linkage between freshwater and coast:

- The river basin is implicitly included in the name of the GPA: the protection of the marine environment from land-based activities. About 80% of pollution of the marine environment originates from land-based sources: from the coastal zone, from air pollution and from river basins. The Washington Declaration states the importance of integrated coastal area management and the catchment area based approach as means of coordinating programmes;³
- In the Water Convention, explicit reference is made to the impact of land-based activities on the marine environment by stating the need for strengthening national and international measures to prevent, control and reduce the release of hazardous substances into the aquatic environment and to abate eutrophication and acidification, as well as pollution of the marine environment, in particular coastal areas, from land-based sources. Moreover, the article on bilateral and multilateral cooperation stipulates that joint bodies according to the Water Convention shall invite joint bodies, established by coastal States for the protection of the marine environment directly affected by transboundary impact, to cooperate in order to harmonize their work and to prevent, control and reduce the transboundary impact.⁴

In spite of the fact that the relation with the coastal zone has been mentioned at several places in the Water Convention, the focus of the Water Convention is on transboundary inland waters. And the GPA has its main focus on *implementation of the programme in Regional Seas conventions and in national programmes*. Implementation in river basins, through river conventions or joint bodies, and building alliance with action programme for river basins did not yet get much attention, if any.

Practical steps

Some developments can be mentioned which assist in bringing the management of integrated river basin and coastal area into practice:

- UNEP started its programme for Integrated Coastal Area and River Basin Management (ICARM) about 5 years ago. The scope has been set by the report *Framework for Action and Planning Guidelines* (UNEP, 1999a), which was an important first step to achieve guidance for this complicated area. A first inventory of cases of river-coast interactions has been made;
- The subject needs to be brought to the international agenda and to be promoted at important events, like the *World Summit for Sustainable Development* (WSSD) and the third *World Water Forum* (WWF3), by means of special sessions, round tables, virtual forums and guidance reports/brochures;⁵
- The integrated approach will be examined in practical cases to achieve a knowledge and experience base (“toolbox”). In pilot projects, cooperation between freshwater and coastal institutions, organizations and joint bodies will be sought. The demonstration character, exchange of experiences and twinning are elements that will become part of the programme;
- The implementation of National Programmes of Action via Regional Seas Conventions as means for regional sustainable development should be based on interaction with the river basins, in close cooperation with donor countries and financing organizations.

³ See the text of the Montreal Declaration under <http://www.gpa.unep.org/igr>.

⁴ See the text of the Water Convention under <http://www.unece.org/env/water/text/text.htm>.

⁵ Proposals for WWF3 to be held in March 2003 in Kyoto were recently submitted, including a proposal by UNEP/GPA together with the Collaborating Centre at DHI-Water and Environment (Denmark) for a session on freshwater and coasts. Among the organizations and institutions which have been and will be involved is UNECE, as it carries out the secretariat functions for the Water Convention.

Translating vision to action

Identification of issues

The identification of issues, causes and priorities is the essential first step to be made. The work programmes, both under GPA and the Water Convention, put significant emphasis on this task as follows:

- Reports on *Identification and Review of Water Management Issues* in transboundary river basins are being produced for pilot projects on transboundary rivers under the Water Convention;
- The GPA programme recently produced reports on *Assessment of Land-based Sources and Activities Affecting the Marine Environment for 14 Regional Seas*, which explicitly focus on the regional issues and priority setting;
- The Global International Waters Assessment (GIWA) – a GEF funded UNEP-project with its office in Kalmar (Sweden) – is also to be mentioned in this context. GIWA divided the globe in geographic regions concentrated round 66 major seas and is providing separate assessments for these regions, including the identification of issues, causes, priorities and policy scenarios.

The Aarhus Convention ⁶ plays an important role to have full access to information, which is open for international review.

Parts of one chain

Information is useless, if it has no role to play in the context of the protection and use of transboundary waters or the marine environment. The identification of issues has to be followed by priority setting and planning for action. These elements are parts of one chain. The crucial items of the chain are those that deal with implementations. Of course, one could continue with more specified descriptions of issues, improved and intensified monitoring of trends, further analysis of causes and continue discussion about priorities. But it is a pitfall – one can get lost in continued and endless preparations without really doing steps forward to the protection of the marine environment and/or transboundary rivers.

In 1999, the UNECE secretariat launched an inquiry among UNECE countries on the implementation of tasks of joint bodies as stipulated in the Water Convention. Some 25 countries that have joint bodies replied. The results are summarised in Figure 1. It can be concluded that all joint bodies are implementing a monitoring programme, only 25% of the joint bodies, however, seem to have a programme of action and only some of them participate in environmental impact assessments. 20% of the replies indicated that joint bodies already function as forums for the exchange of information on existing and planned uses of water and related installations that are likely to cause transboundary impact, which includes exchange of experience with environmental impact assessments and information on the best available technology (BAT). It is worthwhile noting that after some time a new inquiry will be made to investigate whether over a period of some 5 years a shift from monitoring the state to tackling the causes through protection and improvement activities could be noticed. ⁷

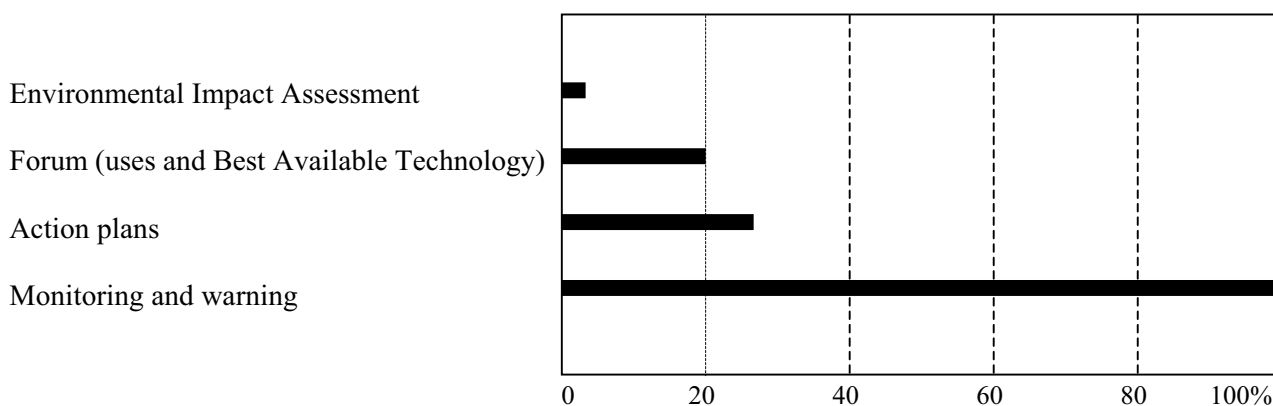


Figure 1. Tasks of joint bodies implemented in UNECE countries

⁶ UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, done in Aarhus on 25 June 1998.

⁷ See the contributions on joint bodies at the Water Convention's web site under <http://www.unece.org/env/water>.

Conventions and/or programmes of action

Does the preparation of conventions compete with the preparation of programmes of action? Are people “convention-fatigue”? Will the POPs Convention⁸ be the last of a generation?

Conventions are paperwork indeed. It should go to implementation, targeted approaches, action programmes, and concrete improvements with technical, legal, organizational and economical means.

It is true that statements and beautiful intentions are only words. For many countries that are “in need of support”, the only practical help consists of concrete projects, with funding arrangements included.

But in many Central and East European countries, binding regulation and obligations from international law are an absolute prerequisite to get things in motion. An international action programme does not have any authority to be implemented in such countries. And the EU is making progress with legally binding arrangements like its Water Framework Directive⁹, to be implemented by Member States and accession countries in their respective national laws.

Conventions, legislation, institutional arrangements, identification of issues and priorities, national programmes of action, financing arrangements, awareness raising, implementation, etc. are elements in a chain of activities. No universal model of the chain can be applied. The composition of the chain is specific, tailor-made, for each country or socio-economic context. The approach used in the rehabilitation of the River Rhine cannot be used as a model for developing countries.

But it is true that the whole chain fails to work if the final links are missing: if it does not lead to action, successful measures and final results.

References

1. UNECE, 2002a. Working Group on Monitoring and Assessment under the UNECE Water Convention. Bug, Report No. 2. Identification and Review of Water Management Issues, RIZA.
2. UNECE, 2002b. Working Group on Monitoring and Assessment under the UNECE Water Convention. Morava, Report No. 2. Identification and Review of Water Management Issues, RIZA.
3. UNEP, 1999a. Conceptual Framework and Planning Guidelines for Integrated Coastal Areas and River Basin Management.
4. UNEP, 1999b. Assessment of Land-based Sources and Activities Affecting the Marine, Coastal and Associated Freshwater Environment in the South-East Pacific. UNEP Regional Seas Reports and Studies No. 169.
5. UNEP, 2000a. Report of the Workshop on Integrated Coastal Area and River Basin Management. UNEP/Mediterranean Action Plan/Priority Actions Programme, Toulon, 10-12 January, 2000.
6. UNEP, 2000a. Overview on Land-based Sources and Activities Affecting the Marine Environment in the East Asian Seas. UNEP Regional Seas Reports and Studies No. 173.
7. UNEP/GEF, 2002. GIWA Methodology. Detailed Assessment – Causal Chain Analysis – Policy Option Analysis. Version 3.5. Draft of 5 May 2002.

⁸ Stockholm Convention on Persistent Organic Pollutants, done in Stockholm on 22 May 2001.

⁹ Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy, published in the Official Journal L 327 on 22/12/2000.

