MINISTRY FOR FOREIGN AFFAIRS OF FINLAND

WATER SEMINAR:

Challenges, Responsibilities and Options

Finnish Environment Institute, 26.-28.1.2005

SYKE

TEKNILLINEN KORKEAKOULU
HELSINKI UNIVERSITY OF TECHNOLOGY

Konsulttitoimisto Planpoint Oy

WATER SEMINAR: CHALLENGES, RESPONSIBILITIES AND OPTIONS

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WATER SEMINAR: CHALLENGES, RESPONSIBILITIES AND OPTIONS

Introduction

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The "Water Seminar: Challenges, Responsibilities and Options" was organised by The Finnish Environment Institute (SYKE) in association with Helsinki University of Technology (TUT) and Planpoint Ltd. in January 26.-28.2005. The seminar was financed by the Ministry of Foreign Affairs and aimed at supporting the development of long term strategies for the Finnish water sector cooperation. The seminar was held at the premises of the Finnish Environment Institute in Helsinki, Finland

The **objective** of the Water Seminar was to elaborate, analyse and discuss systematically the global and local connections of water resources, water supply, sanitation and development with a geographical focus to the partner areas of Finnish development co-operation. While so doing, water's many roles were echoed in achieving the concurrent development paradigms such as the Johannesburg Plan of Implementation, UN Millennium Development Goals, etc. Of particular interest were the cross-cutting roles of water and sanitation in development. Thereby, the seminar supported the long-term planning of the Finnish development co-operation by giving guidance on alternative future priorities and approaches for the Finnish-supported water and sanitation development.

Altogether 85 participants from 11 countries participated in the seminar (see annex C).
The programme of the seminar is presented in annex D.

Background

Water and sanitation as strategic development factors

Water is one of the most strategic natural resources. It is, together with sanitation, intertwined in the everyday life of human beings in countless ways. Their importance as drivers for health, food security and quality of life, and as pillars for economic development are unique. Currently, 1.1 billion people lack access to safe water supply, and 2.4 billion lack access to safe sanitation. For all these billions of human beings, inadequate water supply and sanitation are among the most serious development obstacles. Globally, water is also the key bottleneck in agricultural development.

As water affects human lives, the mankind also effects the hydrological cycle, in all dimensions from the very local to the global scale. The production of one kg of grain consumes 1000-4000 litres of water. Food production, although not being enough for all, already accounts for 90% of water use in developing countries. Environmental and social impacts of damming rivers for hydropower production evoke grand emotions, yet sustainable energy production is among cornerstones of economic development. The damage caused by floods and droughts is escalating. Pollution of water bodies, caused by insufficient waste water management, has led to catastrophic impacts on the ecosystems. Water is also largely a political good since a bulk of the mankind lives in river basins shared by two or more nations.

Water and sustainable development

Poverty reduction is the globally accepted primary goal of all development efforts and the key policy principle of the Finnish development co-operation. More concretely, the UN-declared Millennium Development Goals (MDG) prioritise eight key strategic objectives for development: eradication of extreme poverty and hunger; achievement of universal primary education; promotion of gender equality and empowerment of women; reduction of child mortality; improvement of maternal health; combat against HIV/AIDS, malaria and other diseases, ensuring environmental sustainability; and development of global partnership for development. As water and sanitation are among the most critical cross-cutting factors affecting human life, productive activities and environmental conditions, measures on water resources management, water supply and sanitation contribute directly to all of the MDGs: water resources management provides the foundation of the agriculture sector, much of the energy sector, and is together with sanitation an important part of urban infrastructure, health care and many other vital functions of the society. Economic growth is desperately needed in poverty reduction, but growth alone is not sufficient. The well-being must reach the poor, otherwise the growth only polarises the economies. Water's role is important in this complex interplay. Besides being an important foundation for many economic sectors, water is also a key to meeting many of the basic needs that are in turn instrumental in poverty reduction.

- *Water: the more important economically the poorer the nation is.*
- *Environmental threats; by far the most detrimental environmental catastrophes are floods and droughts. Water is the main carrier of environmental pollutants, inadequate sanitation being often the main cause for the pollutants. It is also the major agent in the global erosion, desertification, biodiversity decline and climate change problems.*
- *Traditional societies and the traditional sector: Their economy is tied with nature and very closely to the water cycle. Development of water management and sanitation requires culturally tailor-made approaches.*
- *Housing and informal sector: water and sanitation are key constraints for decent housing and livelihood as well as for the rapidly growing informal sector. Particularly in urban poor conditions the challenges are soaring.*
- *Agriculture: Accounts for 70% of all water use by humankind. In most developing countries the share is over 90%.*
- *Industry: In large parts of the world industry is developing more rapidly than ever before. Most industrial sectors rely on water. Pollution challenge is enormous.*
- *Energy: The Johannesburg Plan of Implementation defined the increase in the share of renewable energy sources as the primary goal of the energy sector. 96% of the contemporary renewable energy production comes from either biomass or hydropower. These both rely completely on water resources management.*
- *Services: For many service industries such as tourism—which is the fastest growing industry sector of the world and among the key potentials in many developing countries—water and adequate sanitation are elementary.*

Key Findings and Recommendations of the Seminar

The seminar discussed widely the various aspects of water resources, water supply and sanitation in development. Especially the cross-cutting role of water in development came up in the presentations as well as in the group discussions. Water and sanitation issues need to be addressed not only through the water and sanitation sector, but also in several other related sectors, especially in agriculture, health, education, environment, and in medium and small scale enterprise development.

The importance of water has been emphasized in all recent international conventions on development, and even though water is pinpointed in all of the UN's Millenium Development Goals (MDGs), the funding of water and sanitation has declined by 50% in the Finnish development funding since the early 1990s. Thereby, the seminar strongly recommended to increase the sector's funding at least to its former proportional level (11 % of ODA). The second generation of poverty reduction strategies of the partner countries seem to highlight better water issues, whereby there is now a better chance that the partner countries prioritise also water and sanitation improvements.

The importance of ownership and gender-sensitive and culturally adjusted approaches were emphasised throughout. The analyses revealed still a tendency to overlook local development potentials and resources, whereby the solutions for water supply and sanitation improvements tend to be supply-driven and inadequately adjusted to local conditions. Sustainability clearly calls for demand-driven and truly participatory approaches.

The multi-dimensional economic role of water was also emphasised. Realisation of the full economic potential of water calls for approaching water development through wider integrated water resources management (IWRM) –approach. Also the actual nature of the hydrological cycle calls for stronger application of the IWRM-approach.

Successful water and sanitation development requires diversified approaches and methods. The strengths and weaknesses of alternative approaches (sector wide programmes, projects, twinning, educational co-operation, etc.) were discussed and debated. It was noted, however, that it is not yet appropriate to concentrate on only one or two approaches. Instead, alternative approaches need to be applied, depending on the needs and partner country's strategies and potentials. The private sector may have an important role that should be studied more.

Active and successful co-operation requires innovative and skilful professionals also in the Finnish side. Even though interest on development co-operation is high among young professionals, only a few opportunities exist for gaining experience on practical work. Solving of this problem is a necessity for ensuring the availability of skilled Finnish experts also in the future.

The key findings and recommendations are summarised in the following:

Key Findings

Global/multilateral processes

- Water and sanitation are among the key cross-cutting issues in the Millenium Development Goals (MDGs). Actions in water and sanitation sector are crucial in achieving the MDGs.
- Water is a widely cross-cutting theme and has not been adequately addressed in the development actions of other related sectors (agriculture, health, education, environment, forestry, etc.).
- Water and sanitation development contribute towards mitigation of the negative social and environmental impacts of globalisation.
- Water-related conflicts are increasing due to the scarcity of water resources and ever-increasing and competing needs.
- Water issues are essential in the main global conventions on development. Approaching the environmental problems addressed in these conventions through the water sector contribute efficiently to the implementation of these conventions.
- Prevention and mitigation of the negative impacts of the climate change requires wide actions. Climate change is highly dependent on water and its impacts influence heavily all phases of water cycle and water use.
- Demand driven approach is essential in water and sanitation sector development co-operation. This entails that also the partner countries prioritise water development. Priorities may be influenced through an active dialogue in international arena and in aid consultations.

Co-operation mechanisms

- Approaches of bilateral water/sanitation sector projects have developed considerably. Well-planned and coordinated bilateral projects in Finland's key partner countries are justified.
- Sector wide program concept (SWAP) is still new in water sector and therefore the experiences on its application are limited. Before entering into SWAPs enabling preconditions must be in place (policies, institutions, governance, local resources, donor commitment and co-ordination mechanisms, monitoring mechanisms, etc.). Harmonisation of procedures is the first step towards SWAPs.
- Only a few co-operation mechanisms are currently used. Other, underutilised mechanisms include twinning (utility to utility, local government to local government, institute to institute, NGO to NGO), co-operation of higher education institutions, and other capacity building processes.

Approaches

- Local resources, strengths and potentials are not identified nor utilised properly in co-operation processes. Therefore, the solutions have to too often been supply-driven.
- Management capacity (e.g. management of water utilities) is often among the main bottlenecks in developing countries. Instead, technical skills are more developed.
- Capacity building is needed simultaneously at all levels (management, experts, communities).
- Water must be understood as an economic good and its economic potential should be better utilised (e.g. small-scale irrigation, small and medium scale enterprise development). To ensure sustainability, the solutions must be based on cost-

recovery. However, solving the needs of the poorest requires clear strategies and practical case-specific solutions.

- § Ownership is a key element of sustainability. True participatory approaches are essential in all water and sanitation development actions.
- § Gender and culture do make a difference in water and sanitation development. Approaches and solutions need to be adjusted to local culture and gender roles. Empowerment of women and the poor requires case-specific solutions.
- § Sustainable management of aquatic ecosystems is essential in all water-related development interventions.

Finnish strengths

- § Reputation as a neutral and trustworthy partner and experience in conflict resolution.
- § Long-term and wide experience on water issues and sector development in several partner countries.
- § Advanced and diversified water technology.
- § Finland has the most sustainable water management level in the world as ranked by the UN water-poverty index. However, studies are needed to identify the relevant areas of value-added for developing countries.
- § Finland has a long tradition of co-operatives and other self-governed solutions in water sector.
- § The Finnish educational institutions have capacity for educational co-operation with developing countries. The impacts of previous water-related educational programs (e.g. AIT, TUT Master's course, Kosovo) have been positive.
- § Finland has successful track record in integrated water resources planning and management (wider environmental assessment, system planning, monitoring, and management systems and approaches).

Finnish weaknesses

- § Finnish experts need improved process facilitation skills and better cultural and gender understanding.
- § Finland's multi- and bilateral development operations are weakly co-ordinated. Utilization of the knowledge of sector ministries is low.
- § The Finnish resource base is thin. Opportunities for young professionals to enter the field of development co-operation are very limited due to the prevailing recruitment and tendering mechanisms.

Recommendations

Policies and strategies

1. Water and sanitation are essential and highly cross-cutting elements in poverty reduction

   ⇨ ***Significant share of Finnish development funding should be allocated to water and sanitation sector to effectively contribute towards the achievement of the MDGs.***

2. The role of water in development is not recognised fully in all partner countries

   ⇨ ***Finland should actively promote water development at international fora and in consultations with partner countries.***

3. Water has a strong multidimensional role and linkage to other sectors

   ⇨ ***Water and sanitation issues need to be integrated to the actions of other development co-operation sectors (especially health, education, environment and agriculture).***

4. Water-related conflicts are increasing

   ⇨ ***Finland's experience in water-related conventions, transboundary co-operation and conflict resolution should be actively utilised in the water sector development co-operation.***

Approaches and methods

5. Strong local commitment and ownership are essential for sustainability

   ⇨ ***Co-operation mechanisms need to be highly participatory and demand-driven throughout the project cycle. Sustainability must be addressed throughout the process.***

6. Benefits of development efforts often fail to reach the poorest of the poor

   ⇨ ***Clear and concrete pro-poor strategies need to be prepared and implemented in all water and sanitation interventions.***

7. Aid replaces often local resources and/or they are not recognised

   ⇨ ***Solutions should be based on local potentials and resources. Methodologies and approaches need to be developed for their better identification and utilisation.***

8. Water is a key factor in productive activities. Sustainable water development entails environmental, social and economic balance

   ⇨ ***The economic potentials of water should be analysed and actively promoted. Accordingly, integrated water resources management approach should be applied more widely.***

9. Gender and culture do make a difference in water and sanitation development

   ⇨ ***Gender mainstreaming and cultural adjustment methods need to be developed for water and sanitation interventions.***

10. Needs differ depending on the stakeholder, level, culture, gender, situation, etc.

    ⇨ ***Diversified and innovative cooperation mechanisms are needed for all levels:***

    - ***Bilateral projects***
    - ***Support to sector programmes***
    - ***Support to capacity building (co-operation between higher education institutions, grass-root level capacity building)***
    - ***Long-term institutional twinning***

    New co-operation mechanisms require change in MFA's administrative culture: readiness for long-term commitment, flexibility and trust for partners. However, they imply also high responsibility among the partners.

    To ensure the availability of sufficient resources, mechanisms need to be developed for providing opportunities for young professionals to gain experience on development work.

Annex A: Background reports and presentations

A1 Dr. Olli Varis, Helsinki University of Technology and Dr. Esko Kuusisto, Finnish Environment Institute: Water: Challenges, responsibilities and options, Background overview report for the Water Seminar, Helsinki 26-28 January 2005

A2 Dr. Ede Ijjasz, Manager of the Water and Sanitation Programme, World Bank: Drivers, Tendencies and Policies in the Water Supply and Sanitation Sector

A3 Ms. Margaret Catley-Carlson, Global Water Partnership: Perspectives and challenges of water resources management

A4 Ms. Zenebeworke Tadesse, Forum for Social Studies, Ethiopia: Water and sanitation in poverty reduction; case Ethiopia

A5 Ms. Chamara Pansegrouw, Eco-Care Trust, South Africa: Capacitating communities and beneficiaries; South-African experiences

.

Annex A1

WATER:
CHALLENGES, RESPONSIBILITIES, OPTIONS

BACKGROUND OVERVIEW REPORT
Water Seminar Helsinki 26-28 January 2005

Esko Kuusisto & Olli Varis

Finnish Environment Institute Helsinki University of Technology

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Cover photo: Phnom Penh, Cambodia

INTRODUCTION

Recent years have been busy with international summits and other high-level events related to development and water. The Rio summit of 1992 did not put water high on the agenda and therefore the water sector's development pressures started to accumulate. After the mid-1990s, the international pressure towards the increasing emphasis on water grew, and we have seen consequently a series of high-level events with very strong recommendations on water. The three World Water Forums, Bonn Freshwater Conference in 2001, Johannesburg Summit on Sustainable Development in 2002 and many other events have all highlighted the role of water and sanitation in sustainable development of societies, in environmental sustainability and in poverty reduction.

The Johannesburg Summit had a strong focus on water. Its Framework for Action includes many interesting recommendations with respect to water. Some of the most important ones include the following:

- Developing Integrated Water Resources Management (IWRM) and water efficiency plans by 2005 for all major river basins of the world
- Developing and implementing national/regional strategies, plans and programmes with regard to IWRM
- Improving efficiency of water uses
- Facilitating public-private partnerships
- Developing gender sensitive policies and programmes
- Involving stakeholders, especially women in decision making, management and implementation processes
- Commitment to UN Millennium Development Goals.

High levels of investment in the water sector will be needed. Briscoe (1999) estimates, that the total annual spending of water-related infrastructure in developing countries amounts to US$ 65 billion (almost as much as West Africa's total GNP). Hydropower accounts for US$ 15 billion of that, while water supply and sanitation for US$ 25 billion, and irrigation and drainage also for US$ 25 billion.

The bilateral aid from OECD countries for the water sector increased by an annual average rate of 9% over the two decades to 1993, but it has fallen since then. In recent years, total aid allocations to the water sector from OECD have averaged about 2.5 G€ a year. An additional 1 G€ a year is allocated to the water sector in the form of non-concessional lending (mainly by the World Bank).

The Third World Water Forum in Japan in 2003 recommended that this level should roughly be doubled in order to achieve the UN Millennium Development Goals. This suggested increase should be accompanied by doubling of the effort and investment to capacity building, most notably in education in all levels including universities.

FINLAND'S DEVELOPMENT POLICY IN THE WATER SECTOR

Water has been high on Finland's development co-operation agenda throughout Finland's involvement in development co-operation since the 1960s. The focus of the activities has been strongly in the water and sanitation sector and in particular in bringing clean water outlets close to consumers in an affordable way. This activity has been outlined by the policy guidelines for the water supply and sanitation sector of 1989, revised slightly in 1998.

The sector co-operation was reviewed in 2004 (Wihuri et al. 2004). Since this comprehensive document is very elaborate and up-to-date, we concentrate in this report on future challenges of the water related development questions in a broader, less sectorial viewpoint. We want to make the point that water is related as a cross-cutting issue far more broadly to development questions than what the traditional, water and sanitation oriented philosophy appreciates.

A similar failure of recognition of water's fundamental role led to its omission from the key recommendations of the Rio Summit in 1992. However, this failure was fortunately clearly recognized one decade later in the World Summit on Sustainable Development in Johannesburg, where water was returned on the top of agendas of sustainable development.

Water's manifold role in sustainable development calls for reassessment also in the Finnish development co-operation.

LESSONS LEARNED

All donor countries can tell success and failure stories on development aid projects in the water sector. Few countries have presented these stories in so clear and concise way than Norway (Tollan & Repp 2002); let's summarize their experience.

Negative factors:

- Internal political problems, corruption and incompetence, social dissolution
- External situation, political history and pressure
- Lack of data and knowledge
- Poor communication between authorities, water users, and development aid organisations

As to the first item, the list of symptoms can be very long, including poverty, poor health conditions, poor infrastructure, and unpredictable and overly bureaucracy. External political issues may often add to the internal causes of problems, and may be interlinked with them. Data problems take many forms; simple lack of observations, irrelevant data, poor data treatment, secrecy. E.g. in Tanzania, less than one tenth of the observation network, mainly established in 1974-80, is operating.

Lack of open and trustful communication is a major obstacle in many developing countries. Agendas are hiding, pure ignorance is prevailing, and different ministries and organisations compete for status and resources – or are trying to build their own empires.

Positive factors:

- A combination of individual idealism, competence and good will
- Differences in culture between the water project expert and the receiving part are often quoted as obstacles to success, but may turn out to be a positive stimulus
- Sufficient financing
- A long term perspective

In spite of unfavourable circumstances, remarkable progress has been made in a number of projects. It has often been the personal effort and enthusiasm, which has made the difference. "Cultural collisions" may prevent mutual understanding, but this is not a necessity. Honest confrontation as to e.g. the norms of work efficiency may benefit the project.

Proper financing is a necessary, but not always a sufficient prerequisite for success. An experience often repeated is that financing ends with the departure of the external project personnel. This clearly tells that a long-term perspective has been lacking. In general, the Norwegian experience is that the progress and sustainability of water projects very often depends on factors outside the scientific-technological arena.

DRIVERS AND CONSTRAINTS

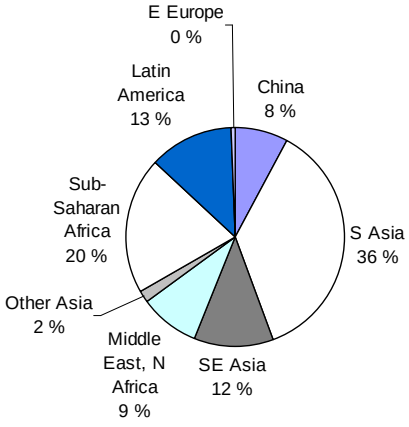
A number of drivers and constraints, common to water sector in most developing countries, can be identified. These long-term factors essentially influence the course of future water developments. By knowing them, it is possible to gain an insight of the possibilities of water resources development.

1. Socioeconomic factors. The key socioeconomic factor is the widespread poverty in many developing countries. Poverty reduction has found its way to all agendas. The definitions and the number of those living in poverty vary greatly, but roughly one-fifth of the mankind is usually classified as being poor. One of the UN Millennium Development Goals is to halve the incidence of extreme poverty from 1990 to 2015.

It is obvious that many water problems go hand in hand with the poverty problem. Those exposed to malnutrition, to inappropriate water and sanitation services and so forth are very often the same individuals who have been classified as poor by various indicators. In addition, these are the people forced to illegal activities, causing destructive exploitation of natural resources.

All societies are divided internally by privilege, class, wealth, race, religion – and gender. The last division might be even more complicated and multi-faceted than the other ones; this is exemplified by the fact that the very concept of "gender" does not easily translate into a number of languages, including Finnish. In water issues, gender inequality is pronounced in many countries. A gender sensitive approach to water management can transform particularly the lives of poor families.

Understanding cultural differences related to water is a prerequisite for successful water and sanitation projects. Some of these differences may be considered as strengthening factors for water development, while some are obvious obstacles. When tackling these issues, a sensitive approach is needed.



People in absolute poverty by region (World Bank 1997).

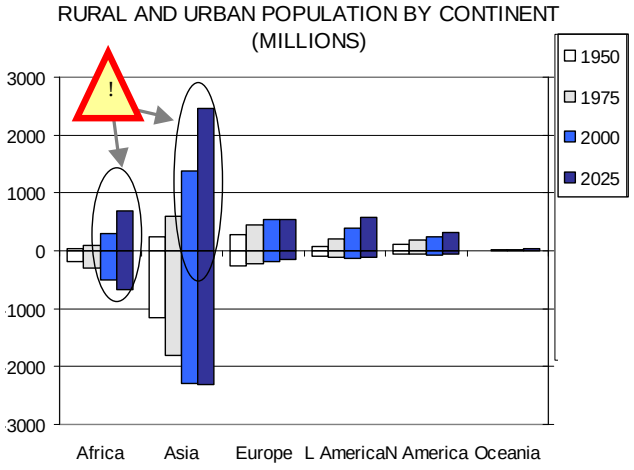
2. Demographic factors. The demographic baseline is the rapid population growth in many developing countries. In the water debate, it is typically considered as an externality, which is beyond water policies. However, several issues that affect water development positively also help in population control. Many human development aspects belong to them – such as education, gender equity, poverty reduction...

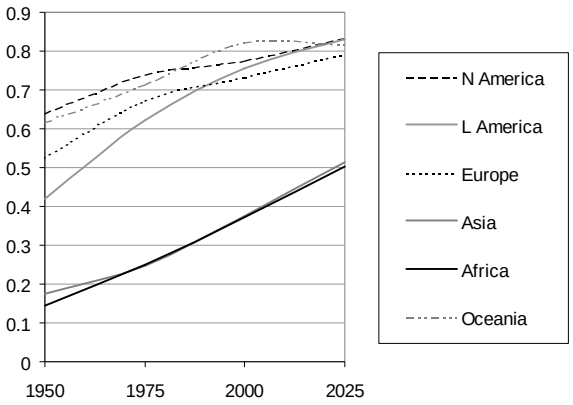
Urbanization will perhaps be even a more problematic and momentous issue than population growth itself. Almost all population growth ends to cities (Figure 2). Globally, rural and urban populations equal now in size. Till 2025, the rural population will not grow, yet the urban population will grow by almost two thirds.

The growth of cities' immense needs of water and food will be challenging all aspects of the water sector. Agricultural productivity must grow sharply. This cannot take

place without massive improvement in irrigation efficiency. Arable land area as well as rural labour force will remain very much on the same level as before.

Growing urban centres will face enormous problems in ensuring safe water supply and appropriate sanitation to their inhabitants. Urban water infrastructure should be prioritised more than before. Most developing countries have a long way to go until the citizens can enjoy a safe sanitation. Obviously, the water supply and sanitation situation should be developed hand in hand in to reach best results in public health and environmental protection, but too often the development has not been in balance.





Rural and urban population by continent. Source: UN (2002).

3. Health factors. There is a high prevalence of communicable diseases and premature death due to inadequate, unsafe and inequitable access to water supply and sanitation. An important fraction of this burden is attributable to the way water resources are developed and managed. In many parts of the world the adverse health impacts of dam construction, irrigation development and flood control have increased incidence of malaria, *schistosomiasis*, and other diseases. Health issues indirectly associated with water resources development include e.g. exposure to agricultural pesticides and their residues.

It should not be too difficult to sell the idea of breaking the cycle between unsafe water and poor health to politicians. People who lack decent water and sanitation are unproductive – and costly. They form a major drain of labour force. Stopping this drain should be on top of the agenda in each developing country.

4. Food security. In many developing parts of the world, food production systems have been improved remarkably in the past decades. However, malnutrition is still widespread, and part of the progress is eaten away by the rapid population growth. Rapid urbanization, droughts, and many social disparities continue to cause food security problems to one-sixth of the world's population.

Self-sufficiency is important in most developing regions of the world, both locally and nationally. Irrigation is very often needed to increase productivity to facilitate economically rewarding farming. Impact of urbanization is large; market-driven agriculture must grow rapidly. Lack of purchasing power is a serious obstacle. Food security is not only an agricultural issue, but also a social question closely related to poverty.

At present, the area of irrigated land worldwide is 275 M hectares, equivalent to only 18% of the total farmed land. However, irrigated land contributes 40% of all crops and 60% of cereal production. Irrigation consumes some 70% of total freshwater withdrawals. In order to enhance the efficiency of irrigation, many possibilities are available; they relate to legislation and regulation, transfer of knowledge and skills, education and community awareness, appropriate infrastructure, and adequate maintenance.

The population keeps growing, and the dietary patterns change towards increasing meat consumption. The agricultural production should hence grow much faster than the population growth does.

Competing land uses such as urbanization appear to restrict a remarkable growth in arable land. The land resources will be subjected to exceptional pressures, which lead to massive land degradation problems. Pimentel et al. (1995) estimate that about 12 M hectares of arable land are lost annually due to soil degradation.

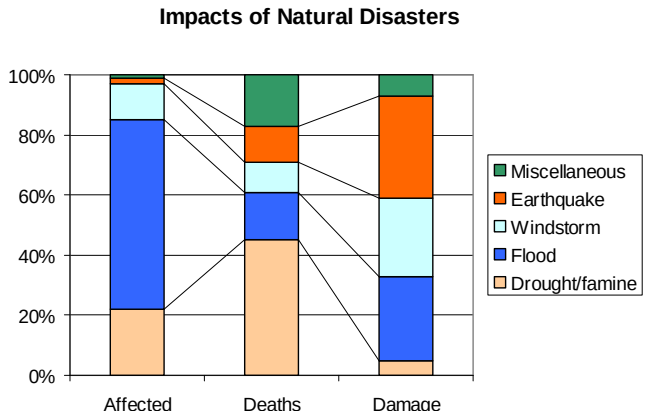
4. Environmental factors. The variability of climate has traditionally been a major factor affecting water resources in many regions, particularly in arid and semi-arid zones. It is far too common that safe annual water resources are less than half of the long-term average, or even less. Variations in the timing of the rainy season tend to aggravate the problems.

In addition to the climate variability, we now face a new environmental factor: the climate change.

The hot research topics today include the following ones: whether human activities have changed global climate, how this has happened and will continue to evolve, what the most important consequences will be, and how the future changes should be mitigated with present actions.

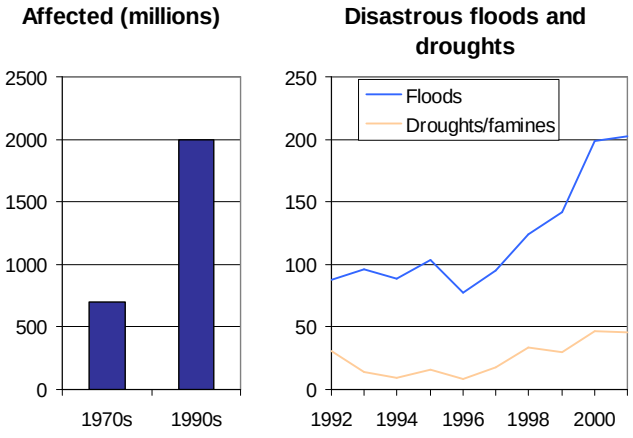
Climate change is assumed to decrease water resources in many areas, and more importantly, it will further exacerbate the frequency and magnitude of floods and droughts in several, already vulnerable river basins. The impacts of climate change on water sector depend essentially on system characteristics and on the level of management. Poorly managed systems in developing countries are likely to be most vulnerable to climate change.

Altogether, the massive population growth and urbanization, combined with climatic changes and variations as well as changes in the economic systems and human development level escalate pressures on the nature on the Planet Earth.



Floods, droughts and other natural disasters in the world during 1992-2001 (IFRC 2002).

Due to rapid urbanization and other factors that open material cycles the soils are threatened by degradation in terms of loss of organic matter, salinisation, erosion, etc. Streams, lakes, reservoirs, and wetlands are used and exploited in myriad ways. They also contain fundamental cultural and religious values. The exploitation of surface water contributes to the deterioration of water quality and unsustainable changes in hydrology. The natural patterns of seasonality and other variations also cause mismatch between supply and demand of the resources. The water quality problems tend to accumulate into areas and regions where water is also scarce in quantity. Such particularly problematic regions include North China Plain, India and many parts of Africa.



The number of people affected by floods (left) is soaring and so is the numbers of reported flood and drought disasters (IFRC 2002).

Groundwater is a major freshwater source, in some regions even the only one. It serves domestic and municipal supplies and irrigation. Its importance as a reliable and high-quality source is rapidly increasing, but the groundwater resources are deteriorating with a growing

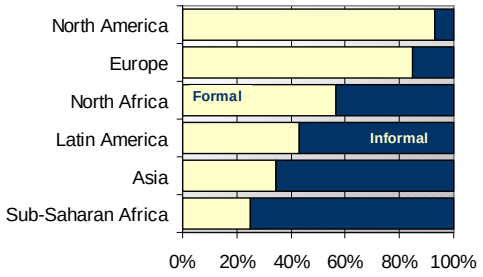
rate. This causes, besides overwhelming social and economical problems, also ecological damage and even desertification.

The driving forces to global changes cause various pressures to wildlife, forests, other ecosystems, and the natural biodiversity. The global rate of deforestation is estimated to be about 500 km^2 per day, chiefly due to land acclamation to agricultural use. Biodiversity is a key element of sustainability of the earth's ecological system. It has been estimated that 50,000 species disappear in the world each year.

5. Governance factors. In a high number of the world's countries, the governance system suffers from serious malfunctions such as corruption. The legislative systems tend to be handicapped by overlaps and inconsistencies, and laws are not implemented. National water policies may exist but are very ineffective in many countries.

Governments are too heavily involved in controlling the resources even at the micro level. Decentralization is seriously lagging behind, and the private-sector involvement as well. The water sector is far too fragmented in the government institutions, and consequently IWRM is very difficult to be implemented. There are serious problems in people's access to information, which hinders the development of transparent and democratic governance practices. Substantial amount of capital-intensive water infrastructure investments have been made, but a typical problem is that the installations are deteriorating due to inadequate maintenance. Women's participation in water management tends to be too low.

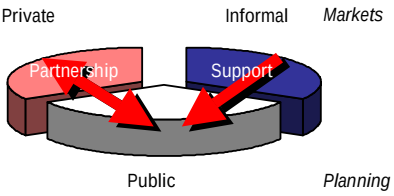
Formal and informal sectors
(percentage of employed)



The informal sector employs two-thirds of the Asian labour force and three quarters in Sub-Saharan Africa (Charmes 1998).

As a partial solution to governance problems, privatisation and public-private partnerships have been proposed. This policy would be justified in many cases. Yet, in situations where the governance system suffers from serious malfunctions, this policy has serious traps. If a weak government cannot properly regulate the private sector actors, there may be a partnership with the informal sector and the private sector – instead of the public sector, as is the case in many countries.

A crucial issue that is missing largely from the contemporary debate on water governance is the role of the informal sector and consequently the informal institutions. Institutions provide the rules for the society. Their various functions range from legislative, juridical, and administrative to different informal aspects such as culture, religion, and ethnicity. The former ones are often called as formal institutions, whereas the latter ones are known as informal ones.



Positive interconnections between public, private, and informal sectors. The public and private sectors should be able to work in partnership, and the informal sector should support the public sector (Varis 2001).

Along with rapid urbanization, economic liberalization, and other transitions, the roles of informal institutions are increasingly emphasized in development programmes, although not yet properly in water agendas or visions. Policies that are based on promotion of public awareness, grassroot activities, participatory approach, and so on are often targeted at least partly to the informal sector. This sector, leaning largely on informal institutions, grows rapidly in developing and transitional countries, and incorporates a majority of the world's people.

6. Technology factors. Although many traditional solutions in the water sector are good examples on sustainability, inadequate technological know-how is an essential obstacle to wise water management. Today's technology is capable of offering improvements to many traditional methods of water utilization, like rainwater harvesting and different forms of irrigation. In water supply, leak location and repair

methods are examples of technologies that need to be invested in far more than today.

Low-cost appropriate technologies are burningly needed in the developing parts of the world. Equally, capacity shortcomings in the human and institutional side call for emphasis on operation and maintenance of existing installations.

The appropriate technology is far more likely to be invested in if both supply and demand side options are included in water supply augmentation planning. Saving water in one place means it can be used elsewhere.

The Internet is a major instrument for overcoming some of the technological constraints; yet in many developing countries, high telephone costs constitute a major constraint to access the Internet.

7. International factors. Water does not recognize borders. The abundance of international river basins creates interdependencies between countries; these can be threats as well as opportunities. Governments need to establish organizations to enhance cooperation and coordination in the management of shared river basins.

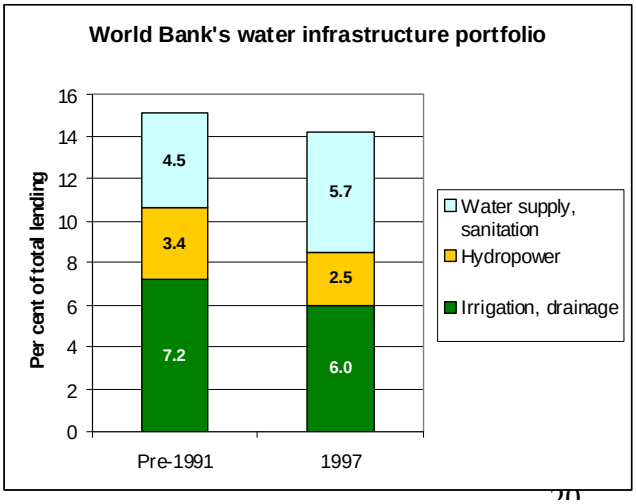
Globalisation is one of the most hated or beloved concepts of these days. In the broad meaning of the word, it means opening of the gates and building down boundaries between nations. While the basic idea is grand and the underlying tendency is inevitable in the contemporary world, plenty of contradictions and side effects are obvious.

A great part of developing countries are expected to rely still on self-sufficiency in many basic commodities for a long time ahead. This has important implications to freshwater management since in many countries over 90% of all the used water goes to agriculture. Along with urbanization and population growth, the water used in agriculture is expected to grow unless water saving attempts will become far more efficient than at present. Too rapid exposition of agriculture and particularly traditional livelihoods to globalisation has many times shown to increase the vulnerability of these livelihoods, which in many cases has caused immense human suffering. The situation is different in modern, industrial sector, which is far more buffered against increased exposition. Water management in this sector often improves as a consequence of globalisation.

Last few decades have witnessed a myriad of examples of destructive stress to ecosystems and societies due to their too extensive exposition to large-scale externally driven economic activities. The catastrophe of the Aral Sea is one of these examples.

8. Economic and financial factors. Cases in which basic infrastructure of a country would have been constructed fully market-driven without considerable public investment are extremely rare if not non-existent. Even Adam Smith, the founder of classical economic theory said that the government should provide law and order plus basic infrastructure. Operation is another matter – the public sector is not always the most appropriate operator of even basic services.

Water infrastructure, particularly for low-income communities, seldom provides an attractive investment opportunities. Analogical to agricultural and



Water infrastructure development receives 1/7 of World Bank's total lending (Briscoe 1999).

other capital-intensive sectors, the sort-term revenue due to one invested sum of money tends to be very low in comparison to rates of return from for instance stock exchange markets. However, the indirect benefits of infrastructure are often very important in the long-term development of a region or a country.

The importance of infrastructure provision is neglected in many important policy papers at the moment. This holds for instance to the Development Policy Programme of the Government of Finland, which gives no emphasis to infrastructure.

9. Participatory factors. It is common to argue that people-centred development provides many solutions, which cannot be met with the contemporary resource-based approaches. Empowering the people to help themselves, raising public awareness and enhancing public participation are all important keys to overcome the limited financial capability vis-à-vis requirements.

The limits of the people-centred development are faced very rapidly if no systematic education of the people is provided. Education has been shown many times to be the real booster to both economy and people-centred development.

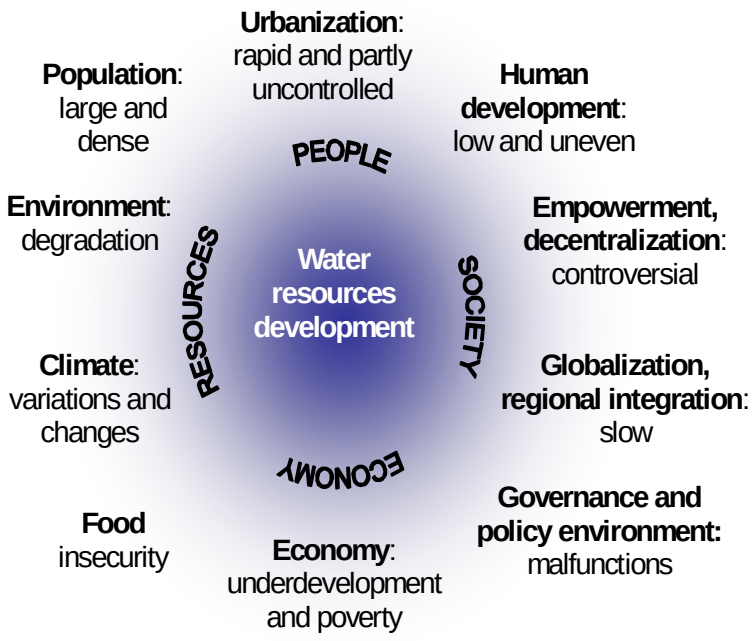
Along with the wave of globalisation in trade, finance and environmental issues, another worldwide force – namely decentralization – is reshaping development efforts everywhere. One of the basic ideas behind localization and decentralization is to enhance people's participation in politics and increase local autonomy in decision-making.

This tendency is welcomed and progress in decentralization is necessary. What comes to privatisation, the problems might come in the fairly low level of cost return that prevails in the water sector investments, which usually does not by far give a competitive rate of return in comparison to investments into industries.

In many parts of the world, the water sector planning is changing gradually from top-down technocratic to bottom-up grassroot approach (Ahmad et al. 2001). The approaches are developed towards more participatory than before, and partnerships between public and private operators are called for.

Empowerment, however, should be much more emphasized than the water sector does at the moment. Civil society organizations are functioning better and better in most developing regions, and in fact, the civil society might become more functional in those regions. However, big masses are beyond the appropriate control over their own living conditions. The disparities in gender, education, economy, and consequently empowerment and many other respects are enormous.

The figure aside summarizes the externalities of water resources development. Most of them are common to developing countries. However, their mutual importance varies considerably from country to country – and also inside a country. Identifying the key constraints is an important step in every water project.



WATER POVERTY INDEX OF SOME DEVELOPING COUNTRIES

Monitoring the state and progress in the water sector in a country is not a simple task. It requires an interdisciplinary approach that may involve both qualitative and quantitative assessment techniques. These should be integrated to allow a wide range of issues to be addressed, while at the same time allowing the views and values of a range of stakeholders to be represented.

This demanding task was quite successfully made by researchers from the Centre of Ecology and Hydrology, Wallingford, United Kingdom. The results aroused high level of interest in Finland – an obvious reason being that Finland ranked number one in the world, among 147 countries included into the comparison.

The ranking was made according to the Water Poverty Index (WPI), which consisted of five components. Each component was based on several variables measuring different aspects of the water sector (Table 1). The maximum score from each component was 20 points, implying a theoretical maximum of 100 points for a "water paradise" country.

Table 1: The structure of the Water Poverty Index (Lawrence, Meigh & Sullivan 2002).

Component	Data Used
Resources	• internal Freshwater Flows • external Inflows • population
Access	• % population with access to clean water • % population with access to sanitation • % population with access to irrigation adjusted by per capita water resources
Capacity	• ppp per capita income • under- five mortality rates • education enrolment rates • Gini coefficients of income distribution
Use	• domestic water use in litres per day • share of water use by industry and agriculture adjusted by the sector's GDP share
Environment	Indices of: • water quality • water stress (pollution) • environmental regulation and management • informational capacity • biodiversity based on threatened species

No paradises were found; the highest score, for Finland, was 78.0, the lowest, for Haiti, 35.1. Table 2 lists countries, where Finland has had development co-operation, with their overall rankings and scores from each component.

All our African partners, except Namibia, have rankings worse than 100, Ethiopia being among the last three countries. Cambodia, Nepal and Vietnam represent the middle level of developing countries, while Nicaragua and especially Kyrgyzstan have considerably better rankings.

As to the Resources component, Finland lacks behind two of the cooperation countries, Cambodia and Nicaragua. In Access, Capacity and Environment components Finland is ahead of all listed countries. The Use component is structured so that both high and low water use decrease the number of points obtained; this explains why Finland is in the middle of the group.

The level of water supply and sanitation is measured by the Access component. The percentages of the population with access to safe water and to sanitation are important variables in this component. It also includes other factors, like the degree of access to irrigation. Cambodia and Ethiopia rank lowest in the Access component.

Table 2: The WPI rankings and scores of the countries of Finland's development co-operation (data from Lawrence, Meigh & Sullivan 2002).

Country	Ranking	Total score	Resources	Access	Capacity	Use	Environ-ment
Cambodia	**93**	53.6	12.8	4.9	10.8	8.1	9.5
Ethiopia	**145**	35.4	6.6	3.1	8.0	8.1	9.5
Kenya	**112**	47.3	4.9	8.7	11.5	11.7	10.5
Kyrgyzstan	**39**	64.2	10.5	17.7	13.8	13.5	8.8
Mozambique	**120**	44.9	10.0	8.1	7.5	8.5	10.7
Namibia	**60**	60.0	11.4	9.7	15.0	12.9	10.9
Nepal	**89**	54.4	10.2	8.7	11.2	12.6	11.8
Nicaragua	**69**	58.2	13.4	9.7	11.6	11.2	12.3
South Africa	**100**	52.2	5.6	12.2	12.7	10.1	11.6
Tanzania	**110**	48.3	7.4	10.5	10.4	8.2	11.8
Vietnam	**99**	52.3	10.0	6.4	14.4	13.3	8.3
Zambia	**105**	50.4	10.7	7.4	8.5	13.4	10.5
cf. Finland	***1***	*78.0*	*12.2*	*20.0*	*18.0*	*10.6*	*17.1*

THE VIEWPOINT OF YOUNG PEOPLE

Last but not least, let the young people express their viewpoint. Many experts in the water sector in Finland have almost finished their water marathon; the percentage of water experts over 55 years of age is now exceptionally high and they prepare for the well-earned status of senior citizenship. New generations have to step on the stage, with new and fresh ideas.

Let the young people be represented by Marko Keskinen and Matti Kummu, whose article entitled "Water theses – a look towards the future" will be published in Vesitalous-magazine in 2005. They state that both water resources management and its education are changing and developing. In order to fill the challenges, they want to nail six theses on the door of everyone working in the water sector:

1. More courage! The shooting water crisis cannot be solved with the traditional engineering methods, an integrated approach to water management is necessary. This implies that one must also have the courage to make trials, despite of inevitable errors. Although something accumulates into the error basket, radical solutions are a necessity in rapidly evolving situations.

2. More cross-disciplinarity! Water management is much more than the management of water; it deals with the environment, economy, social questions, politics,… Any specialist must also look outside his/her own expertise, and it is impossible to do so without cooperation. Finland's universities are now on the right track after having entered a flexible system, where students can pick up courses from other universities. Keskinen & Kummu consider that e.g. courses in international politics, sociology and biology are useful for water engineers.

3. More cooperation! There is water knowledge at ministries, institutes, universities, consulting companies,… All of them have their strengths and special expertise. Broadminded cooperation is necessary, particularly in international water projects. This cooperation should also cross the national borders.

4. More young people! Today's students are tomorrow's experts and decision-makers. Young people should be given responsibility at an early stage. Their participation in water projects should also take place as early as possible. E.g. in Sweden SIDA is actively supporting thesis work of students in water projects abroad. This system ought to be strengthened also in Finland.

5. More internationality! The proportion of multi-national water projects keeps increasing. Various exchange programmes have traditionally been a way of enhancing internationalization among students. Today, every student in the water sector should be encouraged to make part of her/his studies abroad. Likewise, the number of foreign students in Finnish universities should be increased. A voluntary work in the water sector would also be very useful for Finnish students.

6. More responsibility to developing countries! Because problems are there, the solutions should also be found there. The donor projects should be closely tied and linked to local culture, habits and people. At the same time, local capacity building, education and research should be enhanced. It is an unsustainable situation that only

1% of water research is done in countries, where almost 99% of water problems occur.

CONCLUSIONS

Water is a strategic resource. It is intertwined in the everyday life of human beings in countless ways. The importance of water and sanitation as drivers for health, food security, and quality of life and as a pillar for economic development is unique. As water affects human lives, the mankind also effects the hydrological cycle of this planet, in all dimensions from the very local to the global scale. The production of one kg of grain consumes 1000- 4000 litres of water. Food production—although not being enough for all—already accounts for 90% of water use in developing countries. Hydropower production by damming rivers evokes grand emotions, yet sustainable energy production is among cornerstones of economic development. The damage caused by floods and droughts is escalating. The human impact on ecosystems is catastrophic in immeasurable ways. Water is largely a political good since a bulk of the mankind lives in river basins shared by two or more nations.

Water, sanitation, sustainable development, and Finnish development policy
The Development Policy Programme of the Government of Finland defines poverty reduction as the primary goal for Finnish development co-operation. This goal will be supported by mitigating environmental threats, promoting social equity, human rights, democracy and good governance, global security and economic interconnections.

Water is a backbone of economy in very many countries of the world. Water resources management provides the foundation of the agricultural sector, much of the energy sector, an important part of urban infrastructure, health care and many other functions of the society. Economic growth is desperately needed in poverty reduction, but growth alone is not sufficient. The well-being must reach the poor, otherwise the growth only polarizes the economies. Water's role is very important in this complex interplay. Besides being an important fundament to many economic sectors, water is also a key to meeting many of the basic needs that are in turn instrumental in poverty reduction.

- **Water:** the more important economically the poorer the nation is.
- **Environmental threats;** by far the most detrimental environmental catastrophes are floods and droughts. Water is the main carrier of environmental pollutants, inadequate sanitation being often a major cause for

pollutants. It is also the major agent in the global erosion, desertification, biodiversity decline and climate change problems.

- **Traditional societies and the traditional sector:** Their economy is tied with nature and very closely to the water cycle. Development of water management and sanitation requires culturally tailor-made approaches.

- **Housing and informal sector:** water and sanitation are key constraints for decent housing and livelihood as well as for the rapidly growing informal sector Particularly in urban conditions the challenges are soaring.

- **Agriculture:** Accounts for 70% of all water use by humankind. In most developing countries the share is over 90% Water nature, infrastructure, technology etc are the backbone of the economy.

- **Industry:** In large part of the developing world (China, Southeast Asia, South Asia…) industry is developing more rapidly than ever before. Many industrial sectors rely on water. Pollution challenge is enormous.

- **Energy;** The Johannesburg Plan of Implementation defined the increase in the share of renewable energy sources as the primary goal of the energy sector. It is fundamental to understand that 96% of the contemporary renewable energy production comes from either biomass or hydropower. These both rely completely on water resources management.

- **Services:** For many service industries such as tourism—which is the fastest growing industry sector of the world and among the key potentials in many developing countries—water, adequate sanitation and healthy environment are elementary.

- **Economic growth** is necessary to poverty alleviation, but does not guarantee poverty alleviation. Distribution of wealth is necessary. In economic terms, care must be taken also of not very profitable sectors such as (capital intensive) food production.

Water, sanitation, Millennium Development Goals and Poverty Reduction Papers The global and local connections of water and development should be seen much more broadly than done so far in the Finnish development co-operation. Water's many roles are clearly echoed in achieving the concurrent development paradigms such as the Johannesburg Plan of Implementation, UN Millennium Development Goals, etc. Of particular importance is the recognition of the cross-cutting role of water in development. Water is considered as a sector by itself. This sectorial view gives, however, only very limited appreciation to water as it is also a crucial component in several other sectors as was elaborated above. This limited sectorial view has led to the insolence of water in many important policy tools such as the Poverty Reduction Policy Papers. Water should absolutely be present in such policy tools due to its fundamental role in development. As highlighted recently by the Swedish International Water House, water is in a key role in achieving most of the Millennium Development Goals; not only in the one that implicitly mentions water (Table 3).

Table 3: Water – A Cross-cutting Tool for the MDGs (Source: Interim Report of the Millennium Project Task Force on Water and Sanitation and Global Water Partnership).

Millennium Goal by 2015	Improved water resources management and access to water supply and sanitation has benefits for each of the eight MDGs:
ERADICATE EXTREME POVERTY AND HUNGER Target 1: To halve the proportion of the world's people whose income is less than $1/day	• Water is a factor of production in agriculture, industry and economic activities • Investments in water infrastructure/services as a catalyst for local/regional development • Reduced vulnerability to water-related hazards reduces risks in investments and production • Reduced ecosystems degradation makes livelihood systems more secure • Improved health increases productive capacities, reduces burden on those who care for the sick
Target 2: Halve the proportion of the world's people who suffer from hunger	• Water is a direct input to irrigation for expanded grain production • Reliable water for subsistence agriculture, home gardens, livestock, tree crops • Sustainable production of fish, tree crops and other foods gathered in common property resources (also affects poverty when such goods are sold for income) • Reduced urban hunger due to cheaper food prices • Healthy people are better able to absorb the nutrients in food than those suffering from water-related diseases, particularly worms
ACHIEVE UNIVERSAL PRIMARY EDUCATION Target 3: To ensure that children every-where complete a full course of primary schooling	• Improved school attendance from improved health and reduced water-carrying burdens, especially for girls • Having separate sanitation facilities for girls and boys in schools increases girls' school attendance
PROMOTE GENDER EQUALITY AND EMPOWER WOMEN Target 4: To ensure girls and boys have equal access to primary and secondary education	• Community-based organisations for water management improve social capital of women • Reduced health, and care-giving burdens from improved water services give women time for productive endeavours, education, empowerment activities • Water and sanitation facilities closer to home put women and girls at less risk for sexual harassment while gathering water and searching for privacy • Higher rates of child survival are a precursor to the demographic transition toward lower fertility rates; having fewer children reduces women's reproductive responsibilities
REDUCE CHILD MORTALITY Target 5: To reduce by two-thirds the death rate for children under five	• Improved quantities and quality of domestic water and sanitation reduce main morbidity and mortality factors for young children • Improved nutrition and food security reduces susceptibility to diseases
IMPROVE MATERNAL HEALTH Target 6: To reduce by three-fourths the rate of maternal mortality	• Improved health and reduced burdens from water portage reduce risks • Improved health and nutrition reduce susceptibility to anaemia and other conditions that affect maternal mortality • Sufficient quantities of clean water for washing pre-and-post birth cut down on life-threatening infections • Higher rates of child survival are a precursor toward lower fertility

	rates, and fewer pregnancies per woman reduce maternal mortality
COMBAT HIV/AIDS, MALARIA AND OTHER DISEASES Targets 7 & 8: To halve, halt and begin to reverse the spread of HIV, malaria, other major diseases	• Better water management reduces mosquito habitats • Better water management reduces risk for a range of water- borne diseases • Improved health and nutrition reduce susceptibility to/severity of HIV/AIDS and other major diseases
ENSURE ENVIRONMENTAL SUSTAINABILITY Targets 9 & 10: To stop the unsustainable exploitation of natural resources and to halve the proportion of people who are unable to reach or afford safe drinking water	• Improved water management, including pollution control and water conservation, is a key factor in maintaining ecosystems integrity • Development of integrated management within river basins creates situation where sustainable ecosystems management is possible and upstream- downstream conflicts are reconciled • Biodiversity conservation, combating desertification furthered by sound water management
Target 11: To have achieved a significant improvement in the lives of at least 100 million slum dwellers	• Improved domestic water supply and sanitation and better water management reduce the biological pathogens and chemical hazards to which slum dwellers are exposed

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LAC DE GUIERS, SENEGAL

Annex A2

Drivers, Trends and Policies in the Water Supply and Sanitation Sector

Ede Ijjasz, Manager Water and Sanitation Programme

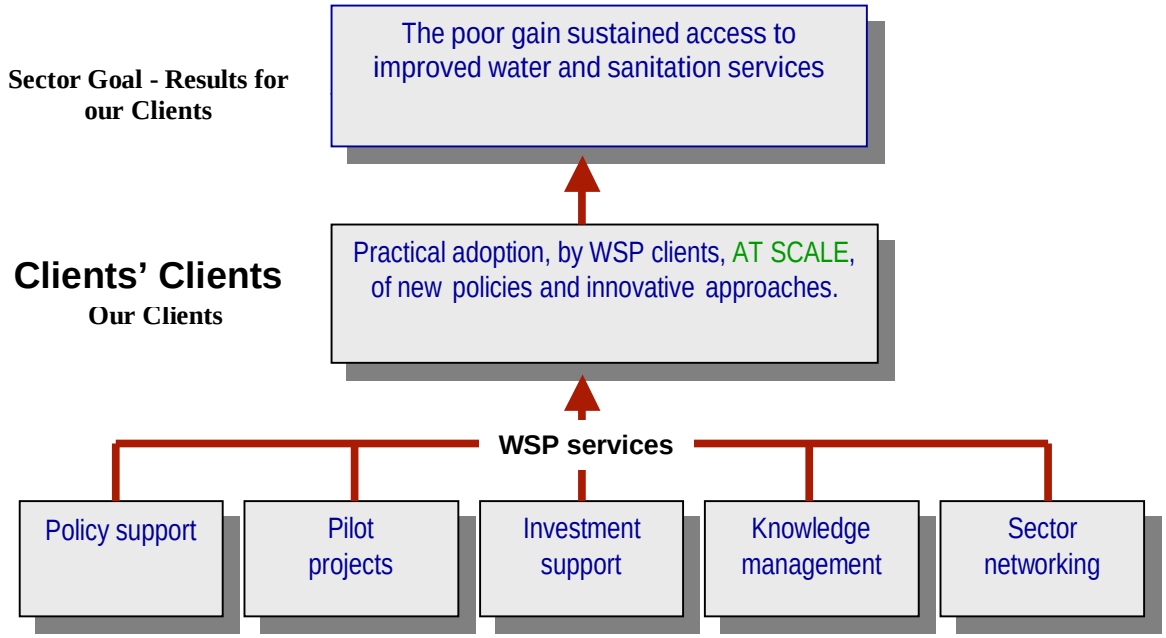
WSP Overview

- 28-year-old field-based partnership
- $14-16 million field-based program
- About 70 staff
- Small management team in Washington
- Regional offices: Nairobi, Jakarta, Lima, New Delhi
- Permanent presence in ~15 countries
- 12 financing partners – mostly European
- Partnering with the world's leading water supply and sanitation agencies

WSP Countries

- Country Focus
- Africa – Benin, Burkina Faso, Ethiopia, Kenya, Mozambique, Senegal, Uganda -> new program in Yemen, West Africa growing
- East Asia and Pacific – Indonesia, Lao PDR, the Philippines, Vietnam
- Latin America – Peru, Honduras, Nicaragua
- South Asia – Bangladesh, India, Pakistan
- Country Selection Criteria
- Low WSS access and poor population
- Willingness to reform
- Demand for WSP services
- Comparative advantage for WSP intervention
- Available funding partner
- Opportunities for linkage with lending or grant investment programs for scaling-up

WSP Results Framework --------



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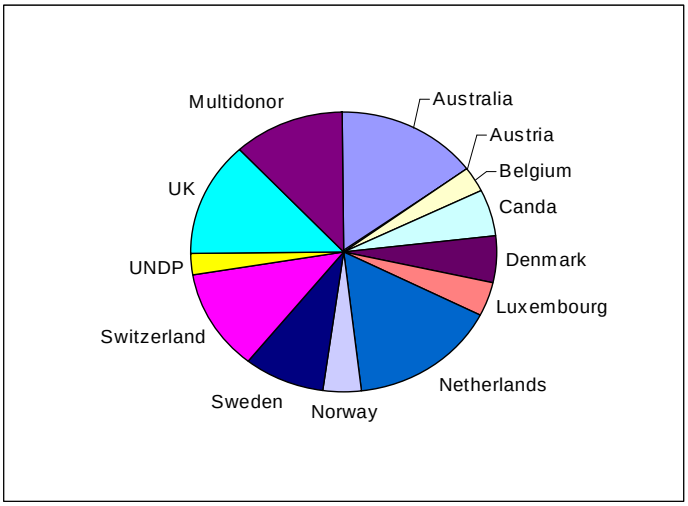
Financial Support by Donor Country (fiscal 2002-2004)



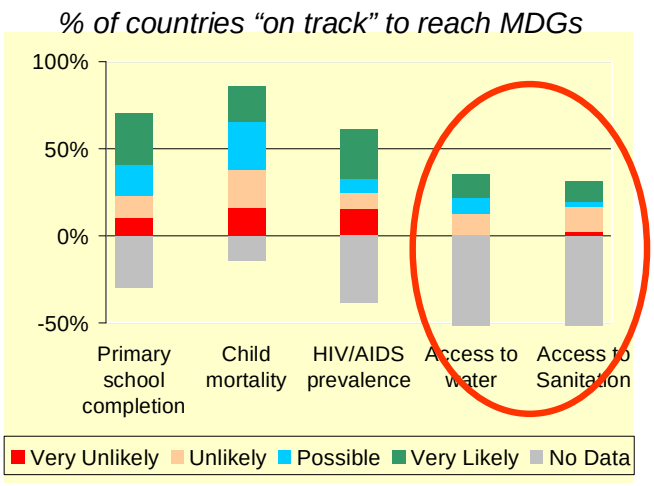
Funding channeled to WSP through trust fund arrangements with World Bank, the administrator of the Water and Sanitation Program.

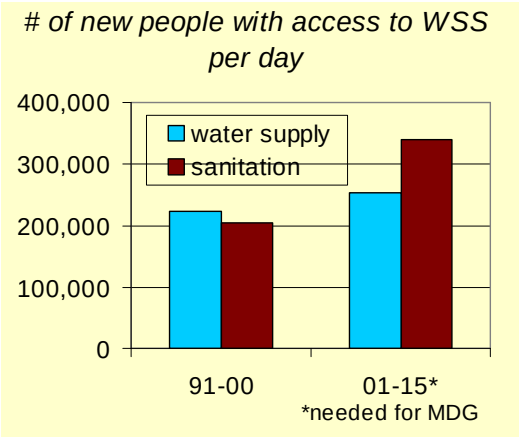
Outline

- § The overall environment: challenges and new developments
- § The rural challenge
- § The urban poor
- § Sanitation
- § Financing the sector
- § The private sector
- § Development partner coordination
- § Technical assistance and policy engagement – WSP support

The Challenges for the Sanitation MDG Target: The Numbers

- § MDG & WSSD targets: "Reducing by 1/2 the proportion of population without sustainable access to safe drinking water & sanitation"
- § Reality check:
- § Less than 1 in 5 countries on track for WSS
- § Less than 1 in 10 low income countries on track
- § Proxy indicators – proximity to "hardware"



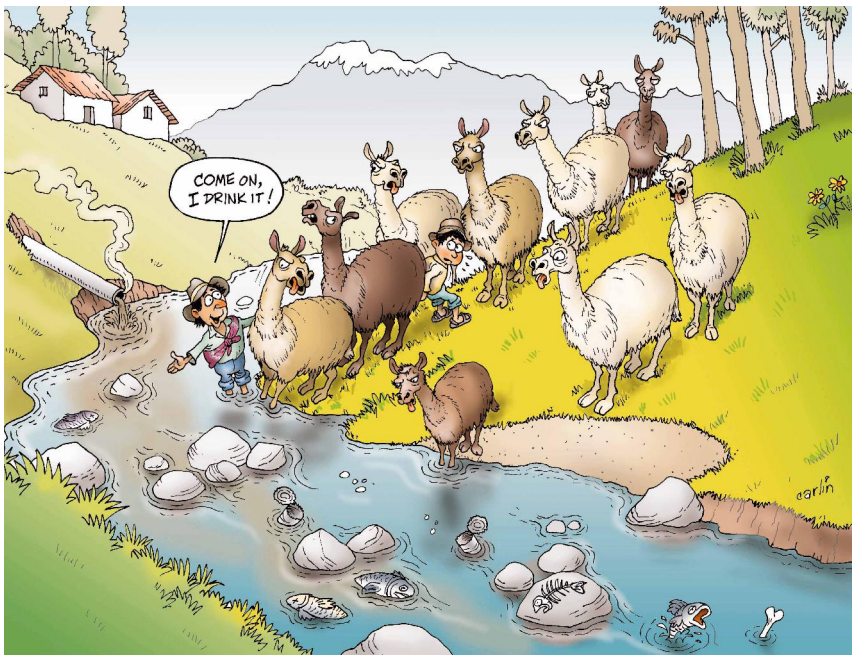


The challenge – beyond the numbers

- § Official statistics use proxy indicators – proximity to hardware…far fewer countries on track for:
- § Health benefits
- § Girl's school enrolment
- § Environmental sustainability
- § Sustainable access to safe drinking water and adequate sanitation key to improved health, education, and environmental outcomes

Sustainable access?

Environmental Sustainability?
Everybody lives downstream



Water, Sanitation and Poverty – Multiple linkages

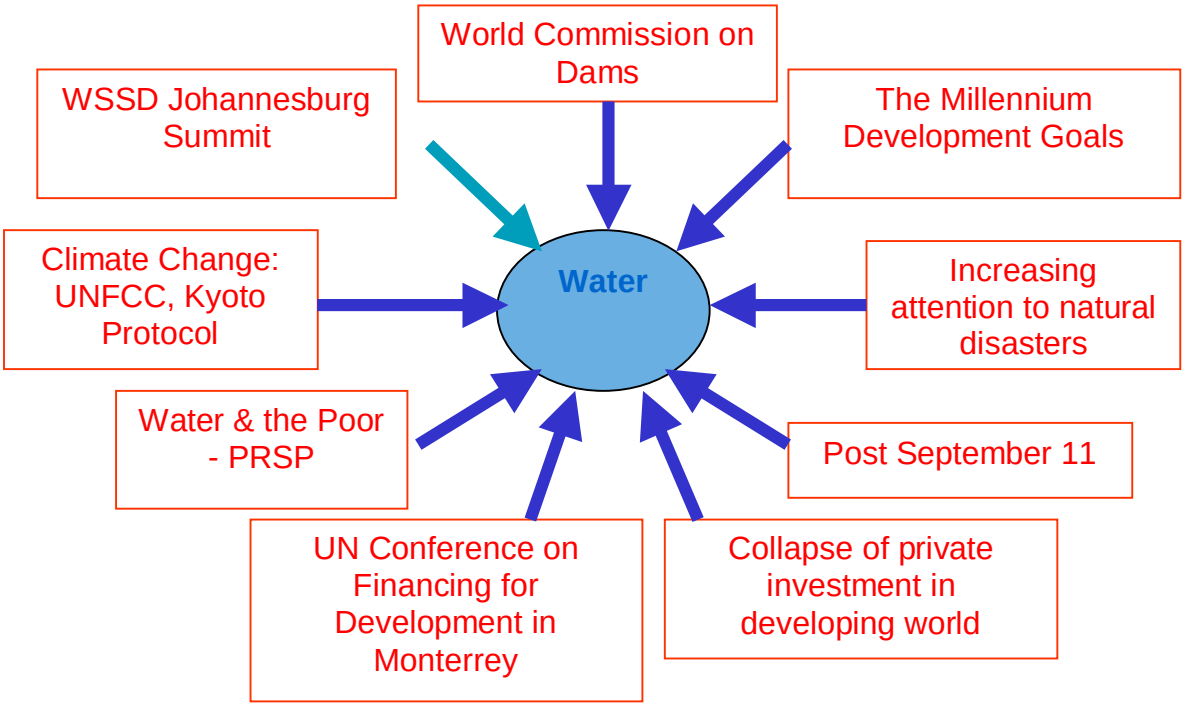
- Improved water and sanitation services contribute to poverty reduction and growth through a variety of mechanisms:
- Health
- Globally, more than one-fifth of under-five deaths are caused by diarrhoea, and in some countries the proportion of child deaths due primarily to diarrhoea is as high as 44 per cent
- 2.5 million children under five die of diarrhea every year
- Water, sanitation and hygiene interventions can reduce the burden of diarrhoeal diseases by at least 42 per cent. Hygiene interventions have the greatest impact, closely followed by water quality, sanitation and water quantity improvements.
- Unhygienic environments and poor hygiene practices result in chronic diarrhoea, which is a leading cause of death in people living with HIV/AIDS
- Clean delivery practices by birth attendants – including hand-washing and the use of clean instruments and delivery surfaces – has the potential to prevent over 400,000 neonatal deaths a year, or 4 per cent of all under-five child deaths

During the hour we will spend today on this presentation and discussion, 250 children under five would have died from diarrhea caused by lack of water for hygiene, unsafe water supplies, and poor access to sanitary means for excreta disposal

Improved water and sanitation services contribute to poverty reduction and growth through a variety of mechanisms:

- Education
  - When water access is improved in communities, school enrolment rates have been shown to increase by up to 15 per cent.
  - WHO estimates that the number of schooldays gained annually in Africa from fewer incidents of diarrhea if the MDGs are met is a staggering 99 million, or about an extra 270,000 years in school every year
- Economic development
  - WHO estimates indicate that achieving the MDGs in Africa and the associated reduction in cases of diarrhea and reduction of productive days lost would have a value of $116 million a year (using minimum wage as the value of working time). The averted health costs were estimated as $1.695 billion per year.
  - Better water and sanitation may also have positive impacts on tourism. The perception that countries are risky places to visit in health terms discourages tourists from visiting. Studies have estimated that this factor could cost up to $5.7 million of tourist revenues a year in Nepal, and as must as $283 million in India.
  - Fully exploiting these linkages increases the impact of water supply and sanitation interventions on development outcomes

The External Environment



External developments

- § Exceptional high visibility of water sector; but donor funding constant at best
- § G8, Camdessus follow-up, CSD, UN Millennium Project, EU Water Initiative
- § Increased country ownership of the MDG agenda
- § Country level action, African Ministerial Council on Water (AMCOW)
- § Pragmatic dialogue focusing on local solutions
- § From public vs. private to PPP, from free water vs. cost recovery to pragmatic pricing & financing policies
- §

International private sector has a new look

- § Private financing decreasing or constant at best, operators pulling out but local interest growing

Outline

- § The overall environment: challenges and new developments
- § The rural challenge
- § The urban poor
- § Sanitation
- § Financing the sector
- § The private sector
- § Development partner coordination
- § Technical assistance and policy engagement – WSP support
- §

Rural and urban gaps

- § The world's urban population will grow from 2.9 billion in 2000 to 5.0 billion by 2030, (47% and 60% of the total world's population).
- § The provision of urban water services to the urban population is a serious and growing challenge. However, 75 percent of the poor reside today in rural areas, and the rural poor is expected to outnumber the urban poor for at least another generation.

- In 2002, 860 million rural people in developing countries do not have access to a safe source of water, while the corresponding figure for urban areas is 170 million.

Global Lessons in Rural Water Supply

- Rural communities can manage and will pay for RWSS services if offered choice of technology/service level and have voice in design and service delivery methods:
- Consistent government policies (e.g., subsidy support)
- Control of water resources
- Local support agencies
- Contracting private providers/NGOs or community management
- Decentralization adds a new dimension
- National ↔ provincial / basin ↔ local
- Strong case for decentralization:
- better match services & demand
- increased accountability
- Better knowledge of local costs
- But,we are still learning:
- Decentralizing responsibilities alone not enough (authority, funds, etc)
- How to increase local capacity
- Improve information flows

Outline

- The overall environment: challenges and new developments
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- Sanitation
- Financing the sector
- The private sector
- Development partner coordination
- **Technical assistance and policy engagement – WSP support**

Urbanizing world

- Rapid rural-urban migration in recent decades
- Sub-Saharan Africa is urbanizing faster than any other region in the world
- More than 50% of the total population will be urban by 2025

Global Lessons in Services to the Urban Poor

- Well functioning and financially sound utilities are a necessary (but not sufficient!) condition for the urban poor to gain *sustained* access to water supply services
- Good utility performance requires accountability to consumers: incentives/sanctions to perform imbedded in clear policies, contracts, & legal /regulatory framework.
- Utility reform increasingly issue of local government: Calls for engagement level of: city finances/governance, fiscal transfers/decentralization, and competitiveness promotion.
- Serving the urban poor also requires targeted interventions:
- Poor willing to pay for service if in accord with their needs: Flexible service levels, payment terms, alternative service providers, and design of contractual provisions.

Main Elements of Utility Pro-Poor Strategy

- Extend the piped network to informal settlements
- Establish a financial strategy that allows the poor to be served and maintains the financial viability of the utility

- § Enable low-income households to afford the upfront costs of a connection
- § Reduce the cost of water for poor people and developing appropriate payment mechanisms
- § Manage public standpipes better
- § Regularize domestic resale and small-scale providers
- § Incorporate the poor in their contracts
- § Develop specific policy on urban poor sanitation
- § Support processes to strengthen consumer voice

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Scope of SANITATION?

- § It is not just building toilets
- § Effective use of toilets by all members
- § Proper hand-washing with soap after toilet and before handling food
- § Proper collection and storage of domestic water
- § Proper handling of drinking and cooking water, and water used for washing Etc.
- § Practice adopted by the entire family

The current sanitation challenge

- § Little demand from those who need most
- § Lack of political interest
- § Fragmented administrative ownership between government departments
- § It's not cheap
- § It arouses deep feelings and attitudes of disgust
- § Like all public goods, it is subject to politics
- § Often technically difficult or "exceptional"
- § Difficult to scale-up "island of success"
- § Hygiene promotion is poorly understood…
- § Sheer numbers…
- § 750 million gained access in the 90s….
- § …yet still more *without* access 2000 due to population growth
- § *…other than that, it's straightforward!*

1.Total Sanitation

WSP-South Asia

- § When sanitation behavioral change is adopted by the <u>entire community</u> and not only some households
- § The challenge:
- § Open defecation is an age old and traditional practice
- § Apparently costs nothing and does no harm
- § Therefore, why would those who practice open defecation demand sanitation improvements ???
- § Ignition Process to initiate demand: DEFECATION MAPPING

A participatory process

- portrays a vivid picture of the actual sanitation situation, helps to relate with disease transmission, inconvenience, and risks of eating others feces
- generates a community wide sense to stop open defecation, followed by a host of hygienic behavioral change and peer pressure to sustain the changes.
- Demand for improved sanitation has to be met with affordable options

How to Scale Up?

- PARTNERSHIP
- Mobilization and Igniting Demand: Local Level Institutions, NGOs, Non formal bodies, Community Organizations, with technical knowledge of options
- Local Governments: Provide resource support to contract service providers and to monitor

2. A Market Framework

For Sanitation – WSP Africa

- Upscaling Sustainable Sanitation requires that people can make a living matching the ***supply*** of sanitation goods and services to the ***demands*** of the public, including the poor.
- Current constraints are problems in both supply and demand
- The key "private sector" to serve ***those without access*** is informal, not formal
- The key "consumer" is the household, not the state
- Government has key roles in
- stimulating demand
- creating enabling environment
- addressing externalities and collective issues (e.g. sludge management, sanctions)

The Potential of Social Marketing

- Applying commercial marketing approaches to the promotion of social goals
- **Systematic data collection/analysis** to understand the market and develop strategies
- **Provision of products, services and behaviors** that consumers and users want and are willing to pay for
- Implies…quality, reliability and affordability…from **customer's** point of view
- **Develop a** sanitation industry
- Strategic approach to promotion of services, products – effective communication plans
- Regulate final reuse/disposal

3. Handwashing Promotion – A global partnership

- Hands are the main vector of diarrhea pathogens and play a major role in the spread of respiratory disease.
- Many hygiene behaviors can play a role in preventing infection and disease. Food, water, feces, and utensils need to be handled safely, and flies need to be controlled.
- However, handwashing is probably the most important of all of these behaviors

Rates of Handwashing are Very Low

- The problem is rarely a lack of soap. Soap is present in the vast majority of households worldwide, but is commonly used for bathing and laundry, not handwashing.

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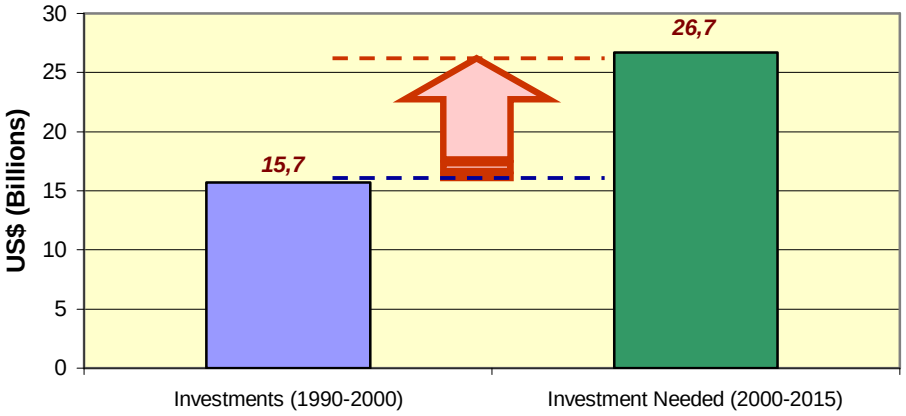
Water and Sanitation MDGs – Investment Requirements

- § However, not enough resources are coming to the water supply and sanitation sector
- § Kenya Government Budget 2002: % Recurrent & Development Expenditure

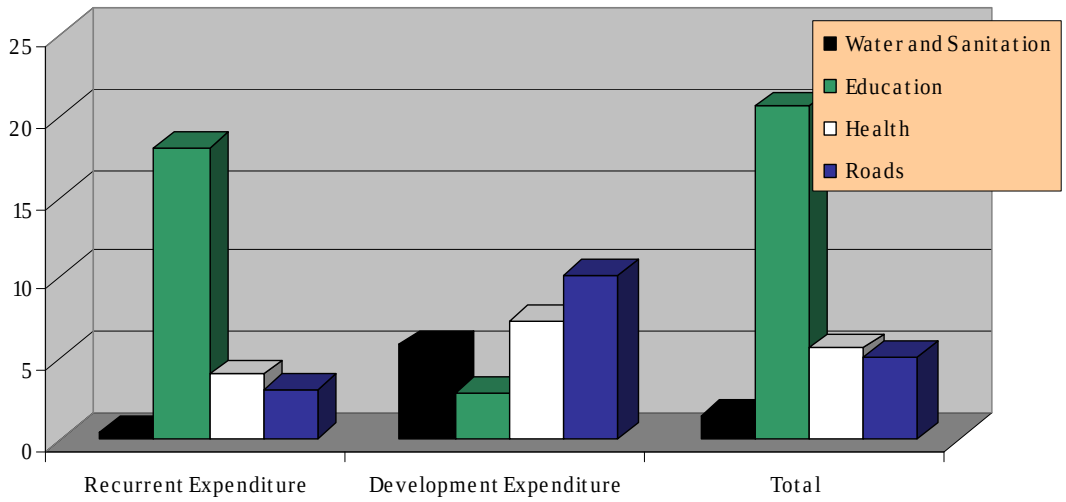
Average Annual Investment Implications of MDG Targets (US$b)



- *Estimated 70% increase in annual investment 2001-2015*

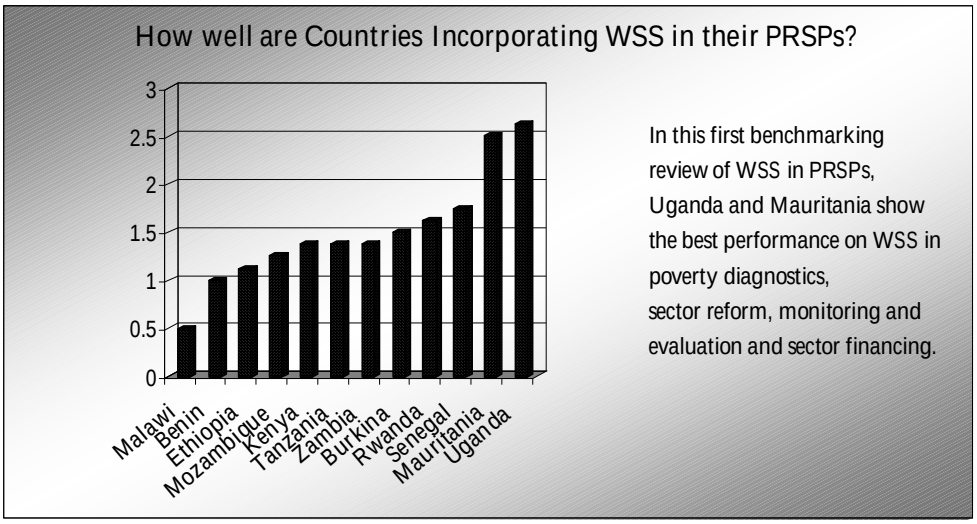
Source: 1990-2000 - WHO Global Assessment 2000
2000-2015 – Global Water Partnership/WB Estimates

Kenya Government Budget 2002: % Recurrent & Development Expenditure



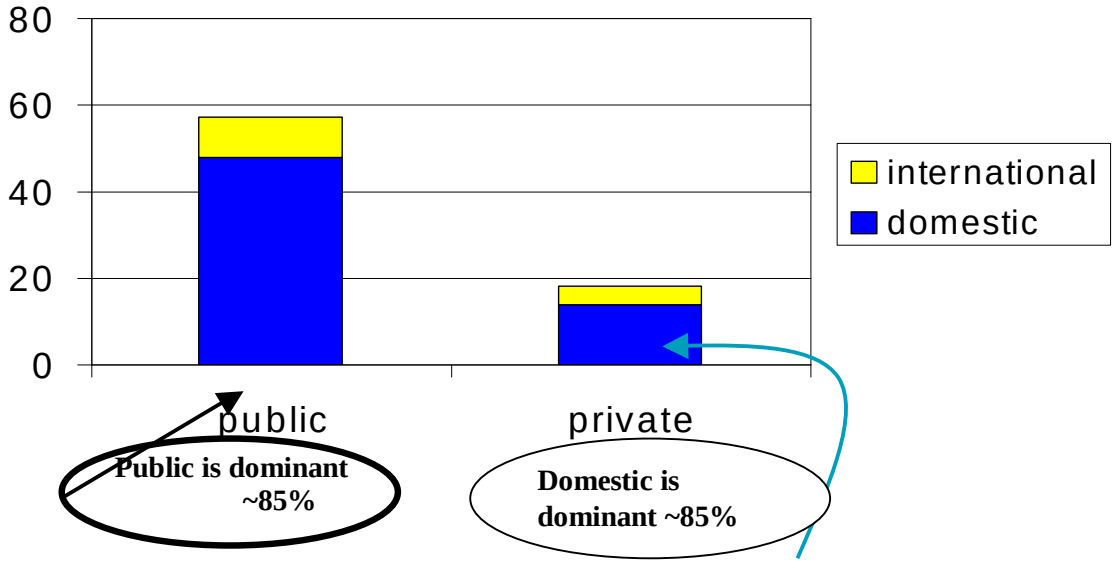
Total health sector expend. – 70.1 billion Ksh. versus WSS sector expend. – 7.6 billion Ksh

And water is not given a high priority in PRSPs



§ Only 2 out of 12 countries reviewed give serious analysis and priority to water supply and sanitation in PRSP!

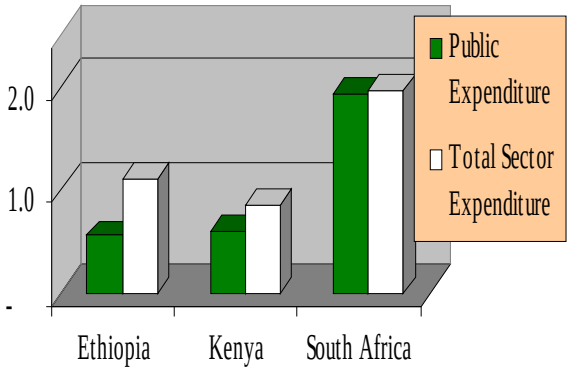
The Current Situation
Domestic Public is Dominant Source for WSS!
Financing flows into water in 2000

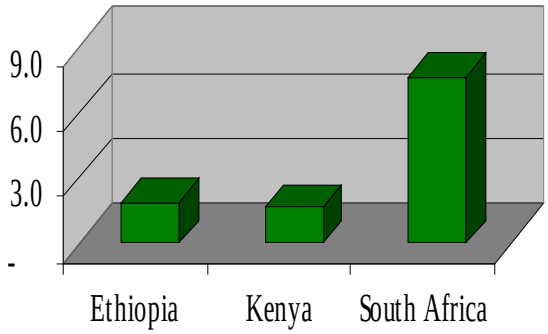


Estimates from "GWP Framework for Action
Source: Ginneken M. 2003: Presentation at Pan African water Conference

The current situation

§ WSP Financial Resource Flows Studies in Africa show:
§ Limited public sector allocation
§ User charges important (39%)
§ High share of off-budget (NGO) sector resources (20%)
§ High dependence on aid donors (up to 80% of public money)
§ Main leverage points: more public and more user resources





What does Financing Improved Water Supply and Sanitation Services mean?

MDGs are not simply about "providing more WSS infrastructure"…but:

- Services that are reliable
- Services that are actually used
- Services that are sustainable – institutionally, financially and environmentally

This requires reforms in sector governance

Leverage Resources at All Opportunities

- Through households and communities
- Appropriate tariffs and management of billing and collection
- Access to credit for households / communities
- Through market borrowing
- In countries where potential exists
- In others - Using mechanisms to mimic "commercial loans"
- Through greater internal surplus
- Performance-linked public funds / grants
- Through private sector resources
- Facilitating small providers in urban informal settlements
- Through local governments (decentralization)
- Partial conditional grants where appropriate

Financing Access for the Poor

- Facilitating small providers
- Utility partnerships in large cities
- Exploring minimum / fixed subsidy concessions
- Improved design and targeting of subsidies
- Improving design of cross-subsidies
- Access to credit
- Innovations needed as micro-finance industry still emerging and not well consolidated and risk issues of informal settlements

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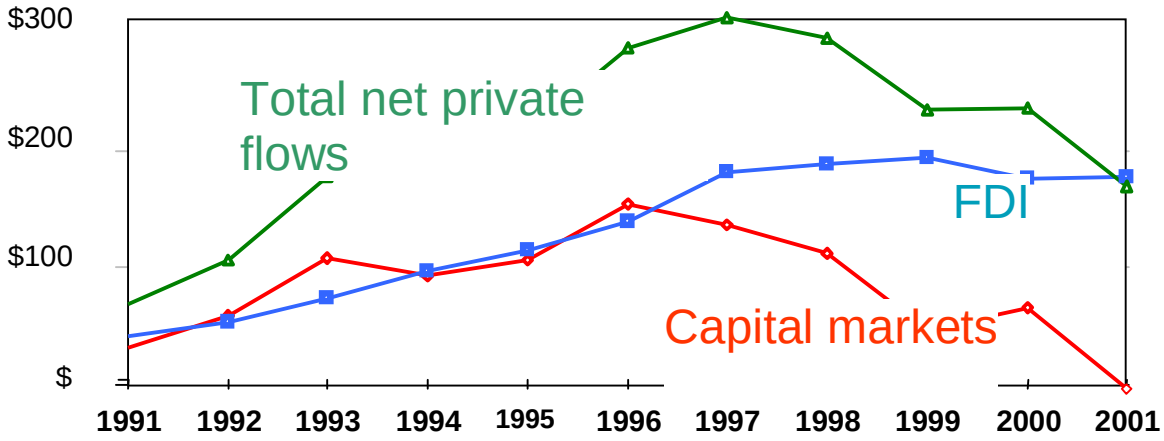
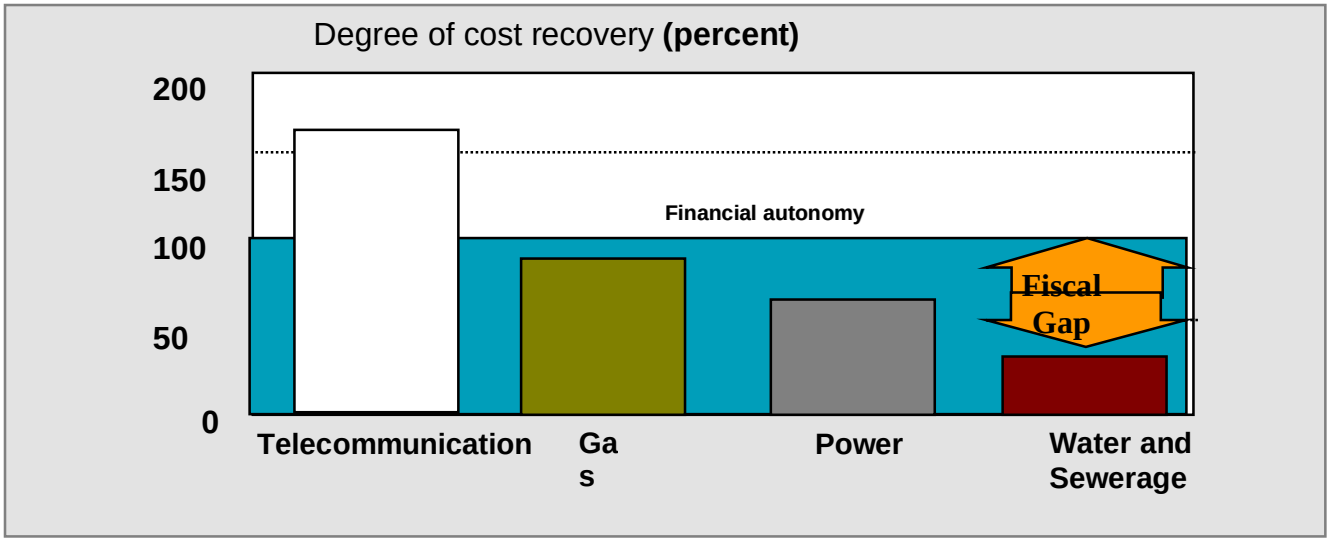
Global capital flows to emerging markets have dropped significantly since 1997
And less than 5% of private capital flows came into water supply services in the 90s



There cannot be private investment (nor effective public services) without a reliable revenue base…

Net long-term flows to developing countries, 1991-2001 (US$ Billions)



Source: World Bank, World Development Report 1994, Investing in Infrastructure 1994.

Substantial Risks in the Water Sector

- Currency risk
- Dollar debt and local currency earnings
- Regulatory risk
- Regulatory framework not implemented or untested
- Payment/performance risk
- Government fails to pay amounts due
- Sub-sovereign risk
- Water investments are often at the sub-sovereign level

- § "Affordability risk"
- § Private operators and consumers will not do it all – role of public investments and subsidies

No One Can Have It All! Some Tradeoffs for Policy Makers

- § Money for the Treasury
- § Front-load the investment program
- § Facilitate investment by giving out guarantees, incl. commercial risks
- § Avoid strong regulatory commitments
- § Keep tariffs affordable
- § Raise productivity
- § Spread out cash needs to avoid tariff hike
- § Reduce Government exposure and provide strong efficiency incentives

But It's Not "Either" "Or" But How Best to Improve and Expand Service

- § The public vs. private dichotomy is a bit false
- § "public" service providers at a minimum use private suppliers and often outsource many functions
- § "private" service providers rely on public support (tax holidays, subsidies) and are always subject to some form of public regulation
- § The focus therefore, should be on "efficient" public-private partnerships, not on ideological debates

Increased attention local private sector development

Formal

- § consultants, contractors, suppliers, utility staff – who bid for contracts to operate town and village systems
- § main issue: structure of transaction design – bidding process, contract design

Semiformal

- § entrepreneurs, cooperatives/user associations who develop, finance and manage small water supply systems
- § main issue: exclusivity/monopoly service, regulatory framework, risk management

Understanding each others' interests

Public sector

- § Minimize risks
- § Reduced liabilities for the state.
- § Tax, fee or sale revenues.
- § Happy customers.
- § Environmental cleanups.
- § Happy public utility employees
- § Jobs for domestic firms

Civil society

- § Dependable service
- § Affordable tariffs
- § Tailored service for the poor
- § A voice in decision making

Private sector

- § Steady, long-term returns.
- § Market share, reputation, geographic presence.

- § Mitigation of risks not under their control, or profits commensurate with risks.

Understanding each others' interests and working together to go…

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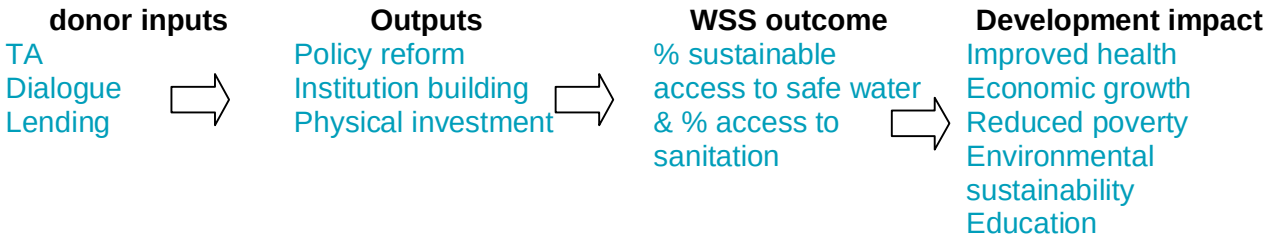
The changing role of development partners

- § The MDGs have raised expectations – the recent UN Millenium Report
- § Countries define local goals and strategies through PRSPs and MDG action plans
- § ODA must adapt and respond to country goals
- § Increased financing
- § Focus resources to countries both ready and committed
- § Support sector-wide governance frameworks
- § Channel funds to local initiatives within scalable frameworks
- § Attend to poverty pockets in midst of progress
- § Adapt and respond to long term engagement
- § Better donor coordination
- § Increase engagement in new regional partnerships
- § AMCOW, NEPAD, utility partnerships, LCR regulators association, professional associations

Increased call for monitoring of results

- § Country outcomes:UN mandated Joint Monitoring Program (WHO/Unicef)
- § Performance: city/utility level benchmarking
- § Effectiveness of donor inputs: individual donor responsibility



Multitude of mechanisms & initiatives (the example of Africa)

- § New, strong coalition through NEPAD and African Ministerial Conference on Water
- § Special (proposed) new initiatives:
- § African Water Task Force
- § African Water Facility
- § EU Water Initiative

Other ongoing donor involvement:

- § IFIs- AfDB, Arab Funds…
- § Bilateral donors

- Programs: WSP, WUP, WASH, NETWAS, etc, etc

But there are many traps to be avoided…

- Repeating the water decade (pipes with no water)
- Being too supply driven ~ not listening to client countries
- Lack of donor coordination and "cherry picking"
- Forcing solutions and programs that are not adapted to local conditions
- Continuing to focus only on global level advocacy
- Focus only on infrastructure and not on technical assistance and policy development

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Achieving the water and sanitation MDGs is not just about laying and fixing pipes:

- Reform of institutions, governance and incentives
- Strong linkages to other sectors
- Integration within governance and capacity building agendas is needed
- It is about fixing the institutions that lay and fix the pipes!
- But this requires long-term policy engagement and technical advice

Evolution of WSP Support Agenda in Response to Changes in the Sector

- Late 70s, 80s: technology; latrines, hand pumps
- 80s: project preparation and capacity building
- Early/mid 90s: demand responsive development
- Late 90s and continuing: institutional reform, Dublin/Rio principles, community-centered development at scale
- 2000 onwards: continue to work in traditional areas, but:
- increased emphasis at achieving impact at scale through policy reform and capacity building
- wider vision beyond sector confines – decentralization, for example
- specific programs to help countries reach MDGs for water and sanitation

WSP Support to Partner Countries in Sector Reform

- Overall sector reform and advocacy to scale up sector investments and build capacity; support to reforming countries as knowledge broker and advisor:
- information to politicians, activists, civil society, and sector professionals on the needs and options for reform
- development of practical tools to attract fresh investment into the sector, particularly to assist poor communities
- strengthening of institutions, governance, and regulations
- decentralization and service provision
- private public partnerships, small scale providers
- appropriate, affordable technology (condominial)
- WSS in multi-sectoral, programmatic projects

WSP Areas of Work

- Policy Support and Dialogue: helping governments define, adopt, and implement enabling sector policies and good practice to improve service delivery capacity
- Knowledge Generation and Dissemination: sharing experiences and insights from one place to another through studies, seminars, conferences, and print products
- Networking: working with other key players – government, civil society, NGOs, and private sector – to bring about change
- Investment Support: help clients to invest in change and sustained investments, bring to bear special expertise
- Donor Coordination: as independent partner, play role of honest broker to help prepare and implement coordinated investments in support of reform and capacity building

Annex A3

WATER SEMINAR: CHALLENGES, RESPONSIBILITIES AND OPTIONS

26-28 January 2005, Finnish Environment Institute

Margaret Catley-Carlson, Chair GWP

Water: Resources Management - and the Link to Sanitation and other MDG Goals

I. The World's Water and the World of Water
II. How Water Links to MDG Goals
III. What we need to do in Water Supply and Sanitation
IV. Conserving and managing this precious resource: How can we all help?

I. The World's Water and the World of Water

The surface world is mostly water. But within this watery world, only 2.5% of world's water is fresh water, with less than 1% available for use. We draw down about fully 56% of that 1% of water that is actually *accessible* to us. Water use sextupled when population doubled since the 1950s (i.e. added 3 billion) There is justifiable concern about what will happen as we move toward 2050, adding the next 2-3 billion. Sextupling once again isn't possible – we're already over the half way mark in terms of the water readily available to us. [1] Finland, as "The Country of the Thousand Lakes" (in fact I understand there are over a hundred thousand) is no doubt a country with deep understanding of water's manifold role in sustainable development. This seminar shows the quest for even greater understanding of the linkages and connections within the world of water management.

We all require water for the agricultural and industrial goods that we use, perhaps for the energy we consume, and for personal use. Huge population increase has reduced the absolute amount available *per person* for these purposes. From the standpoint of immediate human welfare, the *per person* count is what counts. And as populations rise, the per/person availability of thee water *in that place* declines.

Because of the enormous temporal and special variability in water, this hits some areas much harder than others. To add complexity, water shows great variability in time and place around the globe. Some parts of India receive 90% of their water in five days of rain, perhaps spread over two intervals a year. If they cannot store this water they will lose it – and have no more for months to come.

[1] Shiklomanov, 1997 in The UN World Water Development Report: Water For People, Water For Life, World Water Assessment Programme, UNESCO Publishing 2003

For this reason, although we can talk about water globally, the real impacts and all solutions are local. There are about 450 million people in 29 countries facing water shortage, and by 2025 about 2.7 billion or 1/3 of the expected world population will live in regions facing severe water scarcity [2] Pollution adds to the problem. Ninety percent of the South's wastewater goes untreated into the streams and oceans with consequences for the downstream and the reefs and coastal regions. Ergo, there is less water available for each of us, and often it is polluted - occasionally to the point where it cannot be used, often to the point where it causes illness.

II. How Water Links to MDG Goals: Linkages – everywhere

Improved Water management is key to the achievement of virtually all of the MDG goals. This parallels the appreciation formulated by Kuusisto & Varis, that "water is related as a cross-cutting issue far more broadly to development questions than what the traditional, water and sanitation oriented philosophy appreciates".

Here is a partial list compiled by the Millennium Task Force on Sanitation and Water.

To halve poverty:

- Ø Water is a factor of production in agriculture, industry and other economic activities
- Ø Investments in water infrastructure/services as a catalyst for local/regional development
- Ø Reduced vulnerability to water-related hazards reduces risks in investments and production
- Ø Reduced ecosystems degradation makes livelihood systems of the poor more secure
- Ø Improved health increases productive capacities, reduces burden on those who care for the sick

To halve hunger:

- Ø Water is a direct input to irrigation for expanded grain production· Reliable water for subsistence agriculture, home gardens, livestock, tree crops
- Ø Sustainable production of fish, tree crops ad other foods gathered in common property resources (also affects poverty when such goods are sold for income)
- Ø Reduced urban hunger due to cheaper food prices
- Ø Healthy people are better able to absorb the nutrients in food than those suffering from water-related diseases, particularly worms

To achieve 100% primary education:

- Ø Improved school attendance from improved health and reduced water-carrying burdens, especially for girls
- Ø Having separate sanitation facilities for girls and boys in schools increases girls' school attendance

To achieve gender equity -

- Ø Community-based organizations for water management improve social capital of women

[2] IWMI – International Institute of Water Management, Colombo, Sri Lanka

- Ø Reduced time, health, and care-giving burdens from improved water services give women more time for productive endeavours, adult education, empowerment activities, leisure
- Ø Water sources and sanitation facilities closer to home put women and girls at less risk for sexual harassment and assault while gathering water and searching for privacy
- Ø Higher rates of child survival are a precursor to the demographic transition toward lower fertility rates; having fewer children reduces women's reproductive responsibilities

To reduce child mortality –

- Ø Improved quantities and quality of domestic water and sanitation reduce main morbidity and mortality factor for young children
- Ø Improved nutrition and food security reduces susceptibility to diseases. Better water management reduces mosquito habitats
- Ø Improved health and reduced labour burdens from water portage reduce mortality risks
- Ø Improved health and nutrition reduce susceptibility to anemia and other conditions that affect maternal mortality
- Ø Sufficient quantities of clean water for washing pre-and-post birth cut down on life-threatening infections
- Ø Higher rates of child survival are a precursor to the demographic transition toward lower fertility rates, and fewer pregnancies per woman reduce maternal mortality
- Ø Better water management reduces incidence of a range of other water-borne diseases
- Ø Improved health and nutrition reduce susceptibility to/severity of HIV/AIDS and other major diseases

To improve environmental management

- Ø Improved water management, including pollution control and water conservation, key factor in maintaining ecosystems integrity
- Ø Development of integrated management within river basis creates situation where sustainable ecosystems management possible and upstream-downstream effects are mitigated
- Ø Biodiversity conservation, combating desertification furthered by sound water management[3]

III. What we need to do on Water Supply and Sanitation

On the all important Water Supply and Sanitation Goals, the linkage to improved resource management is evident but not always appreciated. Almost no populations are deprived of water because of a shortage of the physical resource. Rather it is investment choices, choice of technologies, absence of community structures and low priority accorded to the task that deprives people of water.

Most developing countries have the financial and management means to address these issues; the question is the priority accorded. For a few very poor countries it is a matter of development assistance. The Millennium Task Force on Water was unanimous in its belief

[3] *Health, dignity, Development: W hat will it take?* A report of the UN Millennium Project Task Force on Water and Sanitation, Final Report, Abridged Edition, 2005, Stockholm International Water Institute, SIWI and United Nations Millennium Project, New York, 61 pp.

that the water and sanitation target, "*to cut in half, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation,"* will not be reached unless:

1. There is a ***deliberate*** commitment by ***donors*** to increase and refocus their development assistance and to target sufficient aid to the ***poorest low-income countries***.

2. There is a ***deliberate*** commitment by governments of ***middle-income countries*** that are not aid-dependent to reallocate their resources such that they target funding to the ***unserved poor***.

3. There are ***deliberate*** activities to create support and ownership for water supply and sanitation initiatives among both women and men ***in poor communities***.

4. There is a ***deliberate*** recognition that basic sanitation in particular requires ***an approach that centres on community mobilization*** and ***actions that support and encourage that mobilization***.

Furthermore, our group is convinced that the MDGs as a whole will not be met unless:

5. There is ***deliberate*** planning and investment in ***sound water resources management and infrastructure***.

The Task Force identified ten critical actions for achieving the water and sanitation target and fostering the sound management of water resources for all the MDGs. They are:

Action 1: Governments and other stakeholders must move the sanitation crisis to the top of the agenda.

Action 2: Countries must ensure that policies and institutions for water supply and sanitation service delivery, as well as for water resources management and development, respond equally to the different roles, needs, and priorities of women and men.

Action 3: Governments and donor agencies must follow a "learning by doing" approach and simultaneously pursue investment and reforms (for improved water supply, sanitation, and water resources management)".

Action 4: Efforts to reach Target 10 must focus on sustainable service delivery, rather than construction of facilities alone.

Action 5: Governments and donor agencies must empower local authorities and communities with the authority, resources, and professional capacity required to manage water supply and sanitation service delivery.

Action 6: Governments and utilities must ensure that users who can pay do pay in order to fund the operation, maintenance, and expansion of services – but they must also ensure that the needs of poor households are met.

Action 7: Within the context of national MDG-based poverty reduction strategies, countries must elaborate coherent water resources development and management plans that will support the achievement of the MDGs.

Action 8: Governments and their civil society and private sector partners must support a wide range of water and sanitation technologies and service levels that are technically, socially, environmentally, and financially appropriate.

Action 9: Institutional, financial and technological innovation must be promoted in strategic areas.

Action 10: The United Nations and its Member States must ensure that the UN system and its international partners provide strong and effective support for the achievement of the water supply and sanitation target and for water resources management and development.

Water supply is a question of investment decisions, and sanitation is a question of community organization but BOTH are linked to water resource management at many points in the chain: the availability and state of the physical resource, whether wastewater is used as a resource or pollutant, to name but two.

Excellent material has been created – the Road Map of the WWSSCC agreed upon in Dakar in December 2004 being but one example.

Finland is well aware of the water supply and sanitation challenges and these have featured for many years with Finnish Development. Like others, you have found that creating the infrastructure is an easier task than ensuring long term sustainability of the water supply infrastructure.

I think you need to do more – and perhaps a little differently. The recent review of the Finnish Water Sector Development Co-operation by Wihuri et al. calculates in simple arithmetic that Finland's share of this global endeavour is to assist five million people, i.e. your own population size. In economic terms this is calculated as meaning a four time increase from present €10 million to €40 million on an annual basis.

You might be interested to know that a single Bangladeshi NGO, Dhaka Ahsania Mission, aims at achieving by 2010, assisting 7 million poor on the Bengali countryside with proper water and sanitation services. So maybe Finland could do more.

There may also be a need to do some things differently – to make sure that the community dynamic dimension is the foundation of work if water supply. In sanitation, that must be the starting place, and the foundation upon which to build.
I know that Finnish polices centre on cooperation with Long-Term Partner Countries in Africa, Asia and Central America, and that bilateral cooperation is based on the partner countries own development plans. For effective work in sanitation, you may have to go deeper than the governmental level. I am sure this is underway in several countries.

IV. Conserving and Managing this Precious Resource: How can we all help?

Water cannot be created; it can only be managed. And water is local, quintessentially so, unlike energy or food commodities which travel through trade. How have our current water management systems allowed us to get into such real difficulty with this essential, vital resource? Here are some of the symptoms.

- Ø Traditional delivery systems are based on traditional ways of looking at water.
- Ø There is usually no Ministry of Water, often water governance; investments use decisions etc. are organized sectorally.
- Ø There is no single UN water organization to set global standards for water management. There are sectoral standards, of course for agriculture, health, water transport, etc.
- Ø Many Governments continue to see their principal role as delivering water to their citizens
- Ø "Water should be no cost/low cost" is tenet of many who advocate that water is a Human Right, and insist that it must be free (the relevant UN resolution says 'affordable')[4]. Many see a Koran proscription against charging for water though several Islamic countries charge for the services involved in delivery.
- Ø Governance systems don't reflect the reality that rivers, lakes, and groundwater don't respect national boundaries.

But things are changing. It is increasingly accepted that the essential role of public authorities is to establish the policy and regulatory framework for water resource management. In many countries there are moves to reform and development of new institutional frameworks**.** Increasingly there is provision for water basin authorities in national regimes. Much more work is needed: transparency is needed regarding subsidies, and some move to more cost recovery, and interest in market mechanisms. The work done to reduce corruption in some sectors should be applied to water[5].

There are also new ways of looking at the role of Governments. Good water governance includes active roles for public authorities in at least the following areas.

- Ø Deciding on, protecting the environmental share
- Ø Establishing water law
- Ø Setting regulatory framework
- Ø Allocating water
- Ø Managing inspection functions
- Ø Ensuring data collection, retention and distribution
- Ø Managing public debate on issues
- Ø Managing communication on water issues.
- Ø Ensuring subsidy for poorest populations

The increasing importance of water has found echo in increased international dialogue[6]. The 2002 Johannesburg WSSD Earth Summit Plan of Implementation, called on all countries –

[4] ECOSOC - 2002

[5] Transparency International

[6] The 2000 UN Summit produced the Millennium Development Goals; these pledge to reduce by half by 2015 *the proportion* of people that do not have access to safe water. The Johannesburg Earth Summit added a similar target for sanitation. These goals imply ambitious if not impossible enterprise. In the 5000 days remaining till 2015, every day about 290,000 people would have to gain access to clean water and over 500,000 to sanitation for these goals to be met

rich and poor, water scarce and water plentiful to develop integrated water resources management and water efficiency plans[7] by 2005 Paragraph 26. IWRM is an approach "which promotes the coordinated development and management of water, land and related resources in order to maximize the resultant economic and social welfare in an equitable manner without comprising sustainability of vital ecosystems."[8]

By common consent, the water issue is mostly about management – and the need for more integrated, sustainable, equitable management rules – and enforced regulations... There is debate on whether there is in fact 'enough water to go around' but no debate on the fact that the greatest potential improvement in the availability of water would come through improved management of the resource.

The overview of Finland's Development Policy in the water sector by Esko Kuusisto and Olli Varis clearly shows that IWRM is well understood by Finnish policy makers. Finland has learned important lessons through its water investments and today infrastructure investments go parallel with activities like prevention of environmental threats, promotion of equality, human rights, democracy and good governance.

The Global Water Partnership is dedicated to the achievement of more sustainable and equitable water resource management using IWRM. We have a global network of 13 regions, close to 3 dozen countries within which people are committed to this task. We have created close to a dozen TEC publications to give guidance in this task, we have a ToolBox which describes specific instances of improved water management, and we have recently created a handbook, *Catalyzing Change*, to help countries develop water resource management and water efficiency strategies.

GWP tackles the issue of change in water policy and practices by a threefold focus:

Ø The enabling environment of policies, legislative framework and financing and incentive structures

[7] The Johannesburg declaration included the following:

(a) Develop and implement national/regional strategies, plans and programmes with regard to integrated river basin, watershed and groundwater management, and introduce measures to improve the efficiency of water infrastructure to reduce losses and increase recycling of water

(b) Employ the full range of policy instruments, including regulation, monitoring, voluntary measures, market and information-based tools, land-use management and cost recovery of water services, without cost recovery objectives becoming a barrier to access to safe water by poor people, and adopt an integrated water basin approach

(c) Improve the efficient use of water resources and promote their allocation among competing uses in a way that gives priority to the satisfaction of basic human needs and balances requirement of preserving or restoring ecosystems and their functions, in particular in fragile environments, with human domestic, industrial and agriculture needs, including safeguarding the drinking water quality

(d) Develop programmes for mitigating the effects of extreme water-related events

(e) Support the diffusion of technology and capacity-building for non-conventional water resources and conservation technologies, to developing countries and regions facing water scarcity conditions or subject to drought and desertification, through technical and financial support and capacity-building

(f) Support wherever appropriate, efforts and programmes for energy-efficient, sustainable and cost-effective desalination of seawater, water recycling and water harvesting from coastal fogs in developing countries, through such measures as technological, technical and financial assistance and other modalities

(g) Facilitate the establishment of public-private partnerships and other forms of partnership that give priority to the needs of the poor, within stable and transparent national regulatory frameworks provided by the Governments, while respecting local conditions, involving all concerned stakeholders, and monitoring the performance and improving accountability of public institutions and private companies

[8] Global Water Partnership, TAC paper #4, Integrated Water Resource Management

- Institutional roles – the needed organizational framework and institutional capacity building
- Management instruments such as water resource assessments, plans for IWRM, demand management, social change instruments, conflict resolution, regulatory instruments, and economic instruments.

Clearly, we hope that Finland will take full advantage of this handbook as you expand from your 30 years of Finnish foreign aid experience in the field of water supply and sanitation to put investments in the context of IWRM – especially in drought prone and poverty stricken societies in the South.

We also hope that GWP will be able to assist you by bringing in our regional experts of the GWP Regional Water Partnerships

A regional example: working together in Central Asia and Caucasus.

The region GWP CACENA consists of the eight countries in Central Asia and Caucasus. Kazakhstan has started the IWRM planning process this year with a grant from Norway where the GWP Kazakhstan today constitutes the neutral platform for the national stakeholders to meet. Finland has recently given a most important starting contribution to establish corresponding processes in the other seven countries of that region.

The Finnish contribution is given for a two year project, 2004-2005. It links to the Johannesburg Summit and the MDGs. In this respect GWP serves the region as a key facilitator for the first steps of this development, i.e. assisting the countries in setting up national IWRM and water efficiency plans. The project also includes transboundary issues which constitute an over-arching problem of the region and its neighbour regions. Here the Finnish transboundary experience and research may serve the region.

The project four main areas:

1. Organization of political dialogue on IWRM implementation at the national level (in the form of inter-sectoral seminars and round tables):

- on drinking water supply and sanitation issues in a context of achievement of MDGs
- on issues of implementation of IWRM concept in context of MDGs

2. Organization of political dialogue on Transboundary issues in the form of the International seminar «Transboundary aspects of integrated water resources management».

3. Support to public awareness campaign towards IWRM principle in the countries. These events will be the continuation of the work started in each country of the region in 2004 – in order to ensure the complete comprehension of the concept of IWRM in context of the achievement of MDGs by civil society.

4. Capacity building to facilitate National IWRM planning process (training seminars):

- on institutional aspects of IWRM - one for water management specialists and one for water users (WUA staff) in each of two sub-regions (CA and Caucasus);

- Ø on institutional aspects of IWRM - one for water management specialists and one for water users (WUA staff);
- Ø on legal aspects of IWRM - for water management specialists;
- Ø on financial aspects of IWRM - for water management specialists;
- Ø on technical aspects of IWRM (water use, automation, etc) – for water management specialists.

Proposed Future Areas of Cooperation between Finland and GWP

- Ø GWP regions to assist MDG efforts in Finland's Long-Term Partner Countries
- Ø Continued support of the IWRM development in Central Asia and Caucasus through GWP CACENA
- Ø Linking EECCA component of EUWI with new EU member countries and their foreign aid polices. GWP CEE have eight CWPs that can assist, e.g. Estonia and Slovakia

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Annex A4

Ms. Zenebeworke Tadesse, Forum for Social Studies, Ethiopia: Water and sanitation in poverty reduction; case Ethiopia

Background

- Ethiopia with a population of 70 million
- Poor access to safe water and sanitation
- Chronic food insecurity and the spread of HIV/AIDS
- Lack of clean water and basic sanitation facilities
- Availability of water for agriculture

Studies have revealed that increasing frequency of droughts in areas prone to natural resources have been poverty enhancing

- Droughts have accelerated declining crop production per capita
- Declines in livestock production due to increased livestock loss through death and distress sale
- Shrinking of other income sources most of which are linked to crop production or dependent on natural forests which are almost depleted in the Northern highlands.
- Weakening of social support networks due to recurrent droughts and production failure and associated impoverishments
- Finally the ability of households to survive on reduced consumption has diminished in the context of poor nutrition and health amidst the rapidly spreading HIV/AIDS pandemic

Lessons from past experiences

- In the past the few and large water projects that were built resulted in population displacement and relocation, substantive loss of traditional farming and grazing land and irreparable damage to the environment together with ill health and livestock.
- These problems were further aggravated by the absence of proper sanitary and refuse disposal facilities, shortage of health staff and facilities and contaminated water supply.
- Excessive use of biocides is reported to have been an important cause of death of animals and poor health of the people.
- Observers argue that the increasing vulnerability of the pastoral population to drought is a result of dam construction and large scale-irrigation development

Proponents of water management schemes particularly small-scale irrigation have indicated a large number of advantages and these include:

- Lower investment costs that in the majority of cases are borne by the community
- Absence of population displacement as such schemes do not involve dams or storage reservoirs
- Less demanding in terms of management, operation and maintenance
- No land tenure or resettlement implications
- Minimal adverse environment impact
- Allow a wider diffusion of irrigation benefits
- Learning of irrigation techniques by farmers at their own pace and in their own way

Water and Sanitation

- Lack of adequate water for domestic use and sanitation facilities
- National survey undertaken by the Central Statistics Agency indicates, 83 percent of rural households and 8 percent of the urban households do not have access to safe water
- A more recent data indicates that it is only 75.7 percent of the urban population and 19.9 percent of the rural population that has access to clean water
- For its part, the Water Sector Programme anticipated that 82 percent of households in Addis Ababa and 39 percent of rural households will have access to safe potable water by 2004/2005

Gender, Education and Income Implications

- To ensuring better health outcomes, ensuring the provision of adequate and potable domestic water supply is indeed a key investment
- Women and girls play an active role in the provision of water for livestock
- Previous water management projects have emphasized the need for adoption of 'participatory techniques'
- In most parts of rural Ethiopia, women are not expected nor encouraged to speak in public gatherings although that seems to be gradually changing.
- A strategy that is committed to the provision of potable water and to gender equity, has to ensure women's right

The Rural Water Supply and Environmental Programme (RWSEP)

- Is a bilateral programme agreed between the government of Ethiopia and Sweden
- Access to clean water both rural and urban in Amhara Region is only 19.1 percent and only 2.3 percent of households in the region have private latrines
- RWSEP is implemented in 18 Woredas and 32 sub-Kebeles
- Phase one of RWSEP that was implemented in 1994-2002

Broadening the Participation of All Stakeholders

- Covering the 2003-2006 is based on Community Development Fund (CDF) approach
- CDF approach is based on the creation of an alternative mechanism
- The funds for water supply construction are channeled to the community using a micro credit institution
- The community elects a water and sanitation Committees (WATSANCOs) consists of six components :

1. Community Development Fund Implementation of Rural Water Supply
2. Operation and maintenance Management of the Rural Water Supply
3. Sanitation and hygiene awareness promotion
4. Environmental promotion
5. Gender
6. Information, Education and Communication (IEC)

Tangible Achievements and Challenges

- Training of rural communities to operate and maintain the water points with an easy access to spare parts
- Ensuring community ownership and programme sustainability through consultation, payment of fees for access to clean water and ensuring sustainability of water points. It is reported that 96 percent of water points are operational.
- Created employment opportunities (water point guards) and local artisans who benefit from continuous capacity building.
- Increased sanitation facilities through the increase of latrine converge in rural communities, schools and clinics, awareness creation in sanitation and personal hygiene and improving sanitation of water points
- Increased gender awareness and enhanced capacity of women in rural communities through the establishment of a quota of 30 percent women representation in various committees in charge of programme design and implementation. Gender training of committees before entering into new sub-Committees. Gender Sensitization Groups are established and trained to promote gender issues among the community.
- Increased environmental awareness and protection through close collaboration with Environmental Protection and Land Administration and Use Authority and training school teachers and students, water and sanitation committees and other community members on environmental protection
- Provision of IEC aimed at awareness raising on critical socio-cultural issues such as HIV/AIDS, harmful traditional practices and gender and enhanced communication skills through development of newsletters, brochures, culturally sensitive posters, and brochure and drama
- Improved cooperation between various stakeholders i.e. government representatives including experts as well as the lowest government administrative structures, private sector and representatives of rural communities
- Significant decrease in time needed for construction from 60 days to 28-35 days.
- Increased community ownership and problem solving capacity through community participation in financial and construction management.
- Ensuring the participation of poorest community members through setting up of different contribution rates.

There are of course some shortcomings. These include

- Inadequate funding from Regional Government
- Risk of more wealthy households benefiting more through their ability to contribute more cash
- Unavailability of hand pumps and other materials in rural towns and thus cost of some construction materials being higher than expected.
- Lack of a regional and national forums of organization working on water and sanitation that would enable sharing of experiences

Conclusions:

- The lesson from good practices in terms of policy priorities for achieving the water and sanitation Goals include: Increasing resources, increasing equity, increasing appropriate maintenance and limiting environmental damage
- As far as increasing resources are concerned, decades of experience have revealed the availability of low-cost technologies that increase household and community access to safe water and sanitation.
- Increasing equity requires sensitivity to poor people actual ability to pay for water and sanitation costs. Often wealthier households are not paying enough. Equity also requires the recognition that women and girls suffer more from difficult access to water and sanitation.
- Governments often fail to pay sufficient attention to the maintenance of water and sanitation delivery services. Sustainability finally limiting environmental damage requires rational water use-especially in agriculture.

Annex A5

WATER SEMINAR: 26-29 January 2004; Helsinki; FINLAND
CAPACITATING COMMUNITIES –SOUTH AFRICAN EXPERIENCES

Chamara Pansegrouw: Eco-Care Trust. South Africa

"The image of a rural women carrying a pot of water on her head while walking throughthe veld is an abiding picture of South Africa and one that the government is determinedto change through the provision of clean, safe water in homes and villages."
Ronnie Kasrils, Minister of Water Affairs and Forestry, 7 August 2000

1. WATER AND SANITATION IN SOUTH AFRICA

The last decade has seen the end of apartheid rule in South Africa. We come from a horrible past - one in which people were denied their basic rights, because of the colour of their skins. But all that has changed. We recognise that all our people have the right of access to sufficient water and basic services. The milestone of providing the 10 millionth recipients with water supply in 2004 is a clear indication that we are working towards meeting our targets and to fulfilling the human rights of the people in South Africa

Water, sanitation and hygiene are vital components of sustainable development and the alleviation of poverty. South Africa is one of the few countries in the world that **formally recognise** water as a human right. According to the Constitution of South Africa, 1996 (Act 108 of 1996), it is every person's right to have access to clean water. Our national water and sanitation programme, which is one of the largest national programmes in Africa, aims to deliver sustainability on that right

Since 1994 SA has made considerable progress in social and economic transformation. Social transformation was accompanied by a remarkable effort in the provision of social services to previously disadvantaged populations. In 1994 the new Government inherited a backlog of 14 million people without clean, safe water while 20 million people did not have access to adequate sanitation. Currently five million people still lack access to clean safe water, while 18 million people (in 3 million households) lack access to adequate sanitation.

Since 1994, within the frame of sound and innovative sector policies, 10 million people have been provided with access to basic water supply, over 1.3 million houses built to provide shelter to over 5 million people and 400,000 electricity grid connections made.

Government is on track to wipe out the infrastructure backlog for basic water supply by 2008 and for sanitation by 2010. We have already exceeded the target set by the Heads of State at the Millennium Assembly of the United Nations in 2000. (By 2015 the number of the world's population without access to basic water must be reduced by 50%)

However, sanitation progress has been much slower, but has now become a national political priority following a cholera outbreak in KwaZulu-Natal in 2000. In response to this wake-up call, South Africa aims to address the entire sanitation backlog by 2010

Although this represents a major development in the history of South Africa, many complex challenges lie ahead. Despite huge development potential, major constraints exist. The government introduced a program of radical social reform, but the inequalities of the apartheid era have not easily been eradicated. The cost of the years of conflict will be paid for a long time yet. Social trends**,** added to the apartheid backlog, help explain the scale of the past decade's challenges and some of the limitations in progress and development like:

- poverty
- crime
- transformation to local government
- challenges with service delivery
- involvement of communities in decision making
- lack of awareness and communication
- culture of non-payment
- the rise of new social movements
- HIV aids
- unemployment
- civil society participation
- the privatisation issue
- implementation of free basic water and sanitation
- traditional leadership and culture

These challenges are facing us as a nation in the Second Decade of our Freedom and are likely to affect not only the country's social and political stability, but also the development path it follows in our communities.

2. AWARENESS RAISING

The need for awareness and education in all communities (rural, urban and peri-urban) on water, sanitation and health cannot be overemphasized. Communities must be made aware and capacitated in taking responsibility for the management of their water supply and sanitation programmes. Unsustainable water use and unhealthy hygienic practices is often due to lack of knowledge and information, not understanding the resource, having no skills to manage it and a lack of affordable alternatives. With the right information and knowledge provided, all users should be in a better position to use water in a more sustainable manner and to make informed choices.

People tend to change when they understand the reason for change, and view it as beneficial. Unless their circumstances are taken into account, and their needs are met, no effort for change will be successful. People need to be informed and convinced, or they do not feel part of the effort. Involving beneficiaries at every level and stage of development-from identifying problems to finding solutions, from resource mobilisation to project implementation- is critical to the success of any development project.

Awareness creation on all levels is a recognised problem in South Africa. Critical research as revealed in the SA 10 year review document of 2004 states:" *There are weaknesses in those areas that are least dependent on direct government action, at the interaction with the public and in the supervision and management of implementation*" **Providing knowledge and creating awareness, in particular for the benefit of vulnerable groups, remains an important challenge and is a major obstacle to the active enjoyment of human rights of which access to water and sanitation is a part.**

Awareness and health promotion programmes can not be evaluated like an income generating or technical project where results can be measured in numbers and bottom line. Behaviour change is difficult to monitor. How do you know when someone has changed their behaviour and how can you tell which message, tool or intervention was responsible for that change? It is much easier and faster to fix a leak or replace a pipe, than to get someone to change and adopt a new practice.

It is at community level that real decisions on hygiene education should be made. But communities need information to be able to make decisions reflecting their particular aspirations, desires and needs. A successful development programme must effectively communicate with people- educating them about the connection between poor water, sanitation, hygiene practice and disease and why changes are needed. They must understand how flies, hands, food, the soil and water are able to make them sick. They must then learn that improvements are possible. Having learnt this, they need to desire the improvements and change. They must implement these changes themselves. Normally all these processes require time, patience, and persistence before people begin to desire change.

Why then, if imparting knowledge and creating awareness is recognised as a requisite for sustainable programmes is it still a problem in South Africa? Why is it that communities still lack knowledge of essential development information?

Challenges in the field of WSH awareness creation in South Africa are numerous to stress but a few:

- People and projects are under **pressure to perform and deliver**. Technical projects show figures and results much quicker and is a lot more visible
- Traditionally in practice on most water and sanitation projects 90% of the **budget** is allocated for technical and "hard" issues, which leave 10% for awareness creation, education and social issues—these interventions can hardly be sustainable
- There is still a lot of interventions where handing out pamphlets and putting up a few posters, count for a community awareness campaign
- Budget and financing of awareness creation and campaigns **seldom receives a high priority**
- Awareness creation and education should be **integrated in the project cycle** and should be coupled with **capacity building, skills training and values**
- Awareness should **reach and involve all stakeholders** and should always embrace **two way communications**
- **Moving from awareness to "action"** in a project is difficult for many reasons and can never be guaranteed. "Unbelievers" can argue it is too costly or too time consuming and sometimes people just don't want to see the benefits. We

all know the dangers of smoking, but millions of cigarettes are still sold everyday. People are always looking for immediate results. We need to be creative in showing people the benefits and making believers of them

- **Different messages for different audiences**. This is a crucial success factor in the development and planning of awareness campaigns and sadly ignored by most
- **The importance of timing** of awareness and education activities in the project cycle should be stressed. Social and technical aspects should be phased. If communities are involved too early, they may become disillusioned by the time lag in providing services, but if they are not involved early enough awareness messages and important information and technical inputs may not coincide
- Awareness activities and information messages need to be **scheduled around major project activities** with a **continuous flow of information**
- All resource material used in community campaigns should be quite visual allowing for the illiterate. Also—**simple and clear messages** proved to be more effective
- Traditional approaches often over-emphasize information and often neglect the **"real life" applications** of information and the role of attitudes and values, or the need for skills, especially related to sensitive issues and personal behaviour

However, the picture on creating awareness in the field of water and sanitation is not just bleak. There are several innovative and successful practices, of which three is recorded here:

ECO-CARE TRUST (MOBILE WATER CLASSROOM)

Eco-Care Trust, established in 1995, is a leading South African NGO on awareness and education in the water, sanitation and health sector, well known for their innovative and creative approaches to awareness and education

Their Mobile Water Classroom, the first of its` kind in Africa, using experiential and participatory learning as a base, proved to be extremely successful. The Mobile Classroom has been widely acclaimed as one of the most innovative development solutions of Africa.

Through its value based, participatory and integrated approach, communities are touched, leaving them with information, challenges, skills, options and a positive mindset regarding teamwork and solving problems.

A menu of different activities form part of an integrated programme

What makes the classroom so dynamic and multifaceted is the fact that:

- The Classroom set no limits or boundaries, presenting at a school, in the open field or under a tree –it's possible. This ensures that participants in far rural areas get exactly the same information and experience as urban participants. The classroom caters for all ages, gender and socio-economic groups. Everyone can participate, be challenged, enjoy and learn
- Content is presented through workshops, theatre, discussion groups, group development activities, participatory approaches, edutainment as well as experiential "learn by doing." activities. The Classroom proved itself equally

successful in the presentation of huge community awareness sessions, consisting of thousands, as in smaller focused, educational sessions

- Why use experiential learning and adventure activities as one of the mediums to promote water, sanitation and hygiene awareness? Experiential learning is a recognized method of motivating people, and a powerful medium of getting the message across. The word adventure implies some form of unusual activity, which involves challenge and risk. When facing your fears and most important of all to overcome them, with the help of your peers is one of the social or life skills objectives of these activities
- The Mobile Water Classroom is dynamic. There is constant interaction between the participants and the facilitators and two way communications turns every intervention into a research exercise as well. There are no set structures to follow; one can facilitate any subject or theme in a number of different ways to reach the desired outcome of the presented programme.
- It entertains and challenges participants-- learning should be fun and creative
- It highlights critical problems and solutions relating to water, hygiene, sanitation and conservation in their communities in an innovative way that challenges them, give them necessary information, urges them to think and lead them to find their own solutions based on their needs and resources.
- It motivates them to think about water in their own lives and in their community and make quality decisions
- It encourages everyone to participate, take ownership and get involved in ongoing projects relating to water, sanitation, health and hygiene
- It creates a positive atmosphere in which personal goals and aims can be stimulated and enhances self esteem
- It emphasize and illustrates the importance of teamwork and co-operation
- It builds leaders and capacitate people on all levels

SOUL CITY

Soul City is a dynamic and innovative multi-media health promotion and social change project. Through drama and entertainment Soul City reaches more than 16 million South Africans. Soul City examines many health and development issues, imparting information and impacting on social norms, attitudes and practice. Its impact is aimed at the level of the individual, the community and the socio political environment. Through its multi-media and advocacy strategies it aims to create an enabling environment empowering audiences to make healthy choices, both as individuals and as communities.

Every Soul City Series is made up of:

- A prime time television series – 13 one hour episodes
- A daily radio drama – 45 fifteen minute episodes
- Booklets – 3 full colour booklets per series
- A advertising/publicity campaign which keeps people talking and thinking about Soul City
- An advocacy campaign around one of the major topics

The television series is broadcast on South Africa's television station (SABC 1). The radio series is broadcast on all nine SABC regional radio stations (in nine of South Africa's official languages). It is also broadcast on many community radio stations.

The Booklets are serialised in newspapers throughout South Africa in synergy with the electronic media. The booklets are inserted into the newspapers at the end of the serialisation. They are also distributed through clinics and other government distribution channels, non-governmental and community based organisations, business and educational facilities. At least 3 million booklets are distributed per series.

20/20 VISION WATER EDUCATION PROGRAMME

In South Africa we have huge challenges especially in the area of water resource management and policies and strategies have been developed to overcome them. DWAF is also providing opportunities and opening up space for the youth to make their contribution towards such challenges. The implementation of a school based water and sanitation education programme called the "2020 Vision for Water", is but one measure through which the youth contributes to this important process of ensuring a better life for all.

This 2020 Vision for Water programme seeks to empower the youth with knowledge and water management skills, and will in turn enable them to participate to the integrated water resource management and other environmental programmes. It is through this programme that water and sanitation is integrated into the schools curriculum. This also demonstrates our commitment to support the implementation of the Outcomes Based Education (OBE).

The 2020 Vision for Water programme are instilling the values of water resource management into the future generation, our youth. These young people will in turn transfer this knowledge and skills to their parents and communities at large.

Children are better placed to change the mindset and educate the parents about water, sanitation and health. Most importantly, the programme is used to enhance the interest of youth in water resource management careers as well as promoting science, technology and research.

3. COMMUNITY MOBILISATION AND OWNERSHIP

Two decades of experience with participatory approaches, decentralization, cost sharing and technological adaptation mean that donors, NGOs and national governments have all the evidence they need that demand-driven community-led approaches delivers better results than the supply-driven government-led models that prevailed up to the 1980s

Globally a set of critical **elements for community ownership** was accepted:

- Promote a **demand responsive approach** where communities make informed choices regarding their participation, service level, and service delivery mechanisms

- Promote **institutional reform, based on clear roles for key stakeholders** where communities own their facilities, the private sector and NGOs provides goods and services, and government facilitates the process
- Ensure **appropriate legal framework** for ownership and management
- Implement RWSS projects within context of broader **community and local government development**
- Communities should be involved in project development since the **planning stage**
- Establish **financial policies** that underpin demand responsive approach where communities pay part of the capital cost in proportion to the cost of the facilities, and all operations and maintenance costs
- Support formation of representative **Water User Associations** for planning, implementation, and management of community water supply facilities
- Create **competitive environment** for allowing communities to access range of providers of goods and services for all aspects of the project cycle
- **Integrate water, sanitation and hygiene awareness and education** in RWSS projects
- Promote **user investment in sanitation** through public awareness and hygiene education, and strengthen private sector's ability to construct facilities
- Ensure representative and informed **participation** of all stakeholders
- Include clearly defined **capacity building** components that enable all stakeholders to play their roles and **build partnerships**.
- Set **rules to target poor, under serviced communities and vulnerable groups** in these communities
- Support **community-based environmental management** to improve living conditions and protect water resources

In South Africa, the Department of Water Affairs and Forestry was primarily responsible for rural water supply and sanitation. In 1994, after the election of the new government, the Department set up its Community Water Supply and Sanitation Programme (CWSSP), as one of the main components of the government's Reconstruction and Development Programme (RDP). The intention has been for this programme to expand the coverage of adequate water supply and sanitation to all rural South Africans over a 10 year period. The CWSSP was not founded on demand driven principles, but based on a nationally coordinated planning process

The Mvula Trust (a national NGO) was established in 1994, at a time when there was no effective government activity in rural water supply, enabling it to develop and implement its own set of policies and approaches. The national government supported this degree of independence and gave the Trust considerable freedom to experiment, within the broad directions of government policy. The Mvula Trust developed an approach to community management and demand responsiveness that, even after considerable modification over the years, is still practiced in South Africa

Mvula has adopted the core principles of the demand responsive approach, but adapted it to South African circumstances. They supported government's commitment to provide the infrastructure costs of projects and believes strongly in supporting the building of the capacity of local government to play a key role in service delivery. They insist, however, that communities initiate and make informed

choices about service options, based on their willingness to pay for the service and acceptance of responsibilities for subsequent operations and maintenance. Mvula is campaigning for community-public partnerships to ensure effective, sustainable service delivery.

As part of the transition after the end of Apartheid in 1994, democratically elected local government existed for the first time. **In terms of the constitution, the provision of services at local level is the responsibility of this third tier of government**, that being **District (Water Service Authorities (WSA) and Local Municipalities.** In the absence up until recently, of local municipalities, the Mvula Trust, National Government and other development organisations, have promoted the concept of what can be considered a fourth tier of government, namely **democratically elected village committees**, whose primary function is to operate and maintain services.

The **Water services authority (municipality)** is responsible for ensuring that infrastructure for reticulation is developed, operated and maintained. It may perform the functions of a water services provider itself (i.e. it may develop, operate and maintain the infrastructure, manage revenue collection and customer relations itself), or it may contract another water services provider to carry out this function on its behalf.

SUCCESS STORIES OF COMMUNITY OWNERSHIP IN SA

WATER COMES TO MORAPALALA:

THE 10TH MILLION RECIPIENT OF WATER:

Soverby, Curries Kamp and Bloemsmond are three rural villages situated between Upington and Keimoes next to the Orange River. These villages comprise 466 coloured families who form part of the Blocuso Trust. Small farmers from both these communities use small parts of land under flood irrigation to make a living. These farms are situated on islands and are usually inaccessible when the water level of the river rises. A more permanent source of income is from work on surrounding farms as well as pensions. Households who earn less than R1500 per month, are 81%, 91% and 92% respectively.

In 1991 the Saamstaan Farmers Union was founded by the 466 families from these communities. In 1996 the farmers union negotiated with the newly elected democratic government in South Africa for the R1 600 housing subsidy that was made available to formerly disadvantaged communities. In this process the Blocuso Trust was established and Soverby, Curries Kamp and Bloemsmond were bought.

Although houses were built, the community was still dependent on raw water from the Orange River. Donkey carts with 220 litre drums were used to transport potable water at a cost to the community.
In 2000 planning started for the provision of water to these three communities within the Kai! Garib municipality. The designs of all three settlements were done up to standpipe standard using the Department of Water Affairs and Forestry, (DWAF) RDP rural water supply design criteria. Blocuso Trust made available an additional R1, 5 million to extend the water supply systems to metered yard connections.

Difficult geographical circumstances and the vastness of the area and communities had a huge impact on the cost of construction. During construction local job creation involved more than 8000 person days and about R0.5 million was spent on job creation. Government, criteria of 30% women and 30% youth were followed strictly. Community involvement was emphasised throughout the execution of the project. Much effort was given to create awareness regarding water related issues such as water conservation. Local people were also trained and utilised during the project. A project steering committee monitored the process continuously. This project provided yard connections to 216 stands in Soverby, 171 in Curries Kamp and 71 in Bloemsmond.

Future plans include establishing a Cooperation, which will include the small farmers, and which will serve the area from Groblershoop to Riemvasmaak. The purpose is to enable the small farmers to buy shares and to market their products to for their benefit.

The Women of Winterveldt. (*May 2003)*

An innovative project aimed at improving health conditions by changing hygiene practices and improving sanitation is changing the lives of a community north of Pretoria. And women are playing a key role in that transformation.

The Winterveldt Community Sanitation Project was launched in 2001 "as it was felt that the full health benefits of the water project could only be fully realised with the implementation of improved sanitation". In line with national policy for rural and peri-urban household sanitation - which focuses on creating ownership of sanitation facilities by providing a household subsidy for on-site sanitation facilities - the project set out to help the Winterveldt community construct their own latrines. "The key objective of the project is to achieve health improvements in the community by changing current poor hygiene behavioural practices and improving sanitation facilities so that they are sustainable in the long term. This includes the development - through skills training - of an environment in which such facilities can be maintained and improved," Gadd said.

The project began with a pilot project in Ten Morgan, the most rural section of Winterveldt that includes 1 000 households. The lessons learned from this pilot project were then applied to planning for the other under-serviced areas of Winterveldt, covering over 23 000 households. To date, about 1 050 toilets have been constructed throughout the settlement. Gadd said that ensuring sustainability was vital. When the project needed to find builders, it ensured that not only experienced builders would apply, but also women with no building experience. "The advantages of appointing women as builders are that they are more likely than men to remain in the community due to household commitments and, as primary care givers, they are more able to communicate important hygiene and maintenance messages. Currently over 50 percent of the builders on the project are women." The community selected a "suite" of designs, with consideration given to their maintenance requirements, capital costs, water requirements and cultural impacts. The ventilated improved pit latrine was chosen.

"One of the key lessons learned during the pilot project is that trained community members, staff and builders involved in the project were capable of implementing the project with minimal external input and few significant problems,"

Movements like the Orange Farm Water Crisis Committee (OFWCC); and the Soweto Electricity Crisis Committee, mobilised the community against pre-paid meters, payment for services and privatization.

But what do the people say- wherein lays the real problem? 'The problem is not that we do not want to pay for water,' said Hilda Mkwanza, a 45-year-old mother of six who lives in Orange Farm. 'The problem is we cannot pay.' Nolulama Makhiwa, a 27-year-old mother of two living in Soweto said: "I know it is not good to take water from this hole," But I am not working. I have no money. What else can I do?"

The real question for sector role players at this time is how to actually ensure that water supply is sustained in the context of poverty, limited finances, insufficient knowledge and poor institutional support?

The cornerstone of the responses has been for strengthened community involvement and management, not an abdication of these roles and responsibilities. It would be impossible to say that "community management" does not work in South Africa, as it has never been implemented to its full potential

4. ENSURING SUSTAINABILITY

Sustainable development refers to an improvement in basic living standards, without compromising the needs of future generations. It implies economic development, social progress, political freedom, and care for the environment. The theme of the 2002 World Summit on Sustainable Development, which was held in Johannesburg, South Africa, was 'People, Planet, Prosperity'. Thus it is appropriate, given the current changes we are going through, that we should examine the progress that South Africa has made, and see if there are any lessons for us.

One of the best ways to ensure sustainability of services and sustainable communities is to get money into peoples' pockets on a sustainable basis. To make this happen we need to turn cooperative governance into a reality and make sure that our institutional frameworks are adequate. If we put people at the centre of our efforts, ensure that they are informed and supported; they will in turn support us to achieve our common goal of sustainable communities. Co-operative governance goes beyond the confines of government to include the civil society in the process of governance. A close working relationship needs to be established at this level, which should be able to assist government in supporting capacity and service delivery.

The process of building sustainable communities should be characterised, among other things, by the following –

- People should understand and know the structures and mandates regarding implementation and management of services
- People should know why they have to pay for services and how they can avoid paying too much?
- People should understand the processes and responsibilities
- People should understand the strategies like Free Basic Water and how it effects them

- Processes need to be simplified and a favourable environment be created for community participation and ownership
- We must ensure the implementation of our strategies and policies and the transformation effect they should have in terms of changing people's behaviour
- We must ensure sustainable delivery of services
- All people should understand and own the process of sustainable development

As our President rightly said: "The policies and processes might be there, but are people benefiting from them?" People can only benefit from what they know, understand and own.

In the Republic, government is constituted as **national, provincial and local spheres of government** which are distinctive, interdependent and interrelated.

For some considerable time, central governments around the world have been **decentralising financial, political and administrative responsibilities to lower levels of government**, and in some cases to the private sector. Worldwide political pressure to increase local control has largely been the driving force, with the potential for increased efficiencies as one of the spin-offs of the process.

South Africa has joined this process. The **delivery of water services is now the constitutional mandate of local government.** The local sphere of government consists of municipalities, which must be established for the whole of the territory of the Republic. **South African Local Government Association (SALGA) represents the interests of local government, in the country's intergovernmental relations system**

The Department of Water Affairs and Forestry's (DWAF), direct action programme has come to an end, as Local Government is now taking full responsibility for the delivery of water services. The role of DWAF has also changed. The Water Services Strategic Framework, approved by Cabinet in 2003, **gives the department the job of leading, regulating and supporting the water services sector.**

South Africa is going through major changes leading to challenges in achieving government targets, delivery of services, funding community water and sanitation projects, as well as participatory processes.

On the process of transformation to Local Government, a great deal still needs to be done. Since the initiation of democratisation of local government in December 2000, various steps have been taken towards achieving the intentions of the White Paper. However, assessments done by national and provincial governments show that there are still major challenges. Such challenges include inadequate capacity to drive service delivery programmes, particularly at municipal level. Recent surveys indicated that on any one-day, as many as 2% of South African households are not getting water from their normal source due to supply interruptions. This is problematic and local government's management capacity must be supported and improved.

The transfer of responsibilities to local governments could slow the delivery of services unless accompanied by an **adequate effort in capacity building**. Sustainability problems may emerge at the local level, where capacity constraints

may affect the maintenance of infrastructure and endanger in the medium term the delivery of services

Another issue that relates to local government's role in water sector management and infrastructure development is that from local government` side, officers and officials involved, are rightly concerned about the condition of projects they will inherit, especially if they have to take responsibility for unsustainable projects that they will have to sustain.

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Looking ahead, one must agree that it is difficult to transfer operational responsibility for water services in the poorest areas of the country from a relatively well-resourced national department to often weak local governments. While the problems are very visible, (through well-publicised public complaints and documented research), the success of the process will only be measured by the sustainability of services over the medium term.

Municipalities, now responsible for service delivery, want and have to be seen **delivering**. The delivery pace of the current models - both the sanitation programme of the Department of Water Affairs and Forestry (DWAF) and NGO driven community management models - is just not fast enough for municipalities. **So given a choice, South Africa might be back to the supply-driven, contractor based, one size fits all approach, ignoring the need for community participation, ownership and sustainability.**

Practice in South Africa **did attempt to transfer real power to communities**. At village level the effects of national changes are real, and there are changes in power and ownership, as the previous passivity under apartheid has been transformed into a sense of ownership and entitlement. We still need to address the issue of **structural inequalities within communities**, e.g. incorporating women, and ensuring that the water bodies are democratically elected and accountable. Project experience suggests that powerful sections of the community dominate development. There is a tendency for better educated men to be active in water committees. Women are still not consulted on all issues. There is a lack of conceptualisation of the term 'community'. Empowerment in South Africa is seen largely in terms of historically disadvantaged communities. There is not enough discussion of the inequalities - particularly **class, gender and ethnic differences** - which exist within communities, and this enables the marginalised to remain marginalised.

CHALLENGES FACING SUSTAINABILITY

- Local political, institutional and legal environment **may reflect supply driven rather than demand driven priorities**
- **Inadequate awareness** may produce negative results
- **Inadequate development information** available
- Sustainable **cross cutting issues** as identified by DWAF should be maintained (**appropriate technology, costing of water, maintenance and operations, gender mainstreaming, civil society participation, environmental impact assessment, communication and monitoring and evaluation**)
- Users may or may not give much weight to the long term, or to the **need to protect the environment**. In particular, vulnerable households and

communities may have understandably short planning horizons, whereas the improvements offered may have a life expectancy measured in decades

- With responsibility for water and sanitation provision shifting towards local government, NGOs should also shift their focus more to **capacity building and training**
- In the new municipal structure there are ward committees in place, playing much the same role as the previous community water and sanitation committees
- In local government project implementation processes, **community participation** is currently through representation on the Project Steering Committee
- Without an effective participation process, the **choice of preferences may be captured by local elite**, to the disadvantage of groups in the community
- Some local municipalities do not have the **capacity or resources to support the rural population.** Also, there may be pressure to focus scarce resources on more politically articulate and valuable urban-based populations in the district or municipality
- There is **considerable variety in the settlement conditions** and social and institutional relationships that occur in South Africa. This brings diversity in the way projects are actually run by different communities
- Community agricultural knowledge is considerable and is often overlooked by policy-makers. **Better understanding and documentation is needed of how local knowledge affects community decision-making** in the management of natural resources
- Given the complexities that often surround the delivery of water supply and sanitation to low-income communities, the **involvement of users or communities** in the planning and management of services is urgently needed. Although poor consumers are often perceived by utilities as being ignorant and apathetic, in many instances they have proven able and willing to help bring about change that responds to the needs they define. The misuse of utility facilities (e.g. vandalism, illegal connections) and non-payment of bills can only be addressed with their participation. Poor organizational capacity and lack of legal status marginalizes many community groups, and may be further undermined by ignoring them in decision-making
- The **involvement of the private sector in the provision of water and sanitation** services is currently one of the more contentious development debates As state agencies are scaled down and private companies take over their roles, there is a danger of losing public sector capacity in water and sanitation provision. Ultimately it is the government's responsibility to ensure that there is universal access to these essential services. While responsibility for service provision changes from public sector to the private sector, the poor generally remain in their old roles as invisible, passive recipients of development. Decisions and contracts are made for them, not with them and they frequently lack access to contract information. Calculations of the costs and financing of water and sanitation services often ignore the complexities of poverty. Increased tariffs to cover costs ignore the fact that poor households may spend proportionately 100 times more of their income on water expenditure compared to the better off. The costs of not having access to water and sanitation services are rarely examined. Mechanisms of

accountability are needed to prevent corruption and inefficiency, whether the operator is public or private

- Limited availability of internal and external **financing** for extending services to informal or unplanned areas is a further constraint. Most utilities direct their resources to formal or planned areas as financing agencies are not willing to risk their resources in informal or unplanned settlements. Inappropriate payment arrangements, pricing policies and tariff structures, combined with socio-economic factors such as low and/or irregular incomes, have further compounded the problem. This has led to a general perception that service delivery to low-income settlements is a loss-making activity
- **Communication** between the utility and low-income urban communities on a wide range of issues (e.g. planning and design, operation and maintenance) is not given sufficient attention, and/or inappropriate **information** channels/messages are used to reach low-income communities. The development of effective strategies to sensitize the public on key issues (such as paying for water, raising hygiene awareness, reducing vandalism and misuse of facilities) is uncommon and public or customer relations programs are not tailored to users in low-income areas

5. SOLUTIONS AND CHALLENGES FOR DEVELOPMENT CO-OPERATION

In many ways, the prospects for sustainable development around the world are more promising today than they were a decade ago. A global development agenda, agreed by all the world's countries, has now emerged, based on more than fifty years experience with development cooperation. With the Millennium Declaration and the Millennium Development Goals (MDGs) issued by the United Nations in 2000, the world community has committed to a set of clear and measurable targets for sustainable development.

South Africa has been privileged to enjoy, for the past 10 years, development co-operation with international partners, directly contributing to many rewarding development initiatives throughout South Africa. We have seen potable water reach some of the country’s most remote areas. Funding has helped to improve rural, as well as urban, health and sanitation services. It has given support to both government and NGOs, in the area of HIV/AIDS prevention and care. It has been used to replace squatters’ shacks with houses and schools have been renovated and equipped. But we have learnt that co-operation with donors do bring challenges. Based on what we learned in these initial projects, **the Masibambane Programme** was designed.

A key challenge was to ensure that donor assistance is effectively designed and managed to **support local development strategies** rather than leading in different directions. For this reason the Masibambane Programme was structured to achieve **co-ordination between the many bilateral donors** who have so generously contributed to our transition from apartheid as well as to support South Africa's own water sector programme, rather than to operate projects parallel to it. The Sector Wide Approach **harmonised donor requirements, minimised transaction costs and reduced delays**, ensuring that more of the money reached those for whom it was intended.

In September 2005, the United Nations General Assembly will convene for the 5-year Review of the Millennium Declaration to debate progress towards the goals set at the Millennium General Assembly of the United Nations in 2000.

Against this background, the Organisation for Economic Co-operation and Development (OECD), Development Assistance Committee (DAC) in collaboration with the UNDP, are convening a Senior Level Forum on Partnership for More Effective Development Co-operation, in February 2005, based on the conviction that greater dialogue and mutual understanding among the world's principal providers of development co-operation hold significant promise for progress towards the MDGs. The Forum will explore avenues for closer co-operation and coordination of development co-operation in the South and the North to enhance their individual and combined impact.

Central questions to be addressed at the Forum include:

- How can the development co-operation community best respond to the obligation/mandate to jointly work towards the achievement of the MDGs, and which areas hold most potential for closer partnership?
- What are the best mechanisms for the exchange of information so as to reduce overlapping approaches?
- How can we enhance coherence vis-à-vis beneficiary countries in delivering development co-operation?

I would like to quote and focus on the published background paper for this intended forum.

The Monterrey conference highlighted the importance of building partnerships among donors and developing countries as a means of making more effective progress towards the Millennium Development Goals. It specifically called on development co-operation agencies to intensify their efforts to: Harmonise their operational procedures at the highest standard so as to reduce transaction costs and make ODA disbursement and delivery more flexible, taking into account national development needs and objectives under the ownership of the recipient country. The management of different donor procedures bears a high cost for developing countries – especially the poorest and most aid-dependent. For example, meeting multiple donor requirements employs a significant proportion of developing countries' administrative capacity; it impairs ownership over partners' own development plans and weakens capacity for effective public management. This is why the Development Assistance Committee (DAC) of the OECD set up a special task force to look at how aid can be delivered more effectively through simplifying and harmonising donor procedures. The Task Force invited sixteen developing countries, representing different geographical areas and at different levels of development, to participate in the meetings.

The first objective of the survey was to identify donor practices that placed the highest burdens on partner countries in terms of ownership, aid transaction costs and

aid effectiveness. To this end, each respondent was asked to name the three most important burdens with regard to effective aid delivery

The main finding substantiated by the survey is the sense that there is a significant lack of national ownership. This has been defined in the survey as partner governments' ability to design and manage its own development plans while relying on development assistance. The survey also confirmed what many people in the donor community already knew – managing different donor procedures is a major burden for partner countries. Both lack of ownership and the cost of uncoordinated donor practices are brought to bear on partner countries in different ways. This is briefly described in the following paragraphs:

● **Donor driven priorities and systems** – This was the most frequently mentioned burden in all of the countries surveyed. It covers two related dimensions. The first concerns the pressure donors bring to bear on partners' development policies and strategies. The second refers to donor aid management systems that are designed to meet mainly donor requirements rather than to support national needs and priorities. One issue particularly highlighted in the survey was donor reliance on parallel management systems and "ring-fencing".

● **Difficulties with donor procedures** – This burden refers to the intractability's encountered by partner countries when complying with specific donor procedures. Respondents highlighted procurement and technical assistance as the two main areas that challenged partner administrations. This category also includes problems associated with donors changing their systems, policies and staff.

● **Uncoordinated donor practices** – Many respondents put forward difficulties in understanding and fulfilling the multiple, diverse requirements of different donors. The problem is particularly acute when competing donor systems are making duplicative demands on partners' administrations. This is the case, for example, when different donors co-funding the same activity all require different reports at different dates to meet their own accountability requirements.

The second part of the survey examines key areas where respondents felt reforms would most contribute to improving the effectiveness of development assistance. The initiatives suggested by respondents are consistent with their perception of the main burdens. They reflect the need to strengthen national ownership and address the problem of the high transaction costs arising from multiple and uncoordinated donor practices. The first four of the suggested initiatives are briefly described below.

● **Donors should simplify their procedures** – Simplifying donor procedures were mentioned, in almost all countries, as the most important initiative for reducing burdens. It offers partners and donors a number of advantages. It meets the objective of diminishing aid transaction costs while eluding the cost of negotiating common or harmonized procedures.

● **Donors should harmonise their procedures** – Different modalities for achieving better harmonisation were put forward, including the suggestions that donors should agree and adopt a common set of procedures, or donors should rely on one another for specific tasks (delegated co-operation).

● **Donors should align procedures on partner systems** – One specific modality for harmonising donor procedures is when donors align their procedures on those of the partner country. It was suggested that this should be seen as a medium term process that may comprise a number of intermediate steps. The first step involves, for example, donors synchronising their procedures with partners' key policy cycles

(*e.g.* budget cycle). The concluding step is reached when donors fully rely on partner systems. This process requires close co-operation between the donor community and the partner country.

● **Donors should be more transparent** – It was noted that donors should increase the level of communication between themselves and with government. Donors and partner governments should share more regularly information on planned and ongoing activities, procedures, reports and evaluation results. This could improve the effectiveness of aid activities and also benefit co-ordination efforts while reducing duplication of activities.

In recent years, donors have given a renewed emphasis to the importance of their relationships with partner governments and, in particular, to placing nationally designed country strategies at the heart of the development process. This trend has been strengthened by the development of nationally owned poverty reduction strategies and similar approaches which emphasise the responsibility of donors to make the exercise of this ownership effective. They also emphasise the need to change the nature of accountability so that donor requirements support national systems. The principles' underlying this new approach to partnership follows. They reflect priorities identified in the DAC's Guidelines on Poverty Reduction (2001) and adopted by the international community in the Millennium Declaration and in the Monterrey Consensus.

Partner countries have legitimate interests in autonomy of action, and in transparency and predictability of aid flows. Donors have legitimate concerns regarding good management and the impact of their aid. This can create a tension between the good practices of promoting ownership and partnership with partner governments and the desire of donors to ensure that aid is used for its intended purposes and helps promote reform. An effective aid relationship requires a donor and partner government to build a working consensus on objectives and strategy. This is easier when the latter has a definite strategy, clearly presented and implemented. Where government capacity is weak, a challenge for donors is in assisting partner countries to develop a nationally owned strategy. Poverty reduction strategies are increasingly the focus of strategic agreement, provided they link into the country's own planning and budgeting system.

A further challenge for donors in building partnerships is to reach a clear agreement with partner governments on how a government's performance will be assessed and how this assessment will be used to determine aid flows. Transparency and predictability about aid flows enhance trust between donors and partner governments.

These challenges suggest the following good practices in creating an effective donor-partner relationship where a shared understanding of objectives and strategies exists:

●**Set out the objectives and operations of individual country programmes and make these widely available** – Donors should set out the objectives, and indicative operations they plan to support, for each of their substantive country programmes. In developing these, they should:

- Consult partner governments on the consistency of the proposed operations with a partner government's poverty reduction strategy or equivalent national framework

- Base the analysis of a country's development needs and potential on the partner government's own analysis in its poverty reduction strategy paper or equivalent national framework
- Share the key proposals for support with the partner government, other donors and civil society.
- An explicit, open, country programme that draws on common analysis and takes account of partner government objectives can help reduce the risk of inconsistency or duplication in donor support in a partner country

● **Multi-year programming of aid** – Donors, wherever possible, should programme their aid over a multi-year timeframe that is consistent with the financial planning horizon of the partner government, and are transparent about the circumstances under which aid flows may vary. The combination of longer term and more predictable finance enables partner governments to have more trust in the reliability of donor finance – this is needed to plan increases in service delivery capacity, and facilitates macroeconomic management.

● **Use common performance indicators** – Donors and partner governments should agree on performance indicators that are simple, measurable, prioritised and easily verifiable. Where donors are funding the same operations they should use the same performance indicators.

● **Build a common framework for aid co-operation** – Donors and partner governments should agree a framework for review and monitoring their assistance and seek to incorporate it into multi-donor review and monitoring processes such as consultative forums and a partner government's review processes, as part of building a common framework for aid co-ordination

● **Provide full information on aid flows** – Donors should provide partner governments with full information of aid flows. This should be done regularly and in a timely manner. This enables partner governments to integrate aid into macroeconomic and budgetary management and to publish details of aid received

● **Support leadership in aid co-ordination by partner governments** – Donors should support leadership in aid co-ordination by partner governments, in order to link aid to development planning and budgeting processes. Partner governments should lead the overall consultative institutions, including organising and chairing consultative groups, high-level meetings, working groups and similar arrangements, and providing the secretariat. This requires adequate staffing, resources and appropriate location within the government structure. Where necessary, donors should be prepared to support the co-ordination process financially and technically. Donor support of partner government leadership should be undertaken in a way that enables donors to continue to consult civil society and representatives of the private sector of the partner country on aid partnership issues.

"(Harmonising Donor Practices for Effective Aid Delivery: Good Practice Papers *A DAC Reference Document)*

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7. LIST OF ABBREVIATIONS

SA	South Africa
WSH	Water Sanitation and Health
NGO	Non Government Organisation
SABC	South African Broadcasting Corporation
DWAF	Department of Water Affairs and Forestry
OBE	Outcomes Based Education
RWSS	Rural Water Supply and Sanitation
WUA	Water User Associations
CWSSP	Community Water Supply and Sanitation Programme
RDP	Reconstruction and Development Programme
CBO	Community-Based Organization
WSP	Water Service Provider
SSA	Support Services Agent
ISD	
OFWCC	Orange Farm Water Crisis Committee
APF	Anti-Privatising Forum
MIG	Municipal Infrastructure Grant
DPLG	Department of Provincial and Local Government
SALGA	South African Local Government Association
LFWP	Leon Foundation Water Programme
MDG	Millennium Development Goals
OECD	Organisation for Economic Co-operation and Development
DAC	Development Assistance Committee
DFID	Department for International Development
O&M	Operation and Maintenance
PHAST	Participatory Hygiene and Sanitation Transformation

Annex B: Findings and recommendations of the working groups

Group 1 / Session 1: Integrated water resources management

The concrete possibilities to approach numerous social and environmental entities to globalisation are unique. Thereby, the Water Seminar presents two recommendations to the Finnish development co-operation in the field of water resources management. They are:

1. ***Water's cross-cutting and catalysing role in development should be recognised in development co-operation in the sectors such as health, agriculture, forestry, environmental management, political and environmental security, rural development and many others.***

2. ***Integrated Water Resources Management should be adopted as the basic approach in working towards socially and environmentally sensitive water resources management in the globalising world***

Water as a strategic resource

Water is one of the most strategic natural resources. It is intertwined in the everyday life of human beings in countless ways. The importance of water as a driver for health, food security, and quality of life and as a pillar for economic development is unique. As water affects human lives, the mankind also effects the hydrological cycle of this planet, in all dimensions from the very local to the global scale. The production of one kg of grain consumes 1000-4000 liters of water. Food production—although not being enough for all—already accounts for 90% of water use in developing countries. Hydropower production by damming rivers evokes grand emotions, yet sustainable energy production is among cornerstones of economic development. The damage caused by floods and droughts is escalating. The human impact on ecosystems is catastrophic in immeasurable ways. Water is largely a political good since a bulk of the mankind lives in river basins shared by two or more nations.

Water as a cross-cutting and catalysing issue to development

The Development Policy Programme of the Government of Finland defines poverty reduction as the primary goal for Finnish development co-operation. This goal will be supported by mitigating environmental threats, promoting social equity, human rights, democracy and good governance, global security and economic interconnections. Water is a backbone of economy in very many countries of the world. Water resources management provides the foundation of the agricultural sector, much of the energy sector, an important part of urban infrastructure, health care and many other functions of the society. Economic growth is desperately needed in poverty reduction, but growth alone is not sufficient. The well-being must reach the poor, otherwise the growth only polarizes the economies. Water's role is very important in this complex interplay. Besides being an important fundament to many economic sectors, water is also a key to meeting many of the basic needs that are in turn instrumental in poverty reduction.

- *Water:* the more important economically the poorer the nation is.
- *Environmental threats;* by far the most detrimental environmental catastrophes are floods and droughts. Water is the main carrier of environmental pollutants. It is also the major agent in the global erosion, desertification, biodiversity decline and climate change problems.
- *Traditional societies and the traditional sector:* Their economy is tied with nature and very closely to the water cycle.
- *Informal sector:* water is a key constraint to a decent livelihood in the rapidly growing informal sector. Particularly in urban conditions the challenges are soaring.
- *Agriculture:* Accounts for 70% of all water use by humankind. In most developing countries the share is over 90% Water nature, infrastructure, technology etc are the backbone of the economy.
- *Industry:* In large part of the world (in terms of population: China, Southeast Asia, South Asia…) industry is developing more rapidly than ever before. Many industrial sectors rely on water. Pollution challenge is enormous.
- *Energy;* The Johannesburg Plan of Implementation defined the increase in the share of renewable energy sources as the primary goal of the energy sector. It is fundamental to understand that 96% of the contemporary renewable energy production comes from either biomass or hydropower. These both rely completely on water resources management.
- *Services:* For many service industries such as tourism—which is the fastest growing industry sector of the world—water is elementary.
- *Security:* a rapidly increasing number of conflicts, particularly internal to a country, are related to the shortage and degradation of natural resources. In addition, international river basins are conflict-prone in many parts of the world. Water resources management can help mitigating such problems.
- *Economic growth* is necessary to poverty alleviation, but does not guarantee poverty alleviation. Distribution of wealth is necessary. In economic terms, care must be taken also of not very profitable sectors such as (capital intensive) food production.

Water has been often called as the blood of the planet earth. Thereby, water has a unifying element in natural ecosystems. Finland has signed several international environmental commitments such as those for climatic change, wetland conservation, biodiversity and desertification. It needs not much imagination to realise that any change in the hydrological cycle or in water quality affect all the problems that are regulated by these agreements. Management of any of the issues mastered by these four agreements remains thin without mastering water.

The IWRM concept

Integrated Water Resources Management (IWRM) has been recommended as a general conceptual approach to water resources management in several recent summit events of the United Nations and other organisations, such as the Johannesburg Summit and World Water Forums. It is defined as:

IWRM is a *process,* which promotes
- the *co-ordinated development and management*
- of *water, land and related resources,*
- in order to maximise the resultant *economic & social welfare*

- § in an *equitable* manner
- § without comprising the sustainability of *vital ecosystems.*

In other words IWRM is based on the so-called 3E principle: waters should be used to provide *Economic* well-being to the people, without compromising social *Equity* and *Environmental* sustainability. Waters should be managed in a basinwide context, with stakeholder participation and under the prevalence of good governance. Thereby, the IWRM *aims at developing democratic governance and promotes balanced development in poverty reduction, social equity, economic growth and environmental sustainability.*

The inclusion of IWRM as one of the standard components of Poverty Reduction Strategy Papers has been discussed lately. IWRM aims at developing democratic governance and promotes balanced development of water resources for poverty reduction, social equity, economic growth and environmental sustainability.

The Finnish expertise and value-added

Finland has a long-term experience in water resources management in several key areas required in order to support the two recommendations submitted.

1. Educational: Finnish universities have been active in research and education of these aspects for decades. The most recent references are the internationally recognised research on IWRM and water governance in Africa and Asia[9] as well as the long-term educational experience of the Finnish Technical Universities. In addition, these universities have participated in several Finnish ODA projects over the years, for instance concurrently at the Lower Mekong Basin Project with a combination of planning, education and research activities.

2. Administrational: Finland has initiated the integrated management and planning processes to watershed management already in the early 1970s. Ever since, this activity has been institutionalised very much along the lines of contemporary United Nations recommendations. The core organisation in this respect is the Finnish Environmental Institute (SYKE) and its regional units.

3. Consultation: Finnish consultation companies, some NGOs, SYKE and Universities represent a broad experience in multidisciplinary and integrated water resources management. This contribution has been recognised and appreciated as being of very respected and high quality in target areas such as in the Mekong Basin. Approaching the issues related to the social and environmental entities of globalisation through the two measures would provide the maximum amount of added value due to Finnish development co-operation.

Group 1 / Session 2: Capacity building

Capacity building is an absolute necessity for development of water sector. It is a long-term process that needs to build on the local realities and existing education systems. Capacity building is not a one-way process but it brings significant benefits to Finland, too.

These are the main issues that were commonly agreed within the Working Group 1 when discussing the different aspects of capacity building in water sector, and Finland's role in it. It must be pointed out that although the discussion focused on capacity building of human resources, there are also other dimensions of capacity building, most importantly institutional and material capacity building.

Two aspects of capacity building

The diverse discussion evolved around the two different themes that were recognised as two main aspects of capacity building:

- Short-term, practical project aspect
- Long-term, academic aspect

The short-term aspect is a more practically orientated, and consists for example of awareness campaigns or technical training, typically within a project framework. This aspect thus builds capacity at the different levels, starting from the grassroots level by e.g. promoting better practices on sanitation, and reaching through middle-level planners up to managerial and decision making level where capacity is build to facilitate problem-solving of present day's water challenges. This aspect thus also builds capacity for the important intermediate technical and management skills needed in project management, implementation and planning.

The long-term aspect is more academic as it deals with capacity building in the universities and research institutions where the future capacity is essentially built and where the "champions of the development" come from. The importance of this longer-term aspect was strongly emphasised by the non-Finnish (African) members of the working group. It should be built on the existing educational system in the country, and include e.g. development of university curriculum, and exchange of teachers, researchers and students. The best way to do this is through long-term cooperation between the universities in Finland and the partner country. However, expatriate expertise is not necessary in all cases as the capacity and knowledge already exist in the partner countries.

It was agreed that these two different aspects are not competing but complementary, and they should be closely interconnected – a task which is not easily done due to differences in their time scale and focus. The task is further complicated by the lack of capacity and experience in Finland to handle these interconnections, particularly in the context of developing countries.

Two ways of capacity building

It was agreed that capacity building can benefit enormously from the cooperation –sometimes even collision– between two different kinds of cultures as this can result in new, creative ideas and approaches that are needed in the increasingly complex and multidisciplinary water

field. This kind cooperation together with overall cultural exchange benefits directly also Finland as it enriches the insight and knowledge of Finnish water experts alike.

This kind of multicultural understanding was regarded extremely important in today's fast developing and increasingly interconnected and globalising world, bringing also the capacity needed for the planning of implementation of capacity building in developing countries. A special emphasis should be put to involve and include also younger water experts and even students in water projects and programmes.

Thus, capacity building should always be seen as a mutual learning process where both Finland and partner country have a lot to gain.

The way forward

How to interconnect the two approaches described above? The Ministry for Foreign Affairs has the main responsibility for this, as it should coordinate that the two approaches are in coherence with each other. One way to increase the coherence is the increased cooperation between the consultancy companies, ministries, NGOs, research institutions and universities also in actual project and programme level.

Universities were seen to have an essential role in both long-term and short-term capacity building, and they should thus be used as one central bridging factor. Civil society, on the other hand, has an important role in capacity building in grassroots level and with more informal capacity building, as NGOs often have long-term experience on working with the communes and villages using participatory methods. The role of multilateral organisations such as the UN agencies was also seen increasingly important, as the shift from the project approach towards sectoral and budget support grows in most cases their role in planning of education and capacity building.

In addition, the capacity building is an extremely wide issue that is needed in every sector and that crosses the traditional boundaries between different sectors. Thus, cooperation between the different projects and programmes in different sectors has to be enhanced as well. Particularly important this cooperation is with the education sector. Finally, capacity building within a water project should be performed not only through training and workshops, but also through the actual hands-on work, which is achieved only when local actors and institutions are an essential part of each project from the planning phase onwards.

Drawing from above, there are **five main recommendations** for the Ministry for Foreign Affairs regarding the capacity building in the water sector:

- Need for long-term perspective, commitment and funding for capacity building
- Include capacity building component as an integral part of every water project and programme
- Increase cooperation and coherence between short- and long-term aspects of capacity building
- Increase resources for long-term university cooperation between Finland and partner countries
- Better cooperation between different sectors, most importantly with other capacity building and education programmes such as CIMO's NorthSouth-programme

Group 2 / Session 1: Water and Sanitation as Economic Goods

Introduction

WG discussed first whether to tackle "water" as broad as possible or narrow it to water supply and sanitation. The narrower approach was chosen.

The group decided that the main objective for the session was to answer the question " How can Finnish cooperation support the Partner Countries?. Any recommendations should meet following two criteria: (i) important to the partner country and (ii) have a Finnish value added.

Following issues/view points were brought up by the participants:

1. Water administration is fragmented. Linkage between institutions and economic productivity of water weak, capacity, credibility and legitimacy of institutions weak.
2. Market failures and water.
3. What are the key factors which contribute water as economic good?
4. Social dimension of water as an economic good.
5. Linkages to human rights based approach.
6. Definition of water as an economic good.
7. Linkage of political dimension to economic value of water.
8. Cost recovery policies.
10. Water as a global good
11.Water and security as key element and key value of water.
12. Linkage of poverty and cost recovery of water, smart subsidies

The following three topics were chosen for further discussion:

- *What is the definition (justification) of water as an economic good?*
- *Institutions, capacity, credibility and legitimacy of institutions*
- *Water as an economic good, tariffs, subsidies, cost recovery*

What is the definition (justification) of water as an economic good?

(i) benefits to health
(ii) productivity, quality of life, improved individual capacity for economic activities
(iii) input to industrial production
(iv) factor for household income generation
(v) factor (leverage) for education
(vi) environmental benefits of improved sanitation

Areas of support for Finnish Cooperation?

Institutions, capacity, credibility and legitimacy of institutions.

(i) Urban water utility
(ii) Ministry of Water
(iii) Parliament
(iv) City Councils
(v) CBOs, NGOs

(vi) Regulators
(vii) User groups
(vii) Legal System
(viii) Industrial Associations, Chambers of Commerce
(ix) Ministry of Finance
(x) Ministry of Health
(xi) Ministry of Health
(xii) Water services (Consultants etc and their associations)
(xiv) Donors
(xv) IFIs
(xvi) National funding institutions
(xvii) Transboundary Basin Commissions
(xix) Informal institutions

How can Finnish Cooperation support the institutions?

Supporting the creation of enabling environment by:

(i) legislation and regulatory framework
(ii) communications
(iii) institutional analysis
(iv) HR and capacity building
(x) policy framework
(xi) advocacy
(xii) transparency
(xiii) cross country learning, experience sharing, knowledge management

Water as an economic good, tariffs, subsidies, cost recovery.

Sensible cost recovery is pro-poor.

Cost recover policies are pro poor, when it knows who are the poor, owned by users, by community, is linked to affordable service level, and choices, transparent infrastructure cost, supports the ultra poor, sensitive to social, cultural (sanitation) and gender issues, supports livelihoods, finds mechanism for cost effectiveness like community procurement, integrates different actors of service providers, is dynamic and reports back to users/communities, fosters and promotes scaling up services for the poor.

Finnish cooperation can help in/by:

(i) improving reliability of services to the poor
(ii) development of knowledge base
(iii) economic efficiency instruments, policies
(iv) support to financial institutions
(v) providing transitional subsidies
(vi) governance, transparent, democratic decision making
(vii) advocacy in makro PRSP the importance of pro poor cost recovery policy

Group 2 / Session 2: Partnerships in Water Resources (Irrigation, Hydropower, Water, Sanitation)

1. **What is meant by Partnerships?**

"Formalized cooperation between partners that promotes mutual benefits"

How Finnish Development Cooperation can support?

2.**What are the strengths of Finnish Water Sector partners?**

Partnerships	Partners	Purpose
Transboundary water commissions	Fi-Swe, Fi-No, Fi-Ru	Management of transboundary rivers
Helcom	Countries of Baltic Sea Catchment area	Monitoring, promotion, clean up of the Baltic Sea
Lake Associations	Landowners	Managing fisheries, environmental monitoring, clean up
Water cooperatives	Municipalities (small)	Providing water services
Municipal Cooperatives	Municipalities	Construction, O&M
Associations of NGOs	NGOs	Knowledge sharing
Finnish Water Utility Association	Utilities	Knowledge sharing
Sister City Cooperation	Cities in various countries	Knowledge sharing
Industry Associations	Industrial plants	Knowledge sharing, bench marking
Finnish Local Government Association	Municipalities	Knowledge sharing, advice,
Association of Consulting Engineers	Consulting firms	Knowledge sharing,

3. Possibilities

1. Mixture of players, Municipalities, Private Sector, Banks (like Finnfund)

2. In country utility to utility twinning including NGOs

3. Public - Public partnership. E.g public water utility providing capacity support to a public utility.

4. Private-Private, industrial associations, associations of consulting engineers

5. Educational partnerships (e.g. University to University cooperation)

6. Labor associations

7. Forest industry /Industrial Associations

4.**Analysis**

	Challenge	Solutions	Expected benefits
Networking of Local Government Associations	Low capacity at local level, requires long term commitment, takes long time to get the partnership operational, requires external catalyzing support. Monitoring is difficult. Who keeps the initiative in track (consultants)?	Concepts at union level, step by step approach, build on what is available, select limited topics in the beginning, plan and scale up, when partners are ready	Capacity building, facilitates knowledge sharing and change. Networking reduces vulnerability.

Group 3 / Session 1: Development of sustainable basis for water infrastructure

It was agreed by the working group that water infrastructure developments can only be successful, if they will have a beneficial impact on target communities, and if this impact will be long-lasting, i.e. sustainable. Unless these requirements are likely to be met, there is little point in carrying out environmental, economic, and other appraisals with a view to subsequent implementation.

Unfortunately it is a fact that many water projects in developing countries have failed to deliver benefits to communities over the long term. These failures have often been due to poor understanding of the issues of impact and sustainability. A sound, practical, analysis of these two concepts must include:

- a clear understanding of the present water and sanitation problems faced by communities
- identification of the potential benefits which can be delivered by improved infrastructure
- monitoring and quantification of the actual benefits experienced by users and consumers.

In a very simple way, sustainability can be defined as "whether or not something continues to work over time". The continuity involves both continued delivery and utilization of the services. The most frequent causes of non-continuity (or non-sustainability) are as follows:

- a large number of community members have never been adequately motivated to use the new system
- the financial share of the community itself has been unacceptable or unaffordable
- community may never have felt ownership of the new infrastructure
- the repair and maintenance of the system have not been properly organized
- benefits promised at the outset of projects have failed to materialize
- attitudinal and behavioral education in the community has been inadequate
- the community-level organization has been improperly established.

The working group tried to answer the question: **How should the Finnish development cooperation in the water issues be developed in order to enhance the sustainability of its results?**

Several subquestions were discussed on a general level. What is the fair share of Finland – will it be enough to arrange adequate water supply and sanitation for 5 million people, which is the figure often stated as Finland's share – or should it perhaps be up to 20 million? The group did not have a clear view on this question.

Should the focus be in Asia or in Africa? The group did not either make a clear preference among the countries on these two continents. It was noted that the expectations from Finland have been somewhat different in east and south; in our cooperation countries in Asia it has been assumed that Finnish experts have the solutions to almost any kind of water problems. However, it should also be remembered, what the Nordic countries don't have. For example, the expertise in irrigation development is not extensive, perhaps with the exception of Denmark.

It was further discussed, if Finland should concentrate more on the reform of institutional structures instead of engineering solutions. It was concluded that both are needed, and Finland has high level of expertise on both of them. In the case of engineering, the constructions ought to be affordable to the community members, and a fair share of the costs should be covered by users.

It was considered important that the work in water issues clearly enhances democratic development in the cooperation countries. This also supports effectively the poverty reduction, which is a main target in all sectors.

The group agreed that a broader perspective outside water sector is necessary in our cooperation in water issues. It is particularly important to take into account solid waste disposal and hygiene, but the view ought to extend even broader, remembering poverty reduction in all decisions.

A strong partnership between all stakeholders should be created in every water project and programme. A strong commitment of community members is a necessity. There should be a water board or any other community-driven organization, which is flexibly structured according to local conditions. A respect of community members is important, they often have much more potential than generally expected. It was also pointed out that sometimes the local administration is a problem; they don't respect the traditions and knowledge of the communities.

A strong **local** ownership of structures is needed, it is a necessary factor in enhancing the motivation of community members. At the same time, the economic basis of people should be strengthened. Even rather uncostly solutions may turn out to be unaffordable in present conditions. As an example it was cited that e.g. in Cambodia, the cost of water may easily equal the salary of a civil servant.

The choice of technical solutions in water issues should be wide and flexible. The group discussed some solutions, noting that e.g. ecosanitation is one tool to be considered, sometimes perhaps the only workable solution. Trends of technology, both low- and high-tech, should be carefully followed.

Particularly in sanitation, education and training are very important. The community school should have the highest preference – build the first latrines in schools! Pupils can also be used as home educators in hygiene issues to their parents.

The lack of education is also reflected in improper use of pumps and other structures. This, together with intentional damage, has in too many cases led to a complete collapse of WSS systems. The
NGOs definitely have their place in education in this field.

Decision-making in water cooperation is not an easy task. The group felt that the task of decision-makers could be made a little easier by a stronger scientific basis for decisions. Mathematical tools for this purpose have been widely developed also in Finland in recent decades.

Group 3 / Session 2: Projects or programmes?

Project-based approach has not taken sufficient account of factors like

- weak institutions
- deficient policy-making and implementation
- inefficient financial institutions
- inappropriate economic policy
- corruption

"Far too often, projects have done little more than created temporary islands of happiness in an ocean of misery."

Sector-wide Approach (SWAp) = a holistic approach linking investments in water infrastructure, aiming at ensuring sustainable sector development

- it allows all partners to contribute to a national development programme, instead of piecewise project work
- it increases donor coordination, reduces overlapping and duplication
- it enhances the uniformity of government practices and reduces the administrative burden
- a variety of funding modalities are available:
    - earmarked budget support
    - basket funding with other donors
    - funding through NGOs and private sector

SWAp typically consists of e.g. the following activities:

1. A survey to understand socio-economic situation, water sector situation, poverty structure etc. in the target communities

2. Meeting and planning workshops with the community members

3. Formulation of plans, with a particular emphasis on community motivation, construction planning, institutional strengthening, training for operation and maintenance

4. Carrying out preparatory activities (on the same topics)

5. Construction of WSS facilities, procurement of equipment

6. Monitoring and evaluation, follow-up sessions

The working group had a discussion on a variety of topics related to the comparison of project-type and SWAp-type approaches. It was agreed that the present approach in Finnish water cooperation has already advanced far beyond the basic mistakes presented above. Thus the recent projects have created "islands of happiness", which have many aspects of SWAp approach, and SWAp has actually been piloted in many projects. In addition to a gradual shift

in projects, this has been due to the development in administration, attitudes and other relevant issues in our cooperation countries.

It was emphasized that SWAp does not mean a centralized system; on the contrary, it consolidates the participation and enables the resource allocation at the community level. At the same time, it consolidates the efforts of different actors.

As to the readiness of different actors, the group agreed that there are still a number of Finland's cooperation countries, which are not ready for SWAp. And even in countries with highest level of readiness, there are groups and sectors, which are insufficiently prepared. In addition, the group was not fully convinced on the preparedness of donor countries and organizations either. For example, the question was raised: how far does Finland or other EU countries like to go towards the basket funding?

The group listed pre-conditions for the successful application of SWAp as follows:

- the availability of a well-defined strategy for the sector
- good governance and decision-making structures
- regulatory base, legislation and enforcement mechanisms (e.g. policy instruments and tariff base)
- efficient monitoring system, separated from implementation

As to the implementation of SWAp, the following requirements were listed:

- definition of roles and responsibilities between different stakeholders (central and local governments, private sector, NGOs, CBOs, research institutions)
- adequate means should be available for stakeholders to realise their roles
- mechanisms of accountability, efficiency and transparency should exist or be created
- external monitoring and evaluation of project impacts, which should also be quantified

Group 4 / Session 1: Cultural and gender perspectives of water and sanitation

Background presentation: Cultural and gender perspectives of water and sanitation / Sirkka Haunia

CULTURE

- © culture includes
- © values; such as religions, ethics, norms, myths, attitudes
- © practices; such as traditions, gender roles, games, bureaucracy
- © institutions; such as education, primary health care systems, community based natural resource management, village water committees, religious institutions
- © **Cultural analysis** is a methodology which can be used to understand how a development programme interacts with culture

GENDER

- © identifies the social relations between men and women
- © “refers not to men and women, but to the relationship between them, and to the way this is socially constructed"
- © Mindsets need to change:
- © gender is as much about transforming men's attitudes and responsibilities as it is about women's status and access
- © **Gender Analysis** is a tool to make sure that one has real information to base one’s activities on, not on assumptions. It is a systematic way of looking at the different impacts of development on women and men.
- © Efforts should be made to
- © ensure that gender mainstreaming addresses all levels, from national policies to end-users
- © strengthen targeted advocacy at all levels, and provide additional resources (time, authority) to people responsible for gender mainstreaming
- © realign traditional cultural perceptions of male and female roles and responsibilities to facilitate greater sharing of household tasks/duties, and to free up the time and talents of both men and women for water management

GENDER MAINSTREAMING

- © widely accepted tool for promoting gender equality
- © many countries have prepared gender strategies, these need to be put into concrete actions
- © progress must be monitored to identify where affirmative action is needed
- © implementation of the gender perspective should be systematically included in water resources policies and programs at all levels

SUSTAINABLE DEVELOPMENT AND POVERTY ALLEVIATION

- © can only be achieve by;
  - © improving women's economic, social, political, legal and cultural status
  - © respecting women's human rights
  - © improving women's access to health care and education
  - © improving women's rights regarding ownership and inheritance
  - © good governance

WATER AS A HUMAN RIGHT (Dakar Statement, December 2004)

© Commission on Sustainable Development to focus on these issues as a priority
© “confirm our commitment to water, sanitation and hygiene
© as human rights and as vital components of sustainable human development”

ROLES OF WOMEN AND MEN IN WATER MANAGEMENT

© women are traditionally perceived as the custodians of family health, nutrition and welfare as well as managers of domestic water supply and sanitation within the home
© men are predominantly the decision-makers regarding the water management issues of the community
© women traditionally play also a major role in managing and maintaining communal water supply. In most African communities women are responsible for the regulation and control of the social use and safe maintenance of water resources. Since their managerial work is done informally, they are rarely involved in the strategic decision-making processes regarding water resources management.

DISTRIBUTION OF TASKS AND BENEFITS

© Women play a substantial role in food production. In Africa 70% of the food is produced by women, in Asia 60%. Their contribution is in sharp contrast with their ownership of land, which is only one percent. Even if women own land, they often end up losing it through marriage or inheritance laws.
© In most societies men have control over the family's financial resources and income.
© Women receive a disproportionately small share of credit from formal banking institutions. In less developed countries in Africa, women receive less than one percent of the credit allocated to small-scale farmers.

WATER AND EDUCATION

© Many young girls still have no access to primary school education. This may be because fetching and carrying water is part of their daily routine, or they have to help with other domestic tasks.
© access of women to scientific and technological education, training and careers is limited
© even fewer women are involved in science policy and decision-making
© in Africa women's participation in agriculture, forestry, hydrology and other water-related education programs is very low

WATER AND HEALTH

© The figures for water-associated ill-health are dramatic, it is estimated that every day diarrhoeal diseases cause 5,483 deaths, mostly children under five. WHO’s global estimates for 2001 are 2 million for all age groups and 1,4 million for children under five
© women's health care needs are often neglected, although they are exposed to unsafe water and lack of sanitation facilities
© carrying heavy water exposes women and girls to health risks
© in the poorest communities women have no access to health care

© there is a strong correlation between high levels of coverage of combined water and sanitation and low child mortality

SANITATION (Dakar Statement, December 2004)

© needs to be given priority, and special efforts must be made in order to be able to reach the Millennium Development Goal targets
© households and families are the primary decision-makers about their own water sanitation and hygiene
© appropriate technology affordable to the poor should be made available in rural communities
© social marketing and change of behaviour are keys to success, and cultural sensitivity and gender sensitivity are extremely important
© education and support to children and youth, both in schools and through formal and informal marketing techniques, about sanitation and hygiene behaviour such as hand washing

GOOD GOVERNANCE

© effective governance of water resources requires the combined commitment and effort of governments and various civil society actors, particularly at the local/community level
© governance can be considered effective when there is equitable, environmentally sustainable and efficient use of water resources and its benefits
© today there are serious shortcomings, among them the disparities in gender, education and economy, which limit the possibilities of people to influence
© decentralization is foreseen as a necessary development to increase people's participation and local autonomy in decision-making

PRIORITISING THE WATER AND SANITATION SECTOR

© Improved sanitation and water supply has a very special role in
© -empowering women
© -increasing rural and urban productivity
© - reducing the burden of water-associated ill-health
© - improving the quality of life of the poorest and most marginalized people
© - enabling economic and industrial growth in urban centres
© These arguments have so far failed to convince decision-makers in practice. To a large extent research evidence and hard data are available, but not easy to access and use.

BRAINSTORMING / MAIN CRITICAL ISSUES

Gender mainstreaming

© Gender mainstreaming is widely accepted as a tool for promoting gender equality in development cooperation activities. Many countries, including Finland, have also developed gender mainstreaming strategies. However, they will only help if strategies and action plans are put into practice in concrete activities. Monitoring of progress is important, but is not yet done systematically.

Human rights issues

© Equal access to water and sanitation, to education and health care as basic human rights can be considered as strategic long-term development goals. For women in many countries ownership of land and water rights is not yet possible.

Water as a cross-cutting issue

© There is a strong interlinkage between water and other sectors such as health and education. Inclusion of water projects in the sector programmes would provide a lot of opportunities for development cooperation which would also promote gender equality. Improved sanitation would also benefit environmental protection.

Governance

© Decentralization will promote governance at regional and local level but may create additional need for capacity building. The same applies for IWRM. This could be an opportunity to increase women's influence for improving their status in water management institutions.

Capacity building and training

© Capacity building is needed to promote the participatory approach and effective participation of women to influence decision-making. Participation of women in water projects could help to provide job opportunities for them. Increasing the possibilities for women to pursue professional careers needs to be supported.

Sanitation

© Sanitation is a particularly culture and gender sensitive issue. This could be the area where specific programs could help countries to reach the MDGs. Efforts should in particular be made to promote awareness and education programmes regarding proper sanitation and hygiene in schools.

RECOMMENDATIONS

1) Recognize the strong interlinkage between water, sanitation, gender and poverty

- © The water sector institutions do not allow men and women to participate under similar conditions and should therefore be made more aware of gender issues. This is critical, because if you loose the gender issue, all the Millennium goals will not be implemented.
- © Building the capacity of local governments on pro-poor and gender sensitive planning and management is important.

2) How to implement gender mainstreaming in practice

- © Gender mainstreaming needs research. Collecting gender disaggregated data is important, as is also gender budgeting and developing gender indicators. Data should also be analyzed. However, there is lack of capacity to do all this.
- © Participatory approach should be supported, but participation is not enough, women should also be encouraged to speak and influence decisions.

3) Increase support to school programmes for improving sanitation.

- © This is particularly important for keeping the girls in schools. These programmes should also promote hygiene education. Local knowledge should be used more in planning sanitation projects and user-friendly technologies should be applied.

4) Promoting gender sensitive higher education in water and sanitation is important.

- © Efforts should be made to maximize the contribution from both social and technical fields of education.

5) Women's possibilities to engage in productive activities need to be supported

Group 4 / Session 2: Regional multilateral programmes

Key issues (Facilitator's outline, not properly discussed)

- © Regional programmes may differ according to aims, purpose and approach, but they offer a common framework for addressing problems shared by all countries in the region

- © Regional basin-wide cooperation can offer an instrument for regional integration (Nile Basin Initiative) and also for promoting security and peaceful co-existence (Aral Sea) or transnational integrated water resources management (Mekong)

- © Regional partnerships may have as one of the goals donor coordination and leveraging of additional funding (EU Water Initiative)

- © One aspect of supporting multilateral regional cooperation is that it makes possible support for a wider range of countries/countries that would not otherwise receive support

- © UN special agencies (FAO, WHO, UNESCO etc.) should have in their work programmes water projects/activities that clearly are aimed at reaching the millennium goals

Discussion

This group included several of the foreign participants and after the introduction of the topic, they felt that they are not in a position to discuss the potential merits of participation in the multilateral programmes as they were not familiar with them. They were offered the option of continuing the morning session's discussion on gender and cultural issues, but some persons in the group insisted on going ahead with the multilateral cooperation theme. As a result the discussion was not very focused and was more about general observations on multilateral cooperation. This is also reflected in the few sporadic recommendations that were made.

Recommendations

1) Information regarding these type of initiatives should reach also ordinary citizens

This is important in view of the fact that often the representation in such programmes tends to be at a fairly high-level and not really reaching the grass-root level. (this was clear also from the fact that none of the foreign participants knew about e.g. the EU Water Initiative , although it has adopted the multi-stakeholder approach)

2) Before starting new initiatives, it should be checked what is already going-on and who are included in already existing plans

This very generic remark came also up in the plenary discussions earlier emphasizing that in starting new projects, it is necessary to analyze first what is already being done, what local capacities and potential exists.

Support should primarily be directed to the implementation of existing plans. Support should be given to capacity building needs which are not necessarily only technical needs.

3) Promote south-south exchanges and capacity building to ensure that there is a general network of support

4) As far as the benefits of multilateral vs. bilateral programmes are concerned, the majority of the group seemed to be in favour of the bilateral, because they felt that bilateral support has more impact

Annex C: Seminar participants

WATER SEMINAR FINNISH ENVIRONMENT INSTITUTE, 26.-28.1 2005		
Participant	**Title**	**Organization**
1. Ahola Helena	Senior Environmental Expert	Soil and Water
2. Arosilta Anna		WaterFinns ry
3. Belof Anna-Maija		Ministry for Foreign Affairs
4. Catley-Carlson Margaret	Chairperson	Global Water Partnership
5. Castren Tuukka		Ministry for Foreign Affairs
6. Chanda Osward	Director	NWSC, Zambia
7. Efraimsson Juhani	Senior Consultant	Plancenter Ltd
8. Gossa Tamene	Team Leader	Ministry of Water Resources, Ethiopia
9. Grear Jutta		
10. Guterstam Björn	Network Officer	Global Water Partnership Secretariat
11. Halonen Mikko		Gaia Group Oy
12. Haunia Sirkka	Director, International Affairs	Finnish Environment Institute
13. Heinonen Armi	Counsellor	Ministry for Foreign Affairs
14. Heinonen Mari	Senior Planning Officer	Ministry of Agriculture and Forestry
15. Hinkkanen Kati		Käymäläseura Huussi ry
16. Homanen Kari	Director, Int. Consulting Services	Finnish Environment Institute
17. Honkanen selma		Ministry for Foreign Affairs
18. Huhta Elina	Project Secretary	Finnchurchaid
19. Hukka Jarmo	Docent	Tampere University of Technology
20. Ijjasz Ede	Manager	Water and Sanitation Program, World Bank
21. Jolkkonen Ritva	Director General, Dep. for Development policy	Ministry for Foreign Affairs
22. Järvinen Erica	Marketing Assistant	Scanagri Finalnd Oy
23. Kallio Arja	Director	Academy of Finland
24. Karanko Kari	Director for Int.Env. policy	Ministry for Foreign Affairs
25. Karsten Elis	Director	Ramboll-Finnconsult
26. Kauppi Lea	Director General	Finnish Environment Institute
27. Keskinen Marko	Researcher	Helsinki University of Technology
28. Ketokoski Anja-Riitta		Ministry for Foreign Affairs
29. Kiai Sylvester	Assistant Director	Ministry of Water and Irrigation
30. Kinnunen Kari	Director	Lapland Regional Environmental Centre
31. Kivikoski Tuomas	Project Manager	Scanagri Finland Oy
32. Klöve Björn	Professor	Oulu University
33. Kontula Eero	Adviser	Ministry for Foreign Affairs
34. Kruskopf Mikaela		Biota BD Oy
35. Kuusisto Esko	Hydrologist	Finnish Environment Institute
36. Lehmusluoto Pasi		
37. Leino-Nzau Katri	Programme Officer	Ministry for Foreign Affairs
38. Marjamäki Emma		
39. Matinpuro Hanna	Head of international Affairs	Finnish Association for Nature Conservation
40. Maunula Markku	Division Manager	Finnish Environment Institute
41. Mziray Elisamehe	Assistant Director	Ministry of Water and Livestock Development, Tanzania
42. Moreira Maria Arce	Executive Secretary	Gender and Water Alliance, Netherlands
43. Moises Lucilia	Director - CHAEM	Provincial Direction of Health, Mozambique
44. Mäkinen Susanna	Student	Helsinki University of Technology

45.	Nevalainen Ilkka	Senior Consultant	Plancenter Ltd
46.	Nikula Jussi	MSc Student	Helsinki University of Technology
47.	Notley Maria	Community Development Officer	Keskisen Uudenmaan Kehittämisyhdistys
48.	Nyirenda Fordson	Environmental Health Specialist	Central Board of Health , Zambia
49.	Nyroos Hannele		Ministry of the Environment
50.	Ovaskainen Esa	Senior Vice President	Soil and Water
51.	Pansegrouw Chamara	Chief Executive Officer	Eco-Care Trust, South-Africa
52.	Parvainen Ulla	Senior Expert	STAKES
53.	Pietilä Pekka	Senior Researcher	Tampere University of Technology
54.	Punkari Mikko	PhD, Project Director	Helsinki Consulting Group Oy Ltd
55.	Puupponen Markku	Division Manager	Finnish Environment Institute
56.	Purhonen Osmo	Deputy Director	Southwest Finland Regional Env. Centre
57.	Puustinen Pekka		Ministry for Foreign Affairs
58.	Raumolin Jussi	Senior Lecturer	University of Helsinki
59.	Rautalahti-Miettinen Elina	Co-ordinator Northern Hemisphere	UNEP/GIWA
60.	Rautanen Sanna-Leena	Consultant	Plancenter Ltd
61.	Rautavaara Antti	Project Manager	Soil and Water
62.	Sahlin Catharina	Head of Finance	Global Water Partnership Secretariat
63.	Santala Erkki	Senior Engineer	Finnish Environment Institute
64.	Sepplälä Osmo	Senior Consultant	Water Association, Finland
65.	Sierla Jaakko	Counsellor	Ministry of Agriculture and Forestry
66.	Silfverberg Paul	Managing Director	Planpoint Ltd
67.	Sokhem Pech	Senior Researcher, form. director at Mekong River Commission	Japan Science and Technology agency
68.	Sulamaa Raisa	Coordinator, International Affairs	UNICEF, Finland
69.	Tadesse Zenebeworke	Editor, Management Committee	Forum for Social Studies
70.	Taipale Kaarin	Visiting research Fellow, Architect	CKIR/HKKK (Helsinki Business School)
71.	Tanskanen Pia	Environmental Expert	Finnish Environment Institute
72.	Tarvainen Anne	Hydrobiologist	Finnish Environment Institute
73.	Thuo Simon	Regional Coordinator	GWP Eastern Africa, Uganda
74.	Tianen Ismo	Chief of Directors Office	Finnish Environment Institute
75.	Toivonen Juhani	Deputy Director General	Ministry for Foreign Affairs
76.	Tran Minh Anh Thu	Project Manager	Soil and Water Ltd
77.	Vahala Riku	Secretary General	Water Supply and Sanitation Technology Platform
78.	Vainio-Mattila Arja	Director	Huron University College, Canada
79.	Wanner Petri	Programme Officer	Ministry for Foreign Affairs
80.	Varis Olli	Senior Researcher	Helsinki University of Technology
81.	Wihuri Heikki	Senior Consultant	Jywa Consulting
82.	Eija Vinnari		
83.	Vuori Timo	Private Consultant	
84.	Väänänen Paula		Ministry for Foreign Affairs
85.	Zhou Ping	Student	University of Helsinki

Annex D: Seminar Programme

WATER SEMINAR: CHALLENGES, RESPONSIBILITIES AND OPTIONS

Finnish Environment Institute 26.-28.1.2005

Wednesday 26th of January 2005

9.00 Opening of the seminar
Ms. Ritva Jolkkonen, Director General, Department for Development Policy, Ministry for Foreign Affairs of Finland

9.15 Seminar objectives and programme
Mr. Paul Silfverberg, Planpoint Ltd.

Session 1: Introductory presentations

9.30 Water and sanitation in the Finnish development co-operation
Mr. Eero Kontula, Ministry for Foreign Affairs of Finland

09.50 Global trends and options; introduction to the background overview report
Dr. Olli Varis, Helsinki University of Technology and Dr. Esko Kuusisto, Finnish Environment Institute

10.20 Coffee / Tea

10.45 Major drivers, tendencies, and policy frameworks of the water and sanitation sector
Dr. Ede Ijjasz, Manager, Water and Sanitation Program, World Bank; Comment by Dr. Osmo Seppälä, Water Association; Discussion

11.45 Perspectives and challenges of water resources management
Ms. Margaret Catley-Carlson, Global Water Partnership; Comment by Mr. Osmo Purhonen, Southwest Finland Regional Environment Centre; Discussion

12.45 Lunch

13.45 Water and sanitation in poverty reduction; case Ethiopia
Ms. Zenebeworke Tadesse, Forum for Social Studies, Ethiopia; Comment by Mr. Kari Karanko, Ministry for Foreign Affairs of Finland; Discussion

14.45 Coffee / Tea

15.00 Capacitating communities and beneficiaries; South-African experiences
Ms. Chamara Pansegrouw, Eco-Care Trust, South Africa; Comment by Ms. Ulla Parviainen, Stakes; Discussion

16.00 Discussion on the themes

16.30 Organising of the working groups for day 2

17.00 Closing of day 1

18.00 Reception

Thursday 27th of January 2005

Session 2: Critical issues in water and sanitation development

9.00 Brainstorming in working groups

- § Group 1: Integrated water resources management (Facilitator: Dr. Olli Varis, Helsinki University of Technology)
- § Group 2: Water and sanitation as economic goods (Facilitator: Mr. Kari Homanen, Finnish Environment Institute)
- § Group 3: Development of sustainable basis for water infrastructure (Facilitator: Dr. Esko Kuusisto, Finnish Environment Institute)
- § Group 4: Cultural and gender perspectives of water and sanitation (Facilitator: Ms. Sirkka Haunia, Finnish Environment Institute)

10.45 Presentations of the working groups, discussion

12.45 Lunch

Session 3: Alternatives for Finnish development support in water and sanitation sector development co-operation; approaches and their strengths/weaknesses

13.45 Brainstorming in working groups

- § Group 1: Support to capacity building (Facilitator: Dr. Olli Varis)
- § Group 2: Support to partnerships in water sector (Facilitator: Mr. Kari Homanen)
- § Group 3: Projects or programmes (Facilitator: Dr. Esko Kuusisto)
- § Group 4: Regional multilateral programmes (Facilitator: Ms. Sirkka Haunia)

15.30 Presentations of the working groups

17.30 Closing of day 2

Friday 28th of January 2005

Session 4: Seminar conclusions

10.00 Seminar conclusions and final discussions
Mr. Paul Silfverberg, working group reporters

11.30 Closing of the seminar
Mr. Juhani Toivonen, Deputy Director General, Ministry for Foreign Affairs of Finland

11.45 Press conference

12.30 Lunch