

In the late nineteenth century, great progress was made in terms of water, sanitation and hygiene. However, this did not result in universal access to safe drinking water and adequate sanitation for all citizens of the pan-European region. At present, nearly 140 million people -16 per cent of Europe's population still live in homes that are not connected to a drinking-water supply, and about 85 million people do not have access to adequate sanitation. According to the best estimates of the World Health Organization (WHO), more than 13,000 children under the age of 14 die every vear from water related diarrhoea, mostly in Eastern Europe and Central Asia. In 2006, more than 170,000 cases of waterrelated disease were reported, and this figure is probably an underestimate.

These health statistics reveal only part of the picture. Lack of sanitation, improper waste treatment, unsafe disposal methods for chemicals, overuse of fertilizers and irresponsible water management have also taken a toll on Europe's waters and indirectly threaten human health. Together, they have left a legacy of environmental degradation and potential health risk that could take decades to reverse.

In 1999, the international community decided to take action and, at the occasion of the Third Ministerial Conference on Environment and Health in London, adopted the Protocol on Water and Health to the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention).

The Protocol is the first international agreement adopted specifically to ensure, by linking water management and health issues, the adequate supply of safe drinking water and adequate sanitation for everyone. It was designed to complement the Water Convention with further measures to strengthen the protection of public health, particularly at the national level. It works by promoting better management of water and water-related ecosystems and has the ultimate aim of preventing, controlling and reducing water-related disease.

A unique agreement

According to its Article 1, the objective of the Protocol is

To promote at all appropriate levels, nationally as well as in transboundary and international contexts, the protection of human health and well-being, both individual and collective, within a framework of sustainable development, through improving water management, including the protection of water ecosystems, and through preventing, controlling and reducing water-related disease.

The Protocol is remarkable among multilateral environmental agreements in many ways:

- It is the first legally binding agreement linking sustainable water management and reduction of water-related disease
- ▶ It combines environmental protection with the promotion of human health and well-being, thereby uniting ecologists, conservationists and ecosystem managers with water, sanitation and health professionals
- ▶ It offers a holistic framework for addressing the whole chain of cause-and-effect from environmental degradation to water-related health effects
- ► It brings a largely hidden problem to the forefront of public awareness and government decision-making
- ▶ It offers a framework for transboundary cooperation in case of threats to shared water resources or outbreaks of water-related disease, including risks emerging from extreme weather events
- ▶ It invites public participation and involvement in the pursuit of the basic human right to water and sanitation.



The Protocol covers surface freshwaters; groundwaters; estuaries; coastal waters used for recreation, aquaculture or the harvesting of shellfish; enclosed waters for bathing; water in the course of abstraction, transport, treatment or supply; and wastewater throughout collection, transport, treatment and discharge or reuse.



From prevention to response

The Protocol's principal aims are:

- ► To prevent, control and reduce water-related disease
- ► To ensure adequate supplies of safe drinking water
- ► To secure adequate sanitation of a standard that sufficiently protects human health and the environment
- To protect water resources used as sources of drinking water, and their related ecosystems, from pollution
- ► To provide adequate safeguards for human health against water-related disease
- ► To establish effective systems for monitoring and responding to outbreaks or incidents of water-related disease.

Core provisions

The Protocol operates through two core provisions:

Setting targets

The Protocol requires Parties to set targets in areas covering the entire water cycle as well as dates by which they will achieve such targets. Targets should address issues related to the quality of (drinking, bathing and waste) water and problems related to water supply and sanitation, the reduction of water-related disease and the management of water resources.

Parties tailor the targets according to their national/local circumstances and available resources. Parties also regularly assess progress made towards reaching these targets; show how such progress has helped to prevent, control or reduce water-related disease; and publish the results of this assessment. Moreover, every three years Parties are required to report to the Meeting of the Parties on implementation and progress achieved. The reports do not aim to compare the situation among Parties, but to measure and show an individual advancement within a Party.

To assist Parties in complying with these obligations, the Protocol's Task Force on Indicators and Reporting has developed two sets of guidelines: Guidelines on setting targets, evaluation of progress and reporting and Guidelines for summary reports.

Surveillance

The Parties agreed to establish and maintain comprehensive national and/or local surveillance and early warning systems to prevent and respond to water-related disease, along with contingency and outbreak response plans.

The protocol in action



Preventing disease

Access to an adequate supply of safe drinking water and to sanitation is a prerequisite for preventing and controlling water-related disease, and requires an integrated water management aiming at quality control and protection of water supplies.

Access to water and sanitation is inadequate in several parts of the pan-European region, particularly in the east and south and in rural areas. Children are especially vulnerable to unsafe water and poor sanitation. In the eastern part of the region, water-related disease is a major cause of child mortality.

Parties to the Protocol agree to ensure adequate water supply and sanitation of a standard which sufficiently protects human health and the environment, particularly through the development and use of collective systems. They also agree to safeguard human health against water-related disease related to recreational bathing, aquaculture and shellfish harvesting, and to exercise vigilance in areas where wastewater or sewage sludge is used for irrigation or as agricultural fertilizer.

The Protocol not only helps its Parties to control outbreaks of classic water-related disease, but also assists in the handling of emerging diseases such as legionellosis and health-threatening pathogens such as cyanobacteria.

Protecting the source

Water throughout the pan-European region is at risk of contamination from sewage, agriculture, industry and other discharges and emissions of hazardous substances.

In keeping with the principles of the Water Convention and integrated water resource management, the Protocol protects water resources, including those used as a source of drinking water. The Protocol's preamble acknowledges the benefits of a "harmonious and properly functioning water environment" and the importance of water for sustainable development. "Water resources should, as far as possible, be managed in an integrated manner on the basis of catchment areas, with the aims of linking social and economic development to the protection of natural ecosystems...." Furthermore, "Such an integrated approach should apply across the whole of a catchment area, whether transboundary or not, including its associated coastal waters, the whole of a groundwater aquifer or the relevant parts of such a catchment area or groundwater aquifer".

Watching and warning

Early warning and notification systems for outbreaks of water-related disease represent a core provision of the Protocol and are essential for its successful implementation. However, many countries in the pan-European region lack the capacity to effectively carry out these activities.

At their first meeting, the Parties to the Protocol set up a Task Force on Surveillance to draft and test guidelines on good practice for national and international systems for surveillance, early warning and notification. The Task Force also develops assistance programmes, provides training to country officials and holds workshops on topics such as surveillance of water-related disease under a changing climate and ways to improve surveillance systems.







Providing assistance

Parties are required to assist each other in implementing the Protocol. To meet these obligations, in 2007 the Ad Hoc Project Facilitation Mechanism (AHPFM) was established to promote the coordination of international aid and to enhance the capacity of recipient countries in Eastern Europe, Caucasus and Central Asia and South-Eastern Europe to receive funding.

AHPFM assists eligible Parties in formulating and setting targets with concrete dates as well as in establishing surveillance and early warning systems. Subsequently, the Mechanism will help to locate support for the activities required to achieve such targets, e.g. preparation of water management plans; improvement of water supply and sanitation; revision of existing and drafting of new legislation; education and training of professionals and technical staff; research into cost-effective means for preventing, controlling and reducing water-related disease; and monitoring and assessment of water-related services, including quality assurance.

In the Republic of Moldova, AHPFM is providing assistance with setting targets and target dates for reducing contamination of drinking water in a country where contamination causes an estimated 20 per cent of infectious intestinal disease and 15 per cent of non-infectious disease every year. This will allow the Republic of Moldova, a Party to the Protocol, to meet the Protocol's obligations as well as achieve an important target of the United Nations Millennium Development Goals.

Ensuring compliance

To help meet the Protocol's obligations and evaluate progress in implementing its provisions, the Parties decided to establish a transparent, non-confrontational, non-judicial and consultative arrangement for reviewing compliance. An elected Compliance Committee of nine independent members has the overall responsibility of reviewing cases of non-compliance brought to its attention. One important feature of the Protocol's compliance mechanism is that it allows members of the public to make communications to the Compliance Committee on cases of alleged noncompliance. When a case of non-compliance by a Party is proven, the Committee may decide on a number of measures: provide advice and facilitate assistance, including assistance from specialized agencies, to the Party in question; request the Party to develop an action plan to achieve compliance; invite the Party to submit periodic progress reports on compliance efforts; issue cautions; and/ or recommend ways the Party can address concerns raised by the public.







Raising awareness, building capacity and sharing experience

The Protocol recognizes the importance of capacity-building in water-related public health issues, inter alia, through training of professional and technical staff. To promote a deeper understanding of the relationship between water and human health and to ensure that stakeholders and the general public are kept informed, two articles of the Protocol are entirely dedicated to access to public information, awareness-raising and education.

The exchange of information and experience is a significant part of the Protocol's practical operations. In addition to publications and information available at the websites of the United Nations Economic Commission for Europe (UNECE) and the World Health Organization Regional Office for Europe, several workshops, round tables and conferences have been held for this purpose, and many more are planned. Topics include protection of groundwaters in karst areas, the right to water, water and climate change, public participation, implementation of water safety plans in smallscale water supplies and implementation of the Protocol in countries with economies in transition.

Promoting the right to water

In the past 30 years, there has been growing attention to and recognition of the human right to water. Recent developments in the United Nations human rights system have reinforced this recognition; the challenge now is to translate the right to water into reality.

The Protocol on Water and Health illustrates and embodies the close linkages between human rights, health, environmental protection and sustainable development. It stipulates that States should be guided by several principles related to human rights, including equitable and adequate access to water for everyone, access to information, public participation and special consideration for vulnerable groups. The Protocol also obligates Parties to provide drinking water that is free of micro-organisms, parasites and substances that constitute a potential health risk.

Preparing for change

Emerging issues such as climate change have the potential to roll back hard-won human development gains.

Adaptation and mitigation strategies are needed to prepare for this eventuality, and to prevent the worst effects.

Climate change affects water supply and quality and also increases the likelihood of extreme weather events such as floods and droughts. Therefore, the Parties to the Protocol decided at their first meeting in 2007 to develop Guidelines on water supply and sanitation in extreme weather events. This project is being implemented by a Task Force on Extreme Weather Events. In addition, a Guidance on water and climate adaptation is being jointly developed with the Task Force on Water and Climate under the Water Convention.



Equality, transparency, accountability

The Protocol on Water and Health has had exceptional success in combining the efforts of two sectors – health and environment – in an effort to honour the basic human right to water. In doing so, its transparency and inclusiveness provide a practical illustration of human rights in action.

The Protocol offers many direct benefits to the pan-European region's inhabitants: increased life expectancy at birth, enhanced well-being and economic development, progress in research and understanding, improved education, enhanced international cooperation and greater involvement by civil society in environment and health matters. In more specific terms:

- ► To comply with the Protocol's provisions, countries are expected to foster the active involvement of all stakeholders, and notably the general public.
- ► The Protocol puts great emphasis on involving the public in the process of target-setting, a vital prerequisite for successful implementation of its provisions.
- ► The Protocol also gives special consideration to the protection of people who are particularly vulnerable to water-related disease.

- ▶ Its ultimate goal is equitable access to water, adequate both in quantity and quality as well as adequate sanitation for all members of the population, especially those who suffer disadvantages or social exclusion.
- ▶ The compliance mechanism processes reports on violations of the Protocol's obligations. It also invites members of the public to participate. The work of monitoring Protocol implementation and processing complaints from Parties and individual citizens regarding their right to water and a healthy environment is an important complement to similar human rights mechanisms.

By ensuring that the public is both informed and involved, by inviting participation in the pursuit of the Protocol's objectives and by operating according to principles of transparency and partnership, the Protocol on Water and Health is at the forefront of a human rights-based approach to sustainable development. It is truly a "Protocol for the people".

UNECE and WHO/EURO: a common purpose

In keeping with its cross-cutting purpose, the Protocol benefits from a joint secretariat provided by UNECE and the WHO Regional Office for Europe. The two organizations are working together to fulfil the Protocol's central goal of improving human and environmental health in the twenty-first century.

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