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**COMMUNICATION FROM THE COMMISSION TO THE COUNCIL AND THE  
EUROPEAN PARLIAMENT**

**WATER MANAGEMENT IN DEVELOPING COUNTRIES POLICY AND  
PRIORITIES FOR EU DEVELOPMENT COOPERATION**

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ANNEX: SEC(2002)288

## **Executive summary:**

This Communication guides the European Community's support to water resources management in developing countries for achieving the main development goals laid down in the Treaty establishing the European Community – poverty reduction, sustainable economic and social development, integration of developing countries into the global economy.

Providing water and sanitation for all in developing countries, now and in the future, is a demanding challenge. It has to be addressed in the broader context of a sustainable integrated water resource management (including e.g. natural aspects of water resources systems, water uses in all sectors of the economy and for all purposes, institutional framework for management of a finite resource, spatial variation of resources and demands, water pollution). One objective of this Communication is to highlight where and how policies surrounding water and development are integrated into EC's development priorities. It emphasises the need to see water resource management as a cross-sectoral issue to be mainstreamed within most development policies of the Community, in the fight against poverty.

This paper is set in the context of the higher profile gained by water on the international agenda, resulting in growing international recognition of the pressing need to achieve global water security and of the need to address water in a holistic manner, as a key issue for sustainable development. Thus, this communication builds on the recent recommendations for action of the Bonn International Freshwater Conference and promotes the development of an EU initiative as a key agenda point for the World Summit on Sustainable Development.

The Communication outlines a comprehensive and integrated approach that is valid for all aspects of water resources management and for all users of water. The key message on policy orientation is to build strategies based on the overarching principles of Integrated Water Resource Management. Besides, the highlighted key actions on the way forward focus on water supply and sanitation, transboundary water management and cross-sectoral co-ordination and integration.

The strategic approach for sustainable access to and management of water resources integrates sectoral and cross-cutting issues and encompasses all aspect of sustainability. Economic, social and environmental sustainability require implementation of a management by demand, which involves valuing of water for all its uses. Management at river basin level, participation by all stakeholders (and especially women) at every step of the decision-making process, knowledge and information exchange will promote institutional sustainability and conflict prevention.

The way forward to sustainable access to and management of water in developing countries relies on political commitment and stakeholder ownership in developing countries. This is essential to the co-management of Community development co-operation. Furthermore, this Communication recommends a number of lines of action on global challenges related to water (mitigation of climate change effects, impact of trade globalisation, regional co-operation). The long-term co-operation with developing countries on these water-related aspects will have profitable impacts on global sustainable development and poverty reduction.

## **1. CHALLENGES FOR WATER AND DEVELOPMENT**

### **1.1. The freshwater situation in developing countries**

Freshwater is a finite and precious resource essential for sustaining life, for undertaking economically productive activity, and for the environment itself. Of critical importance to any analysis of contemporary water challenges in developing countries is the fact that no strategy for the reduction of poverty can ignore people's vital requirements for water, and the need for equitable and sustainable management of this critical resource in the interests of society as a whole. Sound environmental sanitation, which interacts with water provision, is equally essential for human health, dignity and productive work.

At the beginning of the new millennium, a large backlog of unmet needs exists. In 2000, 1.1 billion people (17% of world population) were without access to a safe water supply and 2.4 billion people (40%) lacked adequate sanitation. The majority of these people live in Africa and Asia. Rapid urbanisation is leading to growing demand. In peri-urban settlements, household water and sewer connections are available only to 18% and 8% of residents respectively<sup>1</sup>. Sadly, the poorest inhabitants often have to pay higher prices for water from vendors than better-off residents who obtain piped supplies at subsidised rates. The urban poor are also at the greatest risk of ill-health from inadequate environmental sanitation.

A stronger attention on water management is thus needed throughout any development planning and programming process intended to contribute to the poverty reduction objective, which is a central concern of EC Development Policy, and of cooperation agreements with developing countries.

Population growth, changing lifestyles and economic development are behind the increasing pressure on water resources everywhere but especially in developing countries, where water use tends to grow at an even higher rate than population increase. The situation in many countries of Africa and Asia is complicated by the fact that water availability is subject to large seasonal fluctuations, as well as by periodic cycles of drought and flood<sup>2</sup>. By 2025, two thirds of the world's population could be living in countries subject to water stress.

Climate change is and will continue to be part of the cause of additional pressure, most severely in the developing world, and particularly affecting the poor in these regions. For many developing countries and communities, the capacity to cope with and adapt to climate variability and change will be a key issue in poverty reduction strategies and in overall development prospects.

Water security is most critical at household level, but reliable supplies are needed for agriculture, industry and energy production, etc. Agriculture is the largest user of water; in some developing countries irrigation accounts for 80% of water use. Even though its share may decline with improved water productivity, the use of large amounts of water for food provision is crucial in a world with a still rapidly expanding population.

Allocation of water between different users will thus become increasingly contentious. Mismanagement of water (e.g. through unsustainable irrigation practices) can lead to drought and desertification. Under such circumstances, the fact that many major rivers, lakes and

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<sup>1</sup> Global water supply and sanitation assessment - 2000 Report , WHO-UNICEF-WSS Collaborative Council

<sup>2</sup> UN/SEI: Comprehensive Assessment of the Freshwater Resources of the World.

underground aquifers cross national boundaries is a growing source of potential conflict.<sup>3</sup> The sharing of water resources up- and downstream, between countries with different development goals and institutional capacities, is a question of conflict prevention, demanding an increasing amount of policy attention.

Waters are also under potential severe threats resulting from human activities. Industrial and agricultural activities imply the use of chemicals, which often end up in surface and ground waters, following their immediate release or after a long storage in inappropriate conditions. In the developing world most of the wastes is discharged directly into rivers, lakes and coastal waters without any kind of treatment. The ongoing decrease of water quality has severe implications not only for resource availability and human health but also for vital ecosystems.

## 1.2. The international debate

In recent years, water and its management has had an increasingly high profile on the international agenda. New concerns on water resources in addition to traditional preoccupations with water supply and sanitation provision have joined the agenda. A number of major international events have contributed to this new visibility of water, reflecting the increasing level and range of concerns outlined above.

During the International Drinking Water Supply and Sanitation Decade 1980-90, meeting basic needs for water supplies and sanitation were the twin key targets. These remain, but other issues have since come to the fore. The economic value of water was highlighted at the Dublin Conference of 1992, as well as the need for participatory approaches and to recognise women's role in water management<sup>4</sup>. The Earth Summit at Rio de Janeiro in 1992<sup>5</sup>, further recognised the importance of water in environmental sustainability in the immediate as well as distant future, and the need to safeguard ecosystems by treating water as a precious resource, without compromising provision of basic human needs for water and sanitation. With a wider range of issues entering the water-related frame, the need to develop an integrated approach to water resources management was gradually emerging.

Efficient and equitable use of water depends on discontinuing policies treating it as an unlimited and 'free' resource. How to value water economically is still debated, especially in developing countries where attaching a price to water may be politically, economically or culturally unpopular. Where the principle is now accepted, there are ongoing debates around how to adjudicate competing uses between sectors, and how to price water services for basic human needs.

These issues and the need to address them holistically were further reinforced at the 2nd World Water Forum at The Hague in March 2000. By this time, the theme of water scarcity and increasing pressures on a vital and vulnerable resource had attracted a stronger attention. Achieving *water security*<sup>6</sup> was recognised as the overarching global objective. Based on an extensive consultative process, a Vision for 'Water life and the environment', and a 'Framework for Action' were presented at the Forum and formed the basis for a Ministerial

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<sup>3</sup> Altogether, 261 river basins which cover 45% of the earth's surface, harbour 40% of its population and collect 80% of river run-off, cross the political boundaries of two or more countries (Aaron T Wolf: Criteria for equitable allocations: the hearth of international water conflict).

<sup>4</sup> International Conference on Water and the Environment, Dublin, January 1992.

<sup>5</sup> Agenda 21, chapter 18

<sup>6</sup> See Annex 1 - Glossary

Declaration. The Framework for Action, developed by the Global Water Partnership, highlighted the need for action to mobilise political will, to make water governance effective, to generate water wisdom and to increase investment for a secure water future.

The Water Supply and Sanitation Collaborative Council has been responsible since 1991 for continuously reinforcing the water supply and sanitation agenda. The Council is emphasising the importance of advocacy and communication, and placing a strong focus on hygiene education and environmental sanitation<sup>7</sup>. Several Multilateral Environmental Agreements address directly or indirectly the water management issue. Examples are RAMSAR, UN Convention to combat desertification and on climate change, UN Forum on forests.

The Bonn International Conference on Freshwater (December 2001), which is part of the preparatory process for the World Summit on Sustainable Development in Johannesburg, September 2002, made 27 recommendations covering the priority themes of governance, financial resources and capacity building. Five key messages were highlighted: - 1) to meet the security needs of the poor; 2) decentralisation of decision making and action to the appropriate level; 3) the development of new partnerships and coalitions; 4) co-operative arrangements at river basin level and 5) better performing governance arrangements.

A purpose of this Communication is to serve as a basis for developing a Community contribution for the water component of the World Summit, integrated in the targets and objectives of the Communication on the external dimension of sustainable development.

### **1.3. International targets**

A general objective is to ensure that adequate supplies of safe water be accessible to everyone in the world today, while preserving the quantity and quality of the resource to sustain essential ecosystem functions and ensure supplies for future generations. The overarching international development target underlying development co-operation is the need to reduce by at least one half those living in extreme poverty by 2015. Three targets specific to water are essential if this overarching target is to be achieved, namely:

**Water resources management** : The Millennium Declaration promoted the concept of reducing unsustainable exploitation of water resources by developing water management strategies at regional, national and local levels. A specific target is to have comprehensive policies and strategies for integrated water resources management in the process of implementation in all countries by 2005.

**Water supply** : In its Millennium Declaration, the UN General Assembly pledged that the proportion of people not having sustainable access to adequate quantities of safe and affordable water would be reduced by half by 2015. Following on the 2nd World Water Forum, the Bonn Conference has recommended that 'the target on drinking water should be complemented by a corresponding target to halve the proportion of people lacking access to improved **sanitation** by 2015.'

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<sup>7</sup> Action Programme agreed at the Fifth Global Forum of the Water Supply and Sanitation Collaborative Council, Iguacu, Brazil, November 2000.

## 2. EUROPEAN COMMUNITY DEVELOPMENT COOPERATION IN WATER RESOURCES

The European Community Development Policy is grounded on the principle of sustainable, equitable and participatory human and social development<sup>8</sup>. Its principal aim is to reduce poverty, and it is recognised in particular that 'access to and sustainable management of water resources' is an important component of social sector policies<sup>9</sup>. One objective of this Communication is to demonstrate how water relates to the priorities defined by the EC Development Policy.

### 2.1. Current water-related strategies and activities

In 1998, the Commission published the 'Guidelines for water resources development co-operation'<sup>10</sup>, whose centrepiece is a 'strategic approach for the equitable, efficient and sustainable management of water resources'. They set out the EC's approach to water-related development activities, and constitute therefore a key contribution to the policy orientations of this Communication. The focus of EC support to water in developing countries has progressively evolved from a project approach concentrating on water supply, addressing mainly technical issues, into a programme approach including stronger social and environmental concerns, and support for improved management of the resource.

*Guiding Principles* for water resources and water services management were defined in six categories : Institutional and management; Social; Economic and financial; Environmental; Information, education and communication; and Technological. These 19 principles (the full list is provided in Annex 2), and the tools for their application at the programming and project level, are already guiding water-related development activities supported by the EC. In applying the principles, certain areas of integrated management need to receive special emphasis, such as integration between land and water uses, between upstream and downstream areas within river basins, between water quantity and quality aspects, and between social and environmental aspects. Recommendations from the study commissioned by the European Parliament in 2000 are also taken into account in this Communication<sup>11</sup>.

Water resources are subject to a variety of demands/pressures which affect availability and quality. Inherent tensions exist between these different demands. Over-abstraction or contamination of water by one user or in one part of a river basin will limit the options available to others. Water resources must be managed in an integrated manner taking account of all the legitimate uses and demands, including environmental objectives. Integrated management requires that water resources within a given river basin or lake catchment area are managed in an holistic manner balancing the water needs of the aquatic environment and the different water uses. An integrated approach also requires that all waters including groundwater and coastal waters are taken into account. This applies particularly to rivers which cross national boundaries and to lakes bordered by several different countries. **Integrated Water Resource Management** and **River Basin Management**<sup>12</sup> are central principles of EU policy.

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<sup>8</sup> EC's Development Policy - Statement by the Council and the Commission, November 2000

<sup>9</sup> Communication on EC's Development Policy, page 18

<sup>10</sup> EC Development (1998): Guidelines for water resources development co-operation. Towards sustainable water resources management - A strategic approach.

<sup>11</sup> European Parliament. DG for Research (2000): Water and Development in Developing Countries.

<sup>12</sup> See definitions in Annex 1 - Glossary

EC Cooperation has historically been organised on a regional basis. Resources are allocated from the European Development Fund (ACP countries) and from the EC budget (Southern Mediterranean and Middle East, Asia and Latin America, Eastern Europe and Central Asia); loans are also funded by the European Investment Bank. Within the various regional programmes, there are some commonalities between water-related policies and activities - in most cases a focus on poverty reduction - but there are also differences, depending on regional conditions and legal agreements. More detailed description is given in Annex 3.

– **Lessons from experience**

The majority of water projects are in rural and urban water supply and sanitation, with an increasing number addressing the wider context of water resources management. Evaluations are regularly carried out, to assess results against the criteria of relevance, efficiency, effectiveness, impact and sustainability.

The use of Project Cycle Management as a framework for development co-operation projects has increased project consistency from programming to evaluation. If applied correctly, this approach allows the achievement of specific objectives (e.g. increased supply, improved water quality, cost-effectiveness, environmental impact) to be measured against verifiable indicators. In the sensitive political and economic context in which development projects are undertaken, it aims to ensure that project design takes accounts of assumptions and risks. Finally, addressing water needs in terms of problems and solutions may encourage the development of more cost-effective methods; in many cases, improving the use of existing infrastructure (e.g. by reducing water losses) should always be fully explored before designing new schemes.

Evaluation findings<sup>13</sup> have pointed to the need for certain key elements to be considered, if water-related projects and programmes are to succeed: An *integrated approach* (conception, design, construction, training, management, including water quality monitoring, environmental issues); *Stakeholder involvement*, at all levels of responsibility and at all stages of project conception and implementation (to allow project design to take account of local practices and experience, and preferences for different types of solutions; it also includes women's participation and attention to gender aspects in design, management and monitoring); *Capacity building*, in particular for sustainable management of resources and services, operation and maintenance of systems; *Awareness* of social and environmental needs, impacts and costs. This might include the encouragement and development of a consumer culture amongst water users. On the environmental side, water projects can be more effective in the context of a pollution reduction or biodiversity recovery strategy.

These findings highlight in particular the needs to clearly identify the beneficiaries and their problems; to design systems meeting the real needs of users, taking account of different lifestyles and consumption patterns, building on their knowledge and experience, and matching their capacities, including financial, to maintain and manage the systems. Consumer surveys should be undertaken so that the optimum extension programme can be planned, in particular to reach the poorest sections of the peri-urban population.

Evaluations of rural and urban water supply projects in Africa have shown in particular that, while most of these projects have a health improvement objective, sanitation and water

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<sup>13</sup> e.g. 'Evaluation globale des projets d'hydraulique villageoise en Afrique de l'Ouest' (1997); Evaluation of Kampala water supply expansion project (2000).



quality aspects are often not given enough consideration; sensitisation and capacity building must therefore include these aspects, in collaboration with health actors. Evaluations of the environmental component of the TACIS Regional Programme, concerning in particular the Black, Caspian and Aral seas, have confirmed the important impact of water quality on agriculture, fisheries and tourism, and how much actions to improve water quality in inflowing rivers, benefit to the coastal economies.

Despite the value of existing reports, a wider spectrum of evaluations is needed to provide a sound base for future action (e.g. on activities directed towards pollution abatement, on experiences relating to transboundary waters, conflict prevention). Donor coordination is not only about improved communication in programming, project design, and funding, but also in the sharing of lessons which can improve the impact of future interventions.

## **2.2. Water as a component of EC development priorities**

As already stated in the opening of chapter 2, the principal aim of the EC development policy is to reduce poverty. *Poverty* is defined not simply by the absence of income and financial resources, but also as 'encompassing the notion of vulnerability and such factors as access to adequate food supplies, education and health, natural resources and drinking water, land, employment and credit, information and political involvement, services and infrastructure'. All of these are needed to enable disadvantaged people to exert control over their means of livelihood and development, enjoy equality of opportunity, and live in a safe and healthy environment. Thus access to the common resource and the expansion of service delivery to the underserved are at the heart of poverty reduction strategies. Among the critical resources to which many rural farming families need access are land and water, and among the critical services to which all people, rural and urban, need access are a safe and reliable water supply and adequate means of waste disposal.

Poverty-related problems in developing countries are complex and multidimensional. Since water is a social, economic and environmental good fundamental to human activity, sound management of the resource base and of services dependent on it will interact with the pursuit of these objectives, directly or indirectly. *Water management is a cross-sectoral issue to be mainstreamed within development policies associated with poverty reduction.* There are many ways in which water management is relevant to the thematic priorities and cross-cutting issues of the EC Development Policy<sup>14</sup>. The following analysis addresses the question of where and how policies surrounding water and development should be integrated into these priorities.

### **– Regional integration and co-operation**

Regional integration and cooperation should take transboundary economic, social and environmental problems fully into account. The shared resource base frequently includes river systems, lakes and groundwater aquifers. Transboundary cooperation over water resources is becoming increasingly important in many developing regions, where growing population and changing consumption patterns create tensions on both water availability and quality among upstream and downstream users. The challenge in sharing waters is to avoid conflict and promote peaceful co-operation between different interests, both within countries and between them. The Communication on conflict prevention recommends EC support 'where a clear

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<sup>14</sup> Communication on European Community's Development Policy, COM(2000)212, 26.4.2000

commitment to regional collaboration exists, to regional actions aiming at a fair management of shared water resources'<sup>15</sup>.

– **Support to macro-economic policies, in particular sector programmes in social areas**

The EC Development Policy recognises that 'the development of social policies such as health, food security, education and training as well as *access to and sustainable management of water resources*, are of the utmost importance'<sup>16</sup>. Meeting basic needs is an essential factor to achieve 'water security'<sup>17</sup>. Access to safe water supply and sanitation, and hygiene education are closely inter-related with health, as well as being a factor - and a subject - in improved educational provision. Key factors associated with poverty are determinants of ill health and malnutrition, such as lack of access to clean water and sanitation, food insecurity and poor household caring practices, all of them linked to water management. In pursuing poverty eradication linked to improved access to safe water and sanitation services in both rural and urban areas - where a growing number of inhabitants live in absolute poverty and lack basic services -, the EC can make a substantial contribution to improvements in health, hygiene and nutritional standards.

– **Food security and sustainable rural development**

In most developing countries rural economic growth is a critical precondition for overall economic growth, and food production remains the main economic activity of much of the rural population. Expanded economic yield mainly comes from natural resource-based goods, such as agricultural, animal husbandry or fishery products, all of which require sustainable management of water resources. Integrating the management of land and water resources is key to both water and food security, particularly in areas with competition over water resources, and calls for improved water use efficiency in agriculture which is the largest user of freshwater, to reduce the pressure on the resources. The poorest and most vulnerable rural dwellers are most threatened by volatility in both the natural and the economic climate. A dramatic downturn in their situation, caused for example by prolonged drought, can leave them at risk of serious food deficit. They are therefore particularly sensitive to lack of water and of water of acceptable quality<sup>18</sup>.

The EC Development Policy<sup>19</sup> recognises that food security often needs to be ensured through a regional rather than a national framework for production and distribution, which can be seen as a transition from food self-reliance to a regional food security. This may entail importing 'virtual water' in the form of crops requiring larger quantities of water<sup>20</sup>.

– **Institutional capacity building**

Sectors which require institutional support and capacity building include those involved in developing and applying an integrated water resources management approach, particularly over the longer term. The same needs arise in the context of water as in many other areas:

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<sup>15</sup> Communication on conflict prevention, COM(2001)211, 11.4.2001

<sup>16</sup> Communication on EC's Development Policy, page 18

<sup>17</sup> see Annex 1 - Glossary

<sup>18</sup> European Policy to Support Rural Development. Policy Orientation Paper. DG Development, February 2000.

<sup>19</sup> Communication on EC's Development Policy, p 27.

<sup>20</sup> Definition in Annex 1 - Glossary

coherent approaches at all levels – local, national, and regional – to overcome fragmentation; transparent and accountable institutions. Sound water management requires political responsibility and good governance. Strategies for ensuring poverty reduction need to be fully ‘owned’ by governments and civil society; equitable water allocation and anti-pollution measures to safeguard public health need to be based on good governance principles.

At local level, particularly in low-income areas, support to water users’ associations or community-based organisations involved in managing water and sanitation services can contribute to water security and poverty reduction. At the regional level, support to River Basin Organisations can strengthen the integrated management of water, and prevent conflict.

#### – **Trade and Development**

The EC promotes the sustainability of trade policy, especially in poor countries, in order to contribute to non-inflationary growth while preserving environmental resources and promoting social equity. Therefore, the EC is prepared to support countries in adopting trade policies which fully take account of scarce water resources.

In water-scarce environments, it is necessary to give a special attention to water management in relation with production and trade of agricultural and industrial goods. The relationship between trade and water security is relevant where the interests of the poor are concerned, in particular for subsistence farmers. Concerns about this key global challenge are further developed in chapter 4.4.

#### – **Transport**

Transport is a key sector for EC support, with a major focus on road transport. In some regions, however, investments may be directed towards river (and maritime) transport. In deltaic areas, coastal zones, or riverine forested areas, waterborne transport systems may be the best or only solution, but the absence as well as the superabundance of water can threaten water-borne transport. The large use of rivers for transport in Europe has proven that such activity can bring great benefits, but also poses severe threats to the environment. The EU has thus experienced that the use of waterways for transport needs to be incorporated into an integrated water resources management approach where applicable, and the EC promotes sustainable transport policies which integrate land and water use planning.

#### – **Horizontal and other aspects**

**Gender balance.** ‘Gender inequality hinders growth, poverty reduction and progress in health and education’<sup>21</sup>. One way in which gender inequality contributes to poverty is the heavy burden imposed on women in terms of their time and energy in collecting domestic water supplies. Not only is their role in household water provision and use frequently ignored in the water planning and management process, but the need to release them from water-related drudgery is insufficiently appreciated by those hoping to engage them in income-generation and poverty reduction programmes. Thus mainstreaming gender equity should give special attention to water-related policies and programmes.

**Environment and sustainable development:** As highlighted before, the importance of water in environmental sustainability has attracted an increasing attention in the international debate. When putting poverty alleviation and human development at the centre of policy it is

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<sup>21</sup> COM(2000)212

essential to recognise that these objectives can only be achieved if we protect the integrity and function of the natural ecosystems, which sustain our existence. Environmental investments, such as improved land and water management, investments in sanitation, waste management and clean air, often yield high rates of economic and social return as well as promoting the sustainable use of resources. Neglect of environmental threats may not only undermine the efforts to reduce poverty but even lead to increased poverty.<sup>22</sup> A joint EC/UNDP initiative looking at the impact of involving the poor in improved environmental management, addresses in particular the water resources context<sup>23</sup>.

A sustainable development perspective integrates also water uses such as energy, industry, and recreation. Access to a reliable source of *energy* is of high economic importance in developing countries, relying on power supply for pumping water, irrigation or household use, and managing waste, with implications for water quantity and quality. Hydropower installations often require the impounding of water by dams, raising increasing concerns for socio-environmental impacts. Water use by *industry* needs also to be part of integrated water management, and specific pollution prevention policies need to be developed. Other important water-related concerns such as the management of floods and coastal areas, and the implications of climate change on water management are reviewed in chapter 4.

**Research:** A number of areas relating to the interactions between effective water management and poverty reduction need in-depth inquiry. Research (and capacity building) play a key role in developing the critical knowledge needed for policy formulation, and to operationalise policies and principles. The management and quality of water has been identified as a key action in the 5<sup>th</sup> Framework Programme, within the Environment and Sustainable Development programme, as well as under the INCO (International Cooperation) programme. More details on these research programmes are given in Annex 3.

### **3. WATER IN THE DEVELOPMENT POLICIES OF EU MEMBER STATES AND OTHER ACTORS**

#### **3.1. EU Member States**

Most EU Member States have a specific emphasis on water-related development cooperation. These include *Austria, Denmark, France, Germany, Ireland, The Netherlands, Sweden and the United Kingdom*. For some water may be an integral part of individual country cooperation, such as *Portuguese* development cooperation with Mozambique; for *Finland*, water is included under the sector budget for health or education assistance. Although there are differences between the importance attached to water as a development cooperation component, and in water-related policies and priorities, there is an important similarity in their policy frameworks.

Meeting basic needs for water supply and sanitation remains an important priority especially within programmes for poverty reduction - poverty being generally defined as a lack of means for a sustainable livelihood -, but this activity is now placed within an integrated water resources management perspective. There has also been a shift from individual technical projects towards a holistic programme approach, addressing issues such as capacity building, local-level management, full stakeholder participation including particularly of women,

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<sup>22</sup> Communication: Integrating the Environment into EC Economic and Development Co-operation

<sup>23</sup> UNDP/EC Poverty and Environment Initiative : Attacking poverty while improving the environment - towards win-win policy options.

hygiene education, awareness-raising, establishment of public-private partnerships – all of which include a built-in concern for long-term sustainability of both the resource and services based upon it. Most Member States are also moving towards sector support programmes instead of individual projects. Some countries are favouring new and alternative technologies such as rain-water harvesting and ecological sanitation, and are placing a stronger focus on water quality aspects, by favouring prevention of pollution instead of end-of-pipe solutions such as water treatment.

Summaries of the Member States water policies are found in Annexe 4, and the list of documents in Annex 5 includes references of the individual policy documents.

### **3.2. Coordination and complementarity**

In accordance with the EC Treaty, coordination and complementarity of EC and EU Member States' development cooperation policies and activities aim to make the contribution of EU cooperation to partner countries more effective. Overall coordination of cooperation within country programmes is the primary task and responsibility of partner governments. However, the European Community can also assist partner countries' donor coordination. This is particularly relevant when the primary source of aid is the EU Member States and the Community. Clear strategies elaborated by partner countries are the ideal framework for reaching complementarity, which aims at a more sustainable use of limited resources by sharing lessons, avoiding unnecessary duplication and making use of a synergistic effect in different areas of expertise.

Regular Expert Group meetings are held with Member States, to share policy, practice and operational guidelines, and to determine a coordinated European approach, linked to achievement of the international development goals. Coordination takes also place at country level, between the Commission and EU Member States, as well as other donors.

### **3.3. International organisations and partnerships**

As detailed in Annex 4, several UN agencies are working on water-related fields (UNDP, UNICEF and WHO, FAO, UNCHS, WMO, UNESCO and UNEP); some have a broad mandate, many have a more specialised focus. The UN Commission on Sustainable Development, the follow-up body for the Agenda 21 process, is also concerned with water issues, mainly from an environmental perspective. The Commission is now moving towards a closer collaboration with the UN system in the field of development<sup>24</sup>, with a view to maximising complementarity and synergistic effects.

The World Bank has redirected its focus towards poverty eradication, which includes provision of water and sanitation basic services. The World Bank is also active in dealing with transboundary waters from the perspective of conflict prevention. The Global Environment Facility has International Waters as one of its focal areas.

The Water Supply and Sanitation Collaborative Council is the main international forum addressing issues of water, sanitation and hygiene. The Global Water Partnership was established to respond to the need for coordination in applying an integrated approach to water resources management. The EC also fosters collaboration with NGOs, the private

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<sup>24</sup> Communication from the Commission on "Building an effective partnership with the United Nations in the field of Development and Humanitarian Affairs" (2 May 2001).

sector, professional associations, and research institutes. Several Conventions include obligations relevant for water management.

### **3.4. Role of the EC : political dialogue, development cooperation and trade**

The Community has three principle means of action to pursue its objectives in the field of development: political dialogue, development cooperation and trade. These avenues are mutually reinforcing and should be used to pursue the water-related policies of the Commission. Considering the mix of policies with a water dimension, the Commission can take account of the possible impact of the whole range of its relevant programmes when formulating and implementing targeted measures.

Within the EC's policy mandate for poverty eradication, improved water and food security plays a key role. The EC being the major single donor in grant financing, it has both the remit and resources to make a significant contribution to the global effort to achieve water security at household, community, national and international levels. Carrying this work in close collaboration with EU Member States increases coherence and complementarity of policies and priorities, as well as coordination of activities.

Regional cooperation is a main focus of EC development aid. Taking account of relevant expertise in water management policies within the EU (such as the establishment and implementation of the Water Framework Directive, a legally binding instrument that promotes in the EU the same principles put forward in this Communication for developing countries), the Commission can make a significant impact in supporting Integrated Water Resources Management at the regional level, including in cases where water-related conflict prevention may be needed. Collaboration between the EU and other international actors can lead to enhanced confidence building between riparian stakeholders in projects on transboundary rivers, lakes or aquifers.

## **4. THE WAY FORWARD**

### **4.1. Raising the policy profile**

The case presented in this Communication highlights the need for more attention to be paid to the fragility of the global supply of freshwater and its equitable distribution to assure a reasonable quality of life for all the world's inhabitants, especially the poorest. All aspects of the resource and its different uses, as well as allied areas such as environmental sustainability, pollution, sanitation, should be encompassed by a heightened political concern for water on the planet. It suggests that a higher policy profile for water is required on the European Community's development cooperation agenda. As already described, considerable international concern is now being devoted to this area, on its own merits and within poverty eradication initiatives, and EC institutions have their own role to play within the debates and practical actions devoted to this end. The established sectoral principles are endorsed in this Communication as a foundation for policy development. Priority themes, including at the regional and global levels, are revisited in this chapter, whose purpose is to articulate and highlight key messages on the way forward.

The six development priorities of the European Community are the overarching framework to reach these objectives, under which three critical areas have been identified to apply **Integrated Water Resources Management**, for sound water-related interventions:

- (1) Ensuring a supply to every human being, especially the poorest, of sufficient *drinking water of good quality and an adequate means of waste disposal*, with the general objective of reducing poverty and improving people's health and quality of life;
- (2) Sustainable and equitable *transboundary water resources management* taking into account all relevant interests and integrating the competing needs of the various users, in particular those of riparian communities and states sharing the same resource base;
- (3) *Cross-sectoral coordination to ensure fair and appropriate distribution of water between users of different kinds*, requires mainstreaming water management principles into related policies : water for food security, for the environment, energy, industry, etc.

As described above, the main purpose of an integrated approach is to reconcile competing needs and uses, bearing in mind the crosscutting principle of gender equity. Within this overall purpose, a special attention is required for several aspects of 'integration': *between sectors and among partners*, to overcome fragmentation of responsibilities; *between land and water uses* within the basin or catchment; *between protection of water quality* (with an emphasis on pollution prevention) *and maximisation of quantity*; between the uses of *surface water and groundwater*; between *supply- and demand-based measures*, requiring attention to pricing of water services; between *short-term water demand* for human development and the *long-term requirements* to protect habitats and biodiversity, especially wetlands.

The primary responsibility for ensuring equitable and sustainable water resources management rests with governments<sup>25</sup>. Supporting developing countries and regions to develop their own water management policies and strategies, and strengthen their public funding capabilities, will thus foster possibilities to reach water security.

To apply the integrated approach to best effect, the level of catchment, river basin or sub-basin should be considered, where appropriate. A key message is, therefore, to promote the development of **river basin management** plans. Water projects should be consistent with these plans, or include assistance for their establishment if they do not exist.

## 4.2. Putting Integrated Water Resources Management into practice

### – Awareness and participation

*Awareness raising* of all stakeholders is needed to ensure that they recognise the value of water in all its dimensions – economic, social, cultural, for health and the environment. Better understanding of the pressures on water resources and the consequences of irresponsible and unsafe water behaviour will improve motivation to manage water more effectively and help in defining societal norms to adapt to a changing situation. Users need to understand that a right to use water implies responsibilities for its sustainable use as well as its reuse. In environments where water and water-related services have traditionally been seen as 'free', the message that water has an economic value and that services have to be paid for needs to be convincingly conveyed. Policy makers need to understand that demand management is to be preferred to supply-driven service provision which tends to enhance inequity and lead to exclusion of the poor while subsidising services for the better-off. Awareness raising of all stakeholders is also a prerequisite for transboundary collaboration. Activities to be promoted include public education campaigns directed at adults and youth, through the media, schools and training institutions, women's organisations, professional associations and political fora.

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<sup>25</sup> Recommendations for action (n° 1) International Freshwater Conference, Bonn, December 2001

*Participation* of all stakeholders is required, in a spirit of balanced partnership at all levels and in all contexts, and including a gender balance. It refers not only to managers, technicians, professionals and administrators, but all segments of society including economic and social actors, representatives of civil society such as NGOs and user associations, and the private sector. *Ownership* is a key to success of policies and activities, especially where poverty reduction is concerned. Effective policy elaboration and implementation requires also partnership between donor and partner countries.

– **Institutional strengthening and management**

The success of policies, programmes, projects and services depends heavily on the capacity, resources and expertise of the responsible institutions, whether these are formal national or international bodies such as River Basin Organisations, or more informal bodies, such as water users' associations. The latter are particularly important in the light of the principle that water-related services should be *managed at the lowest appropriate administrative level*, with people involved in management and governance decisions concerning water resources. Innovative forms of service delivery involve users, informal service providers, private enterprises. Attention needs to be given to the legislative and regulatory framework, administrative capacity, and transparency so as to assure good '*water governance*'. There may also need to be specific mechanisms for safeguarding the poor and gender equity.

One of the most important areas for cooperation is therefore *capacity building* by means of human resources development, training and networking, to make water institutions more effective and water services more attractive for private investment, necessary to bridge the gap between current and required levels of expenditures. Partner countries need to be able to streamline their water-related policies, to develop and apply appropriate strategies, involving local, national, regional and international levels.

One action which would improve the effectiveness of integrated river basin planning, is the strengthening of exchanges of knowledge and experiences, and links between European and developing country actors. EU experience could be drawn upon to promote regional support-groups and centres of excellence, allowing countries to benefit from – for example – success stories in the improvement of water governance or in the introduction of an integrated water resources management approach (such as the EU Water Framework Directive as an example of water management within river basins), which applies also in a transboundary context.

– **Management by demand**

As a result of improvements in living conditions and social aspirations, the demand for water is on the increase practically all over the world. Many countries in the developing world are in the process of moving from supply- toward demand-management scenario. This can be described as a 'water management ladder': when the demand and competition is low, i.e. when access is comparatively easy, the cost is low and the technical and institutional system is comparatively simple. Higher demand (more people per flow unit) will initially result in technical arrangements to augment supply, i.e. a supply management stage. Further increases in demand would lead to inter-sectoral competition and environmental concerns. These management challenges cannot be handled only through technical supply oriented means, and demand management strategies need to be applied. Gradually a 'best possible use' of water becomes inevitable, requiring the design of appropriate institutional arrangements.



Integrating supply-based and demand-based measures requires support for capacity building. Expertise needs to be developed in a number of areas – for example, on the factors influencing demand, and the environmental implications on different rungs of the ladder.

In a situation of increasing demand, the challenge is to reduce the demand while increasing output (per unit of water). This involves attaching a value to water for all its uses, and moving towards the *pricing of water services* and the imposition of fines or tariffs for water degradation. Efficient demand management will include protection of water sources and water reuse. Decisions on pricing should not be confined to cost recovery for services, but should build in the necessary costs of environmental protection from waste and pollution, the 'polluter pays principle'. However, while it is necessary to recover the costs in order to sustain water provision and treatment, it is also important to meet the basic needs of poor and vulnerable groups by designing tariff structures and collection systems in an appropriate way. Because pricing issues are sensitive it is necessary to develop pricing mechanisms in a transparent way with the participation of users, build in appropriate incentives, and introduce new pricing regimes in a phased manner.

#### – **Expanding the knowledge base**

The knowledge base concerning water and waste and their efficient, equitable, and sustainable management, in developing country contexts, has to be expanded in a number of areas, including policy issues, management systems and technology. It can build on the successful experience of international cooperation in science and technology. A prime concern is directed at the development of concepts that can help operationalise the principles of sustainable development of water resources, with natural attention to societal and equity concerns. A focus is also required on innovative approaches (e.g. in demand management, ecological sanitation). Greater efforts towards using research results, knowledge and innovation, through capacity building and up-take, hold great promise for tangible results.

New priorities for collaborative research programmes (such as INCO - see Annex 3), that must firmly address the transition towards sustainability, will be determined through continued dialogue and interaction with partner institutions as well as taking into account the outcomes of the international debate. Given the challenges ahead, integrated and interdisciplinary policy and systems research will warrant highest priority. In this context, it will be crucial to develop and disseminate, jointly with partners in developing countries, the knowledge required to respond to evolving aspirations of societies, particularly the most disadvantaged and vulnerable groups. The knowledge generated by research must help provide options and enable choices of sustainable lifestyles and water resource uses as well as promotion of appropriate incentive and regulatory policies.

#### – **Coordination**

Collaboration between bi-lateral and multilateral donors and international organisations on water programmes needs to be strengthened, at both regional and international levels. In this context, the informal EC/EU Member States Water Expert Group can continue to guide the evolution of policy and its application in a co-ordinated fashion. A major concern is complementarity : The European Community invites donors to intensify co-ordination in order to ensure increased complementarity and improve the effectiveness of aid. Other actions include working with the World Bank and developing country partners in the framework of Poverty Reduction, country and sector strategies and programmes to ensure that water is given its due priority, and is addressed in an integrated manner.

Enhanced collaboration is recommended with the Global Water Partnership, particularly in its networking activities in developing regions, as well as with the Water Supply and Sanitation Collaborative Council, with UN agencies, such as FAO on water for food, with Convention programmes, with civil society and NGOs for the promotion of community-managed services, and with the private sector. Coordination between donors is particularly essential in the context of management of transboundary waters.

The EC should play an active role, in close coordination with EU Member States (not only the national administrations but also the private sector and civil society) in the work towards the World Summit on Sustainable Development in 2002, and the 3d World Water Forum in 2003.

### **4.3. Water related action for its different uses**

The critical areas identified in 4.1, to which political attention should be primarily devoted, and for which all sources of funding (public and private) need to be mobilised<sup>26</sup>, cover all the different water uses under an integrated water resources management framework. The way forward is highlighted for these different areas, in a local and national perspective. The regional cooperation context (transboundary waters), and relations between water and the critical global issues of climate change and trade will be addressed under the next heading.

#### **– Water supply and sanitation**

The target of 'water and sanitation for all' set for the International Water Decade is still far from being reached. As stated in the opening of this chapter, the expansion of safe water and sanitation services to meet the needs of the poorest and under-served parts of the populations is one area regarded as critical for support.

In order to reach this objective, some ancillary messages should be emphasised, including the following needs to improve capacity for operation and maintenance, with increased user's participation; minimise unaccounted-for water and reduce water profligacy; introduce water saving devices, and reuse water where practicable; price water services appropriately so as to safeguard the interests of the poor; introduce incentives for safeguarding water quality at community level, such as the protection of wells and careful water storage.

In this context, two urgent water priorities<sup>27</sup> must be highlighted:

#### *Extending sanitation coverage and hygiene education*

Sanitation is a neglected area, which tremendous consequences on health need to be emphasised and addressed. Improving hygienic behaviour and environmental sanitation alongside water supply must be defined as critical ingredient of public health programmes, for example by creating a wider understanding among low-income communities of the links between lack of hygiene and disease.

Besides, a careful examination of the technical options, regarding health risks, prevailing attitudes and customs, acceptability, existing knowledge and practices, costs, ownership of facilities, and the regulatory framework is needed. New promising approaches do exist and

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<sup>26</sup> Recommendations for action in the field of mobilising financial resources, International Freshwater Conference, Bonn, December 2001

<sup>27</sup> Framework for action, Global Water Partnership

need to be better known, like *ecological sanitation*<sup>28</sup>. The small re-circulation systems can be adjusted upon affordability conditions and management capacity (whereas sophisticated piped systems cannot) and bring large benefits (improved environment and water savings).

### *Meeting the challenge of urbanisation*

Rapid urbanisation throughout all parts of the developing world is placing increasing strain on municipal water supplies, drainage systems and sanitation, including sewerage services. The key message in this context is that the provision of safe water by mains connection and of piped sewerage are unaffordable for the majority of the urban population, and that any strategy for reaching the urban poor needs to offer lower-cost solutions, building on users capabilities. Another important message is that increased hazards to urban health are posed by the failure to protect water quality in its catchment area.

#### – **Water for food: Achieving water-food security**

Ensuring food security at household, community, and national levels is a vital component of poverty reduction. Food security cannot be divorced from water availability, with a high proportion of the world's freshwater resource devoted to irrigated agriculture; this question relates also to livestock and fishery/aquaculture needs. Advocating sound water use and management for food means placing an emphasis on small-scale water-efficient approaches and the application of water-efficient technologies (rain-water harvesting, small-scale drip irrigation). Crop vulnerability to drought and floods is also an important issue in water policies. Besides, promotion of environmentally sound agricultural practices, minimising the use of chemicals, is needed to avoid contamination of waters by their unsafe use and storage.

While the impact of urban (and peri-urban) food production on the urban poor needs to be recognised, actions to promote food security in poor rural areas should include livelihood diversification, together with water saving methodologies (e.g. rainfed agricultural systems, which have spill over effects on environmental sustainability, through reduction of methane emission) and more sustainable management systems (e.g. irrigation which maximise productivity per unit of water, specific agriculture practices in arid areas that reduce salinisation, etc.). This would ensure alternative income generating opportunities for the poorest people, and also decrease the pressure on scarce water resources.

#### – **Protecting and restoring water resources and ecosystems**

Overexploitation of water for human needs may have disastrous consequences on the natural habitat. In the case of water management this means that proper consideration must be given to the water needs and the protection of aquatic ecosystems. Water bodies and in particular wetland areas are extremely rich in biodiversity and often of crucial importance to the poorest; management strategies should recognise the importance of these resources. Moreover, the self purification capacity of healthy aquatic ecosystems and wetlands is an important element of long-term sustainability in water uses. Experience in Europe shows that all partners in a River Basin benefit from healthy aquatic ecosystems because they can reduce their treatment measures for drinking water and other human water uses.

It is essential to find a proper balance between human needs and the intrinsic value of ecosystems at all levels of water management. Specific actions are required to support the maintenance of the ecosystem so that over-exploitation or pollution does not compromise

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<sup>28</sup> definition in Annex 1 - Glossary

freshwater supplies. Actions need to ensure that key ecological systems are kept operational, and that loss of species, habitat and bio-diversity do not deplete other resource bases such as fish stock.

Declining surface and groundwater quality exacerbates the need in urban as well as rural areas to address the causes, not just mitigate the effects of increasing water pollution, thus support should be directed more towards *pollution abatement*<sup>29</sup> than towards curing measures.

– **Sustainable water use for energy and industry**

In the *energy* context, hydropower development must be integrated in water resources management plans, firstly to guarantee a rational use of water for energy, because the absence of water can threaten power generation. The interest from donors in projects requiring large dams is declining, except for uniquely competitive low-cost sites, and sites where environmental and social impacts are acceptable; small and medium hydropower plants often offer a sustainable solution to energy needs, for instance in mountainous areas with few other energy resources<sup>30</sup>. There is also a need to invest in renewable energy for water pumping, wastewater treatment and desalination, where feasible.

*Industry* is not only a significant user of water, but it is also a major polluter, most waste being discharged untreated into waterways. Large-scale and small-scale industries are contributing to the pollution of surface as well as groundwater. The need for cost-effective and ecologically suitable technologies for all kinds of liquid and solid waste disposal is a key issue. There is also a need to invest in pollution management systems.

– **Management of water-related hazards and of coastal areas**

Another important emphasis within water resources planning is the reduction of water related hazards from floods and drought, and the mitigation of their effects. Management of *floods* depends on action within the whole river basin, including upstream and downstream areas, and in the coastal zone and adjacent marine areas. Preparedness and mitigation of flood effects should include warning systems, measures such as building of flood protection structures and creation of storage capacity, and non-structural measures such as land-use planning. Measures for the mitigation of the effects of *droughts* include early warning and response capacity systems; efficiently managed emergency relief, including drinking water supply and food aid; improved water and food storage systems, and the promotion of alternative livelihoods for drought prone areas.

Mismanagement, excessive withdrawal or pollution of water resources has an impact in the discharging area, a delta, a *coastal zone* and associated marine ecosystem. Integrated water resources management within river basins should encompass management of the coastal zone.

#### **4.4. Key global challenges**

Some global and long term issues have become increasingly critical as water resources become scarce: the management of shared waters to build regional cooperation and avoid conflict; the impacts of climate change leading to higher risks of extreme events and resource

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<sup>29</sup> definition in Annex 1 - Glossary

<sup>30</sup> World Commission on Dams: Final Report, November 2000.

depletion; and the globalisation of world trade, including products that may impact on water management.

– **Transboundary water management and conflict prevention**

Prevention of conflicts over water need to build on cooperation and on the sharing of economic and environmental benefits as much as on the sharing of the resource. When the action of one state results in a declining supply for any other there is heightened potential for an intra-basin clash over the distribution of water. Further, state legitimacy is threatened if there is a failure to provide the basic necessities of human life. In response the political leadership may attempt either to stifle internal dissent or to divert discontent toward neighbouring countries.

Cooperation over transboundary water resources call for an increasing openness within upstream/downstream relationships and the development of new partnerships. In this context also, the principles of sustainable management of water resources are gaining increasing recognition, such as the need for new institutional arrangements, increased decentralisation and respect for the environmental demand for water. In line with the recommendation of its Communication on conflict prevention and the focus on regional cooperation in its Development Policy, the EC should therefore participate in supporting an improved governance structure to secure best possible use of water and enhance cooperation in management of shared transboundary water systems. Assistance is needed to develop effective cooperative arrangements and for coordination in such areas as water quality and quantity, and related socio- economic and political relationships. As underlined before, such support can build on the EU's own experience in water management.

Support for water security is particularly vital in situations where those suffering are the poorest. It includes provisions aiming at the reduction of threats to the sustainability of river basin agreements, and the promotion of a dialogue on basin-wide cooperation in such areas as information-sharing, capacity building and technology transfers; cooperation should focus on achievable goals and benefits instead of focusing exclusively on contentious issues of rights and allocations. Cooperation between riparians on flood preparedness or mitigating the effects of hazardous floods should also be promoted.

– **Implications of climate change on access to water for the poor**

Among the issues related to water which need to be addressed at the global level is that of climate change. An expected intensification of the hydrological cycle, with changes in patterns of precipitation and evapotranspiration, will have an impact on the living conditions of human beings and for the environment. According to model predictions, periodic and chronic shortfalls of water and flooding will be exacerbated, resulting in problems of water access and the migration potential is significant. Land degradation, drought and desertification are associated with lower water levels in rivers, lakes and aquifers, affecting the quantity and quality of freshwater supplies. According to a report by the IPCC<sup>31</sup> most important changes will occur at the lower latitudes i.e. where population density is most acute. Where the climate is already arid it may become more so, which will make life even more difficult for some of the world's poorest inhabitants. Similarly, those most vulnerable to flood often live in marginal terrain. The effects of floods and inundation are particularly severe in low-lying areas, including within several of the Small Island Developing States.

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<sup>31</sup> The latest report from the Intergovernmental Panel of Climate Change, IPCC, 2001.

The need for equitable access to water will be reinforced in areas where water will become more scarce. Improved water management, in particular in irrigated areas, swamps and wetlands, will contribute to the mitigation of the effects of climate change. Partner countries will need assistance, through research and capacity building, to increase their capability to adapt to the adverse effects, which requires long-term planning. The regional context is likely to be the most appropriate to build this capacity to integrate climate variability and change issues into other aspects of water management.

#### – **Impacts of trade on water management**

The liberalisation of the world economy – often termed globalisation – has implications for imports and exports of agricultural products. The interconnections between international trade and food and water security, especially where the interests of the poor are concerned, has only recently begun to receive some attention. Many countries have traditionally perceived food self-sufficiency as an important strategic concern, and have used valuable water resources in pursuing this objective. Others, in trying to promote agricultural and industrial exports for economic growth, have grown water-intensive crops and over-drawn their water resources, or polluted them with industrial effluent. Remedying these environmental impacts can be costly. In water-scarce environments, it is necessary to pay more attention to water consumption and the protection of the environment in both agricultural and industrial policy discussions.

For some countries, importing ‘virtual water’, in the form of their requirements for water-intensive food crops, may be a more practical and cost-effective approach to national food security than growing them. However, all policies which support a country’s food and water security objectives should take into account the needs of the poor, especially of subsistence farmers who cannot afford to buy foodstuffs and may be negatively affected by a food security policy which alters the economic framework within which they meet their livelihood needs. More open markets can permit greater flow of grains and better returns to certain farmers and thus have a positive impact on their livelihoods, but can also increase stresses on water and land use and negatively affect the livelihoods of others, as well as a country’s long-term prospects of overall food security. This issue needs to be studied more carefully and the EC could offer its expertise to better understand the implications of different approaches to food and water security, taking trade policies into account.

#### **4.5. Strategic Partnership for Water**

The Commission wishes to build upon the results from the Bonn International Freshwater Conference (December 2001) and to support the development of an EU initiative to address some of the priority issues related to water and development.

In Bonn, Ministers from 22 African countries made a joint declaration in which they identified water as a key natural resource for the continent. They also announced the setting up of the African Regional Ministerial Forum on Water and the holding of an inaugural African Ministerial Conference on Water to take place in Spring 2002. One of the stated aims of the forum is to improve the integrated management of transboundary water resources and to use co-operation on water (including river basin management) as a basis for bringing nations together. The Ministers called upon their international partners to support this process, in the framework of the New Partnership for Africa's Development.

Special attention will be given to transboundary water management issues and the necessary agreements of the riparian states in the main international river basins. Twinning

arrangements between European and African rivers can also be envisaged to exchange expertise and to canalise the support to specific pilot basins.

The process would be driven by the recipient countries. The response from the EU could involve co-ordinated actions from the EC development programme together with bi-lateral funding initiatives from the Member States, following normal funding mechanisms and existing procedures. The EU action should be undertaken in co-ordination with the actions of UN agencies, multi- and bi-lateral donors, and international partnerships. With regard to the African Ministerial Forum for Water, the initial partner would be UNEP.

Relevant stakeholders would be invited to actively participate in the design and eventual delivery of this initiative, such as the water industry to develop new approaches to financing, ownership and operation of water infrastructure projects, as well as representatives of the civil society and NGOs with experience in dealing with issues of water and development.

## 5. CONCLUSIONS

The *challenge* that the world is facing in dealing with the growing scarcity and decreasing quality of its water resources is particularly acute in developing countries, to ensure sustainable and equitable access to safe water for all its uses, with special attention to the basic needs of the poor.

The whole *donor community* has to join efforts to assist partner countries in finding solutions to face this challenge. This requires a stronger commitment to develop and implement water policies in order to improve equity, efficiency and effectiveness in water management. Raising the political profile of water on the development agenda should be coordinated in particular at the EU level, building on an existing strong collaboration. As presented under 4.5, the World Summit on Sustainable Development gives the opportunity to promote a water initiative, building on the results of the Bonn Freshwater Conference.

For *partner countries and regions*, this means raising water on the political agenda as an essential component of poverty reduction strategies, and ensuring that water and sanitation services are adequately integrated with health and education, within the basic services to be provided to all. Good governance, political and sectoral reforms are necessary to address the challenges. Awareness raising, institutional strengthening and capacity building activities are essential to support planning and decision-making, while ensuring participation of all stakeholders and ownership of policies and strategies.

At the level of the *European Community*, such policy development has to be based on the mainstreaming of water management into the priorities described in this Communication, with the application of an "Integrated water resources management" framework.

To achieve these goals, a shift in *thinking* is necessary : to recognise that all water users have a responsibility; to apply a real integrated approach in which all actors cooperate as partners, like in integrating land and water management, in preventing water pollution. Moving towards a sustainable water behaviour requires the establishment of new societal norms; to introduce the need for valuing water by increasing the perception of its preciousness in all its uses; to look for innovative solutions, sustainable in the long-term, while recognising that there is no "blue-print" solution for all problems.

*Action*, and in most cases new approaches, are needed to tackle urgent and long-term priorities in providing water services, expanding sanitation coverage and hygiene education, meeting the urban challenge, achieving water-food security, protecting water eco-systems, managing floods. Conflict prevention and peace building, which are political priorities for the EU, include sustainable and equitable management of shared natural resources, such as water.

In all these activities, the EU, with its experience and resources, has an important role to play. Good practices have to be developed and promoted, in close coordination with EU Member States and international organisations, partnerships and networks, to ensure a maximal level of complementarity and value added of the Community's efforts. Such practices can build on the experience of water management within EU river basins and in the diversity of European approaches to management of water services, and on EC-supported research.

This Communication intends to provide a framework for the thinking and the action needed to achieve water security, in quantity and quality, for everyone on earth, today and for future generations.