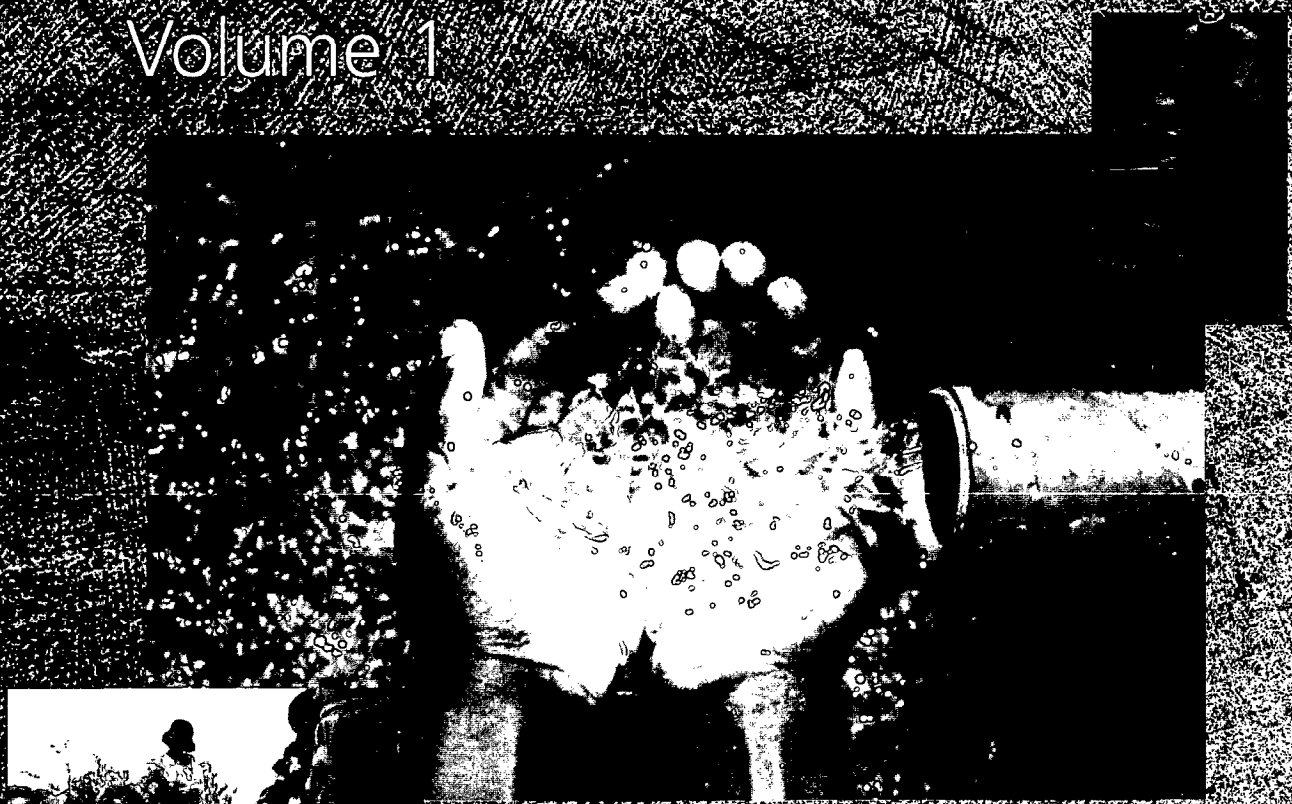
Ireland Aid Evaluation and Audit Unit

Ireland Aid

Ireland Aid in the Water and Sanitation Sector

Volume 1



December 1999

Synthesis Review

Ireland Aid in the Water and Sanitation Sector

Volume I: Main Report

December 1999

Table of contents

Abbreviations

APSO	Agency for Personnel Service Overseas
ESA	External Support Agency
GNP	Gross national product
IPC	Improved Programming through Communication
IRC	IRC International Water and Sanitation Centre
NEDA	Netherlands Development Assistance
ODA	Official development assistance
TC	Technical cooperation
UNCED	United Nations Conference on Environment and Development
WSS	Water supply and sanitation
WSSCC	Water Supply and Sanitation Collaborative Council
WWC	World Water Council
WB-RWSG-EA	World Bank Regional Water Supply and Sanitation Group East Africa

Acknowledgments

The review team would like to acknowledge the contributions of the Ireland Aid staff, both in Dublin and in the priority countries. In addition the contributions of government staff of the priority countries visited was invaluable, as was the assistance provided by the consultants who participated on each trip. A detailed list of all people consulted both during the desk study and the field trips is given in the annex D.

Executive Summary

Introduction

The evaluation and audit unit of Ireland Aid commissioned a review of its experiences in the Water and Sanitation sector (WSS) in Sub-Saharan Africa.

The objectives of the review were:

- To provide an overview and analysis of Irish Aid experiences in the WSS sector reflected against international trends and experience.
- to make recommendations for developing and policy guidelines that will direct Irish Aid in the WSS sector in the future.

The review was led by the International Water and Sanitation Centre (IRC) and co-ordinated by Colleen Savage, economic analyst with the Ireland Aid Evaluation and Audit Unit. Local consultants were used during the field visit and the exercise was highly consultative in its approach. The findings of the review are presented in this report and in the annexure, as shown in the table of contents.

Methodology

The review was undertaken in first two phases, with a final phase to draw up guidelines.

Phase 1 – Documentation Review

The documentation review has been conducted from August to October 1998 and was a review of Irish Aid supported WSS projects in Sub-Saharan Africa. A checklist based on the Terms of reference was constructed and projects assessed against this.. In total, 25 different projects were reviewed, for which more than 80 documents were consulted, primarily being project proposals, project reviews, country review and planning documents, as well as project and programme evaluations.

Phase 2 – Field Trips (Lesotho, Uganda, Zambia, Zimbabwe)

For the second phase, from February to May 1999, a field study was undertaken to complement the documentation review. The main reasons for the field study were: to reflect the review and experiences of the project stakeholders; to improve information available on project performance and impact; and, to involve key stakeholders in policy formulation. The countries that were finally selected were Lesotho, Uganda, Zambia and Zimbabwe based on the innovative characteristics of the WSS projects in these countries. The outcome of these trips is included in annex 3, Volume II of the review. The consultant did not change the main report based on her findings during the field trip. How ever the trip did lead to further discussions on the suggested areas for policy formulation.

Phase 3 – Guideline Workshops and Document

Based on the review findings Workshops on issues to be covered in the guidelines were held in each country visited and a final workshop was held in Lusaka in which representatives of all Irish Aid priority countries (except Tanzania) were present. The key outcome of the both the review recommendations and the workshop was first set of Water and Sanitation guidelines for Irish Aid.

Key findings

The following are the key conclusions of the desk top synthesis and are discussed in more detail in chapter five of the main report.

Lack of Co-ordination of experiences

Over the years a lot of the knowledge and experience has been gained through the various types of mostly water projects in sub-Saharan Africa. A huge variety of interventions is providing a broad knowledge base on sector issues. On the other hand, the approaches and methods used in the various projects could have been more consistent and coordinated. There has been limited sharing and exchange of information and experiences among the different Ireland Aid supported projects and with others in the sector, and consequently opportunities to improve efficiency and impacts of WSS interventions have been lost.

There is a need for coherent water and sanitation sector policy

To improve efficiency, effectiveness and impact of Ireland Aid supported WSS projects, a sound WSS policy that can guide Ireland Aid involvement in the sector is needed. This document is a first step into that direction.

Participation, partnership, capacity building and appropriate technology are encouraged.

A number of issues that are internationally recognised as being important for achieving sustainable WSS improvements have been taken up and are being implemented in a number of Ireland Aid supported projects. For example, particularly the newer projects and programmes are working with participatory and gender sensitive approaches, and are implementing projects through existing government structures. Capacity building has gained a lot of importance within the various projects, and technology options have become appropriate and affordable for users.

In sufficient attention has been given to other key sustainability issues

However, there are also a number of internationally acknowledged key elements for sustainable WSS that are not or not really addressed in Ireland Aid supported projects. These include for example the integration of water with sanitation and hygiene education, considering environmental concerns, supporting decentralisation, good governance and public private partnerships, ensuring a demand responsive approach, cost recovery mechanisms, community management and proper O&M, monitoring for effectiveness and impact, advocacy and communication strategies, and taking into account integrated water resources management principles.

Need for increased access to WSS expertise

Closely linked to the the need to have a WSS policy, there is a need within Ireland to increase access to WSS expertise at headquarters and in the field. Since at headquarters there is at present no possibility to recruit extra personnel, Ireland Aid, Dublin could make use of consultants that have expertise in the fields of water supply, sanitation and hygiene. At field level, an option could be to recruit additional staff, possibly a WSS expert that can operate at regional level.

Chapter 1

Irish Aid policy

Chapter 1
Irish Aid policy

Until 1993, some 60% of Ireland's programme for development cooperation was multilateral aid that was donated to UN agencies, the World Bank Group and the aid programme of the European Union. Over half of the bilateral official development assistance (ODA) financed experts and volunteer personnel which was sent to a limited number of African priority countries. Irish ODA was small in volume and declining as a per cent of the gross national product (GNP), with the ODA/GNP ration fluctuating between 0.28% in 1986 and 0.16% in 1990 and 1991. Technical cooperation consisted essentially of sending Irish experts and volunteers to developing countries (Development Assistance Committee, 1995).

In 1993, the 'Programme for a Partnership Government' was adopted, setting out policy objectives in all areas of government for the period 1993-97. In its section devoted to overseas development cooperation, the programme spells out specific targets and objectives for an expanding Irish aid programme. Based on this programme, a detailed four-year Strategy Plan, 'Irish Aid: Consolidation and Growth', was published in July 1993. To mark the new departure, the Irish aid programme was being labelled 'Irish Aid'.

As a result of the Strategy Plan, the ODA volume has increased to 0.32% of GNP in 1998, with over half of the budget and most of the growth being allocated to bilateral aid. The number of priority countries has been increased from 4 to 6, all in Africa, and bilateral cooperation with other countries in Africa, Asia and Latin America has expanded. Cooperation with Irish NGOs is being reinforced through increasing allocations.

1.1 Irish Aid

Irish Aid as a donor agency has a unique character. Ireland's historical experience, including the absence of colonial or exploitative interests, the famine at the beginning of this century, and the transformation from a rural and less developed economy, have made the nation especially aware of and sensitive to the economic and social needs of developing countries.

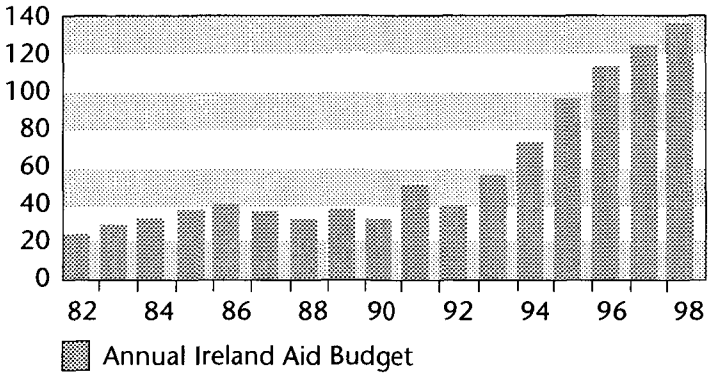
In order to implement its policy, Irish Aid employs a range of instruments through which it administers its aid activities. These include:

- Direct bilateral support for development projects in developing countries;
- The provision of technical assistance;
- Cooperation with NGOs;
- Support for the activities of international development organisations;
- Co-financing with a number of international agencies (principally the World Bank Group);
- Provision of emergency humanitarian assistance in response to natural and man-made disasters in the developing world.

1.2 Budget

Irish Aid is characterised by a relatively small (compared to other donor agencies) but rapidly increasing aid budget, which has grown from £40 million in 1992 to £137 million in 1998. Due to administrative limitations within the government, this budget increase has not been accompanied by an increase in human resources at Irish Aid headquarters.

Figure 1: Irish official development assistance budget from 1982 to 1998 (in Irish £ million). The figures for 1997 and 1998 are allocated amounts.



Up to around 1993, multilateral aid made up for over half of the aid budget. However, there has been a conscious effort to increase the significance of bilateral aid, and as a result, the volume of resources committed to the bilateral sector in 1998 is more than 50%. Bilateral Aid (provided directly from Ireland to individual developing countries) is set to reach £88.6 million in 1998. The allocation for multilateral aid (provided through international organisations such as the European Union, the United Nations and the World Bank) is £45.9 million.

Expenditure through NGOs in 1997 amounted to £18.3m, which is 15% of the ODA. In 1992 this was £3.39m and 8% of the total ODA budget. Part of this money is allocated to the NGO Co-Financing Scheme (see also Section 2.8).

1.3 Policy principles and objectives

Irish Aid policy is based on 5 principles, namely need, self-reliance, partnership, gender and environment, and loans versus grants (see Box on page 3). Furthermore Irish Aid has 4 operational objectives which underlie the day-to-day running of its projects:

- To maximize effectiveness and impact, project aid is concentrated on specific sectors or specific geographic areas;
- The choice of sectors is influenced by the availability in Ireland at high standard of appropriate skills, capacity and experience.
- All project aid is continuously evaluated, both internally and by external experts, to ensure efficiency, cost-effectiveness and sustainability.
- Priority is given within projects to training local counterparts to enable them in due course to manage projects without further need for external technical assistance.

The five basic principles of Irish Aid

Need

The first priority of Irish Aid is to provide assistance to poorer developing countries. The assistance is designed to meet basic needs, particularly of the more disadvantaged sections of the population, and to contribute to long term economic and social development. The six priority countries are among poorest in the world. Within Irish Aid's country programmes the aim will be to maintain a high level of expenditure to meet basic needs such as clean water supply, health care, and primary education.

Self-reliance

Effective development assistance must strengthen the ability of developing countries to promote and sustain their own economic and social development. The objective of Irish Aid projects is to leave behind structures which enable development partners to manage the future themselves. Irish Aid therefore gives priority to projects which are designed to increase the capacity of decision makers at all levels, including grassroots level, and improve their capacity to manage available resources, both material and human, in the interests of sustainability.

Partnership

Irish Aid works in cooperation with governments of its partner countries, both at central and local levels, to ensure coherence with development strategies. Where appropriate, such cooperation also involves local communities directly. The approach is based on dialogue and aims to improve the effectiveness of the aid programme. This dialogue also extends to issues affecting development, such as democratization and human rights, an efficient and open government, and the better use of development resources.

Gender and environment

It is a fundamental principle of Irish Aid that sustainable development is possible only when adequate attention is paid to the particular role of women in development and to environmental issues. Accordingly, systematic attention is given to both gender and environmental questions at all stages of the project cycle, including project identification, appraisal, implementation, review and evaluation. In general, Irish Aid prefers to integrate these considerations into mainstream projects. However, projects aimed at improving the condition of women in developing countries, as well as environmental projects will also be supported where appropriate.

Loans versus grants

The debt burden of developing countries is in part due to loans previously accepted for development projects which did not succeed in generating sufficient resources to cover the cost of loan service. Therefore all Irish Aid is given in the form of direct grants, since as no loans are given, no debt is created.

1.4 Priority countries

Since the inception of Ireland's Bilateral Aid Programme nearly 20 years ago, it has been concentrated on 4 priority countries: Lesotho, Sudan, Tanzania and Zambia. In recent years, Ethiopia, Mozambique and Uganda have also been earmarked as priority countries. The major advantage envisaged in using priority countries is the increased likelihood to have a substantial impact with relatively few resources by focusing on a limited number of target countries, and on specific regions within those countries.

1.5 Technical cooperation

Under Irish Aid, technical cooperation (TC) consists of providing services and transferring experience, skills and technical expertise through advisers or fellowships. The important role of technical cooperation in Irish Aid is confirmed by the fact that expenditures amount to roughly half of the bilateral ODA disbursements. Many of the projects which do not include a technical cooperation component are in their final phase but had previously received technical cooperation support (Development Assistance Committee, 1995).

The significant increase in aid disbursements has been accompanied by a decrease in TC personnel. This is a reflection of the new role for TC in development aid which Irish Aid is promoting, with a strong focus on full local participation in the interest of capacity building and sustainable development. As a result, the Irish Aid programmes in Ethiopia, Uganda and Mozambique are integrated in government structures and do not have expatriate technical assistants. In the other countries TC staff is being reduced. Project Officers at embassies are expected to liaise with local structures and have a light touch on the project. Project development, implementation and ownership is intended to be with local institutions.

1.6 Irish aid in water supply and sanitation

Irish Aid has made a commitment to aim at maintaining a high level of expenditure to meet basic needs such as clean water supply, health care, and primary education of poor populations. Therefore, Irish Aid activities in water supply and sanitation have often been supportive to complement health and education activities, such as providing water for schools and hospitals. On the other hand, involvement in the WSS sector has been in response to needs and requests identified in the various countries themselves.

The Irish Aid budget for water supply and sanitation has gone up from US$ 0.8 million in 1986/7 (3.0% of the budget) to US$ 1.1 million (3.8%) in 1995 (Development Assistance Committee, 1995). At Irish Aid headquarters, it is estimated that the WSS budget will continue to grow because of the increase of the total ODA budget. However, as percentage of the total budget it is not expected to change significantly.

In a number of countries such as Sudan and Zambia, water supply has always been one of the priority areas, resulting in a substantial amount of the county budgets being allocated on water supply. However, at Irish Aid headquarters, water generally is not being regarded as a priority area, although there is a slight variation in views among headquarters staff on

this issue. As a result, the positioning of water activities, on one hand as part of health or rural development, on the other as priority sector, sector or sub-sector, is not very clear within Irish Aid. Both at headquarters and in the field there is a felt need to clarify this issue.

Since the budget increase, and subsequently the increase in expenditure on water and sanitation projects, Irish Aid has recognised the need to give water more attention, and to develop a proper policy and policy guidelines to facilitate its involvement in the sector. The lack of policy and unclarity about its importance and positioning as part of health or part of rural development has to be addressed.

Chapter 2

Irish Aid experiences in the WSS sector

Chapter 2
Irish Aid experiences in the WSS sector

Despite a lack of WSS policy, Irish Aid has been involved in supporting water supply and sanitation projects since its inception. The following chapter gives a summary of Irish Aid involvement in the WSS sector in sub-Saharan Africa. It focuses on the WSS projects that have been supported through the Bilateral Support Programme of Irish Aid. Furthermore, the number of projects supported and the budget spent on water supply and sanitation through the NGO Co-financing Scheme has also been analysed. The summary is based on project documentation, discussions with Irish Aid staff in Dublin, and feedback from embassy and project staff in the field. Therefore it does not necessarily reflect the experiences and views of all the key stakeholders in the field.

Box 2.0: Relevant Interventions

Because of support from Irish Aid and the University College of Galway, the ***Hydrology Department of the University of Dar es Salaam*** *has managed to develop an MSc course and research projects that are highly relevant to actors in the water sector in that region, particularly government institutions.*

Through its Bilateral Support Programme, Irish Aid is or has been involved in 29 drinking water and/or sanitation projects in 10 countries, namely Ethiopia, Lesotho, Mozambique, Tanzania, Uganda and Zambia (the priority countries), and Kenya, South Africa, Sudan and Zimbabwe. Usually support through the Bilateral Support Programme is in the form of funds (often for hardware) and (Irish) technical assistance.

Furthermore, Irish Aid is funding NGO activities in the WSS sector through the NGO Co-financing Scheme. Since the inception of its programme in 1974, Irish Aid has enjoyed strong collaboration with NGOs. The work of Irish NGOs is found to be complementary to that of the government, and enables Irish Aid to provide assistance in countries where Ireland has no official representation, such as Zimbabwe.

2.1 Budget allocations to WSS

The total contribution of Irish Aid to the WSS sector since 1989 amounts to over £24 million, which is almost 15% of the total disbursement of the Bilateral Aid Programme since that year. Zambia is the country where the largest budget on WSS has been spent, namely over £10 million. In all other countries except Mozambique, between £1 and £3 million has been spent on WSS interventions. In Mozambique, where the Irish Aid Country Programme started only in 1997, £280,000 has been allocated to WSS activities.

In two countries, substantial percentages of the country budgets have been allocated to WSS projects, namely Zimbabwe (65.7%) and Zambia (34.9%). In Sudan WSS allocations have also been substantial, on average covering about 20% of the annual country budget, but the programme in this country has ceased recently. In all other countries, except for Mozambique, about 10% of the total country budget has been allocated to WSS projects. In Mozambique, WSS at the moment makes up for almost 4% of the country budget.

As far as the NGO Co-Financing Scheme is concerned, the expenditure on water supply and/or sanitation projects has been roughly between £250,000 and £400,000 annually since 1993, which is about 6% of the annual Irish budget for the NGO Scheme in these years.

2.2 Scope and level of WSS interventions

Irish Aid has been involved in a wide range of activities within the WSS sector, ranging from community based activities to national level institutional development initiatives, through varied modalities of implementation, and covering a wide range of technology options particularly for water supply systems. This can be an indication that Irish Aid is responding to needs in the field, and it has given the organisation a lot of experience. However, the wide range of involvement does also reflect a lack of a clear approach to involvement in the WSS sector.

Box 2.1: Intergrated Approach

*The approach taken by the **Kibaale District Development Programme** in Uganda, which emphasises the integration with and capacity building of the District Administration, a long-term commitment and a strong focus on community participation, appears very appropriate for interventions at district level. Also the focus on five main components, which is in line with district priorities, being capacity building, health, education, water supply and sanitation, and feeder roads, forms a solid base for viable basic needs support to the district. Furthermore, the project has achieved remarkable results in developing environmental and gender guidelines.*

Irish Aid activities in water supply and sanitation have often been supportive to complement health and education activities, such as the construction of water supply facilities for schools and hospitals. In addition, involvement in the WSS sector has been in response to needs and requests identified in the various countries themselves. The positioning of water activities, on one hand as part of health or rural development, on the other as priority sector, sector or sub-sector, is not very clear within Irish Aid, particularly at headquarters level.

Traditionally Irish Aid has had a strong focus on area based programmes, usually managing water projects at provincial or district level, with the intervention going down to grassroots level. In most countries, Irish Aid has not been participating very actively in policy development at national level. Currently there is a trend in Irish Aid involvement towards giving support to sectors as a whole in stead of focusing on particular geographical areas. Although some regard this development as potentially affecting the support to area based programmes, most Irish Aid staff at headquarter level seem to agree that a combination of the two types of support is needed, and therefore that Irish Aid's role at national level, including exchanging ideas and experiences, and participation in policy discussions, should be enlarged.

Concerning the institutional setting of Irish Aid, there is a lack of expertise in WSS issues. This is particularly felt at headquarters but probably also in the field. In general there seems to be a problem of under-staffing in Dublin; staff capacity has not increased since the start of the expansion of the ODA budget in 1993. This, combined with recent transfers of staff, does not contribute to securing and increasing the in-house capacity needed for the guidance of projects.

At headquarters it is felt that information and experience is not sufficiently shared among the various projects and within the sector (nationally and internationally). In general lessons learned in the various countries have not been used sufficiently to improve and optimise other projects.

2.3 Adherence to Irish Aid policy

All interventions of Irish Aid in the drinking water sector are adhering to the policy principle of addressing the need for water supply as a basic service in more disadvantaged areas. The priority countries are among the poorest in the world, and all Irish Aid interventions in the water sector try to target the least developed areas within these countries.

Box 2.2: Combining Water Supply, Sanitation and Hygeine

*The **Bubi Integrated Rural Water and Sanitation Project** in Zimbabwe has developed a very interesting and comprehensive approach that includes water supply, sanitation and hygiene education, capacity building at community and district level and community participation. Project identification and implementation is being done by the government.*

There are quite a number of projects, especially the relatively new ones, that are putting a strong emphasis on capacity building of key stakeholders in the sector to increase self-reliance, which is an important element of the Irish Aid policy. These include the water projects in Zambia and Ethiopia, the water and sanitation projects in Zimbabwe, and the new area based projects in Uganda and Mozambique. Unfortunately, most evaluations and reviews have not focused on the extent to which these efforts have the desired effects and impact.

There is an increasing awareness for gender and environmental issues in water and sanitation projects. However, the level of understanding and analysis, as well as the ways of implementation, vary considerably among the projects. Concerning gender issues, the Urban Upgrading Projects and Northern Province Development Programme in Zambia, the district programme in Kibaale, Uganda, and the Participatory Hygiene Education and Sanitation Project in Zimbabwe appear to have developed comprehensive strategies, taking into account both possible negative and positive impacts for women and men on practical and strategic levels. Environmental issues are generally not seriously addressed. The environment is mentioned in project proposals as part of the compulsory appraisal criteria, but not a single project has conducted a thorough analysis of possible environmental impacts.

There is a lack of policy, policy thinking and policy guidelines and approaches regarding Irish Aid involvement in the WSS sector. The need for a clear water policy and practical

guidelines is strongly felt at headquarters, which should be addressed by the development of a WSS policy. Although not mentioned in the documents, projects in the various countries probably do have their own WSS policies to guide project interventions. These WSS policies at country level have to be in coherence with national policy and bring in the Irish Aid focus on development assistance.

Box 2.3: Sustainable Projects

Institutional sustainability is a very strong feature of Ethiopia's ***Sidama, East Tigray and Guraghe Water Projects.*** *It focuses on three principles: 1) activities should be tailored to the local capacity to absorb and sustain them, 2) maximum use should be made of local expertise and resources, and 3) implementation should take place through local structures and should aim to strengthen local capacities. The projects have also developed an interesting approach to community participation, with communities being involved in project identification, planning and implementation, and being paid for their labour during construction.*

2.4 Institutional setting of projects

Integrating projects into existing government structures instead of managing them through parallel project structures is presently regarded as the best way forward, and is being implemented in new projects in e.g. Ethiopia, Mozambique and Uganda. Older projects and programmes, such as the Lesotho water projects and the Northern Province Development Programme in Zambia, are going through a transition phase to terminate parallel project structures. This process is further complemented by the withdrawal of Irish Technical Assistance and a changing role of the Irish Embassy. This commendable new approach to partnership aims to ensure coherence with national and decentralised development strategies and long term institutional sustainability.

Although generally not mentioned in project documents, most projects appear to fit into national **decentralisation policies.** Furthermore, a number of projects emphasise building capacities at different levels, which will strengthen the decentralisation process. However, most projects do not appear to give particular emphasis to helping institutions, such as government, private enterprises and community groups, to deal with new roles and responsibilities. An exception is the support to the WASHE Programme at national level and in the Northern and Southern Provinces in Zambia.

None of the project documents mentions in-country developments in relation to the involvement of the private sector, although in many countries **privatisation** is an emerging issue in water supply and sanitation.

2.5 Project approaches

Irish Aid interventions in the WSS sector, which generally aim for improved health, have an almost exclusive **focus on water supply.** Although international experience has shown that improving only water supply does not have a significant impact on health, sanitation and hygiene education have not been addressed appropriately in most projects. However, some of the newer projects, such as the Bubi Integrated Water and Sanitation Project in

Zimbabwe and the Kibaale District Development Programme in Uganda, do propose a comprehensive and integrated approach. Also the Urban Upgrading Projects in Zambia integrate water supply and environmental sanitation.

A new, innovative approach to **hygiene education and sanitation (PHAST)**, which has been developed by the WHO and the UNDP/WB WSS Group for East Africa, has been tested in Zimbabwe, and is at present being adopted by other Irish Aid funded projects in that country as well.

Box 2.4: Involving the Beneficiaries

*Combining effective community mobilisation and awareness raising with construction activities is one of the strengths of the **Kasama Rural Sanitation Project** in Zambia. It is one of the very few projects where there is actually a balance between hardware and software activities, and it is achieving the desired results.*

Despite efforts to bring in more software elements, there has been and to a certain extent still is a **strong focus on hardware** activities. Generally training and other capacity building activities appear to receive much less attention than hardware activities.

Community participation has become the corner stone of Irish Aid interventions in the water sector, and a number of projects have been able to develop effective approaches to more genuine community participation. These include the Urban Upgrading and the Kasama Rural Sanitation Projects in Zambia, the water projects in Ethiopia, the Katwe Urban Pilot Project in Uganda, and the Water Supply Projects in Lesotho.

Although community participation is increasingly being emphasised, approaches used to involve communities vary considerably. Community participation is often limited to contributions to implementation in labour or cash, combined the responsibility of operation and maintenance. Future owners of facilities are usually not involved in project design, planning and monitoring, and critical decisions such as technology selection are often to a large extent determined or imposed by project or government staff. A positive exception is the Village Water Supply Programme in Lesotho, where communities apparently are offered a range of options to discuss and decide among themselves which technology they prefer.

Box 2.5: Community Management

*The **Urban Upgrading Projects** in Zambia have proven that disadvantaged and resource-poor communities can manage key services such as water supply. Through experience, practice and reflection, the project has developed good insight and comprehensive approaches to community management and gender issues.*

There is a strong emphasis on **least-cost and most appropriate technologies** in almost all projects. Socio-cultural appropriateness and the use of local materials has generally been promoted and practiced. However, it is not clear whether sufficient attention and research has always gone into identifying and testing alternative solutions, particularly in cases where boreholes were used.

There is a significant variety in approaches regarding **contributions from other stakeholders** such as counterpart government agencies and other implementing institutions. In a number of projects contributions from implementing stakeholders are specified, and usually include salaries of local staff and office facilities, but hardly any project has calculated the contributions of other stakeholders, including communities, in monetary terms. The UNICEF WASHE Programme in Southern Zambia, and the Lesobeng Water Supply Project in Lesotho, which is being implemented by St. James' Mission Hospital, have calculated the monetary value of community labour contributed. In the latest proposal from Ethiopia, communities are expected to contribute in labour up to 50% of the labour cost per site. They are being paid for the labour extra work that is beyond the requirement.

Although it is fair to assume that water supply projects address a need because of the conditions of the project areas selected, in general there is no evidence that the construction of individual facilities is really based on the needs and demands of future users. Project interventions generally do not follow a **demand responsive approach** which ensures that the needs expressed by e.g. influential people are reflecting the real demands as well as willingness and capacity of future owners to pay for the services. Positive exceptions to this are the Kasama Rural Sanitation Project and the rural water projects in Zambia, possibly the Mozambique Country Programme, and the newly identified water project in Sidama, Ethiopia, which has not yet been implemented.

The term **sustainability** is being interpreted and addressed in various ways, and is usually limited to O&M issues. Sometimes it is also addressed in terms of institutional sustainability, particularly in the case of Ethiopia.

2.6 Effectiveness and impact at field level

For many of the projects, very little information on the actual **functioning, hygienic use and appreciation** of facilities can be found in the documents, even as information on other key hygiene behaviour. Reviews and evaluations, particularly the earlier ones, often do not address whether facilities are properly functioning the whole year, who is using the facilities and for what purposes, whether facilities are used hygienically, and whether facilities are being appreciated by men and women.

Box 2.6: Changing Hygeine Behaviour

Hygiene education is being the main feature of the ***Participatory Hygiene Education and Sanitation Project in Zimbabwe****. This project is using a new and innovative approach to hygiene education (PHAST) which challenges traditional methods and achieves good results in terms of strengthened communities and improved hygiene behaviour.*

Health impact studies are generally not carried out, which means that the impact of the facilities on health is not known. There is one exception in the form of an early health impact study in Lesotho, which revealed that the water supply facilities did not have an impact on the health of the population.

Operation and maintenance of water supplies in general has received little attention, and is one of the major problems in many projects. In the early projects there was a strong reliance on spare parts from Ireland. Gradually solutions for O&M are more being sought at the various local levels, with main roles for communities and local government structures, for example in the Village Water Supply Programme in Lesotho. There is one new project that particularly addresses the issue of community management, namely the Community Based Management of Water Supplies Project in Zimbabwe. No reviews or evaluations have taken place yet.

The **quality and impact of training** given is not clear from the documents. Training activities, particularly for community institutions, seems to be weak. An example is the Capital and Training Project in Zambia, where it seems that very little resources (less than 3% in the first two years) and attention is spent on training. However, training of community institutions in the Kasama Rural Sanitation Project in Zambia seems to be effective. Training for district and sub-district levels in Southern Province in Zambia, by the UNICEF WASHE Programme, is said to be well formulated.

Projects that actively try to address **gender** issues usually focus on the participation of women in construction activities and in village water committees, and women being the caretakers of the facility. In the projects that did analyse the effects of the project on women and men (the Urban Upgrading Projects in Zambia and the Kibaale District Development Programme in Uganda), it was found that women did gain benefits from the projects. One obstacle found was that the obligatory community participation during construction did result sometimes in an unacceptable work burden on women residents, since they contributed most of the labour.

The best approach to establish well **functioning community based water committees** is hardly discussed in project documents. A positive exception is the evaluation report on the Village Water Supply Programme in Lesotho, where members of Village Water Committees express their both positive and negative experiences.

Supporting local organisations that are active in the WSS sector, such as the support given to Mvula Trust in South Africa and to the Hydrology Department of the University of Dar es Salaam in Tanzania, was found to be very relevant to the development of the WSS sector in these countries.

2.7 Project identification and management

A more demand responsive approach to water is used in the **Mozambique Country Programme**. It combines 'vertical' water supply projects to support other Irish Aid activities with supporting national and regional developments such as carrying out provincial inventories of water sources, identifying an urban pilot project, and supporting donor coordination.

Projects generally appear to be **identified and designed** by Irish staff or consultants, more recently with the inputs from national governments. However, in the Ethiopian projects, future users are involved in project initiation, design, planning or monitoring.

It is difficult to get a clear picture of the **institutional setting** of projects in the various countries. Aspects which need to be further elaborated are: the functioning and effectiveness of institutions, gaps and overlap in roles and responsibilities, the sustainability of institutions and institutional setting, financial viability, gender balance, and the position and role of foreigners in institutions.

Box 2.8: Community Monitoring
*The **Katwe Urban Pilot Project in Kampala**, Uganda, which was co-funded by UNDP and the WB-RWSG-EA, not only emphasised community management, but has demonstrated that a structure for community based monitoring and evaluation is possible.*

There has been a continuous effort to review and evaluate Irish Aid water projects. **Review and evaluation** reports have become more substantial and critical in recent years, which is contributing considerably to improve understanding of sector dynamics and further optimisation of project effectiveness and impact. Although participatory techniques are being used, this is not always validated in the reporting.

As far as it is addressed in the various documents, **monitoring** is usually in the hands of Irish Aid staff and government officials responsible for implementation. The type of monitoring mentioned is related to the obligatory regular reporting and auditing procedures, which appear to be limited to the collection of input and output data.

Although not elaborated on in most documents, the **scale and level of intervention** of most area based programmes appear effective. The possibility for scaling up should be determined by focusing on the maximum institutional capacity available is very clearly analysed and justified by the Uganda Kibaale District Programme. Scaling up has caused management problems in Zimbabwe with the Participatory Hygiene Education and Sanitation Project.

For a number of projects attempts are made to calculate the **capita cost per beneficiary.** However, in practice it is not possible to compare these data due to the huge differences in geographic conditions, infrastructure, local prices of materials and labour, conditions of water resources, etc.

Information on issues related to **project management** such as collaboration, communication, information management, coordination, monitoring, staff capacities and performance of project staff is generally limited or not available in project documents.

2.8 The NGO Co-financing Scheme

In 1997, total expenditure through NGOs amounted to £18.3 million, which is 15% of the total ODA. This compares with the figure of £3.39 million in 1992, which was 8% of the total ODA.

Co-operation with NGOs is administered through six different schemes, the NGO Co-financing Scheme being one of them. The budget of the NGO Co-financing Scheme has increased from £484,000 in 1990 to £7.3 million in 1997 (see table 1).

The NGO Co-financing Scheme is meant to be a once off payment to support NGOs in developing countries. The scheme has always been administered by the Development Cooperation Division in Dublin, but this responsibility has been transferred to the Irish Embassies in 1994. The ceiling of funds released has slightly varied over the years, and is at present set at £50,000.

The following table gives an overview of the money spent on water supply and/or sanitation in sub-Saharan Africa through the NGO Co-financing Scheme since 1990.

Table I Water and/or sanitation projects in sub-Saharan Africa supported through the NGO Co-financing Scheme

	Support to water projects	Support to sanitation projects	Support to WSS projects	Total no. of WSS projects	% of projects WSS	Total support to WSS	Total budget NGO Sc.	% of budget to WSS
1990	28,224	1,022	0	4	7.4	29,246	484,418	6.0
1991	40,767	16,959	0	6	7.3	57,726	729,965	7.9
1992	125,624	24,433	3,000	15	10.1	153,057	1,679,087	9.1
1993	295,717	9,420	18,000	24	13	323,137	2,494,375	13.0
1994	257,416	17,308	0	25	9	274,724	3,968,043	6.9
1995	253,946	125,229	30,000	41	9.1	409,175	5,536,219	7.4
1996	253,834	12,498	77,887	41	7.6	344,219	6,757,861	5.1
1997	317,634	55,703	17,034	36	7.5	390,371	7,389,088	5.3

The figures in the table are to a certain extent an estimation, since some projects do include not only water supply and/or sanitation, but also other activities. On the other hand, projects that were categorised as rural development projects have been left out, while these might include water supply and/or sanitation activities. It is expected that these two types of inaccuracy more or less balance each other.

From the table it can be seen that water has played a marginal role in the NGO Co-financing Scheme. Despite the huge total budget increase, the proportion allocated for water and sanitation in 1996 and 1997 has been the lowest ever, being 5.1 and 5.3% respectively.

The amounts allocated to water projects has been reasonably steady since 1993. Budgets allocated to projects that involve sanitation or both water and sanitation have been jumping up and down with seemingly no development or trend to be detected.
Annex 4 gives an overview of the WSS projects in sub-Saharan Africa that have been financed by the NGO Co-financing Scheme in 1997. As the table shows, majority of the projects involve water supply only, and almost all projects have a strong hardware focus. The approved budgets range from £832 to £50,000, whereas most of the projects funded do not exceed the £20,000.

Chapter 3

International developments in the WSS sector

Chapter 3
International developments in the WSS sector

This chapter gives an overview of international conferences and historical trends that have played and are playing an important role in the WSS sector in developing countries.

3.1 International conferences

A number of international conferences and meetings have influenced policies and practices in the WSS sector over the last decades. These include the Mar del Plata Conference in 1977, which initiated the Water Supply and Sanitation Decade (1980 - 1990).

Box 3.1: Room for Improvement

As the 20th century comes to an end, WSS services leave much to be desired:

- *one billion people lack safe water;*
- *two billion people lack safe sanitation;*
- *four billion people lack sewage treatment;*
- *all of them cannot realize their aspirations for a better life because they lack a healthy environment and as a result have only limited economic opportunities; and*
- *as a result, three million children die from water-borne diseases each year*

(World Water Council, 1998).

The Decade gave 1.2 billion more people access to adequate and safe water supply facilities, and 770 million more had sanitary facilities. Another important achievement of the Decade was the development, promotion and acceptance of modifications in technology, allowing for simple and low-cost options. Acceptance of the role of users at all stages in the project cycle also increased, and hygiene education became a part of WSS programmes. "Water for all", the objective of the Decade, did provide a stimulus for sector improvement, but what was actually achieved at the end of the Decade fell far short of this ideal. In 1990, still over 1.7 billion people in developing countries were without safe drinking water, and 1.9 billion without decent sanitary facilities. Many new facilities also rapidly fell into disuse as a result of poor maintenance and management. Furthermore, the targets set were significantly frustrated by the huge increase in population, which has made it very difficult to reach the planned coverage. In 1998, still a lot remains to be done (see text box).

During the Global Consultation on Safe Water and Sanitation for the 1990s in New Delhi in 1990, and the International Conference on Water and the Environment in 1992 in Dublin, generally accepted principles for the sustainable development of the WSS sector were formulated on the basis of experiences from the Decade. These principles include that water development and management should be based on a participatory approach, women play a central role in water management, decentralisation to the lowest levels possible, cost recovery, the need to regard water as an economic good, the application of appropriate technologies, and the integration of water and sanitation with environmental management and health. These principles were largely incorporated in Chapter 18 on fresh water

resources of the United Nations Conference on Environment and Development Agenda 21 report, which was developed in Rio de Janeiro in 1992.
The Ministerial Conference on Drinking Water and Environmental Sanitation, which was organised in Noordwijk (the Netherlands) in 1994, contributed to the actual implementation of Agenda 2's Chapter 18. An action programme was drawn up and approved by the Commission for Sustainable Development. The conference concluded that the main focus of international sectoral policy should be on using natural resources and existing water and sanitation facilities more effectively and efficiently in order to benefit as many users as possible ("some for all rather than more for some").

The World Summit for Social Development, held in Copenhagen in 1995, urged External Support Agencies (ESAs) and partner countries to increase their expenditure in the social sector on the basis of the 20/20 initiative, whereby donors reserve 20% of their development cooperation budget for basic social services, and the recipient countries do the same with 20% of their national budget. The importance of investing in water supply and sanitation facilities to alleviate poverty was stressed, although water only partially makes up for the finances spent on basic services.

In 1996, the World Water Partnership and the World Water Council were established as international water policy think tanks, advocacy instruments and fora for discussions and exchange of experiences. The focus of these two institutions is on water resources management, and includes drinking water supply and sanitation concerns.

3.2 Historical trends

In the early days of development co-operation (1960s) the establishment of drinking water supply and sanitation provisions was approached with an engineering view, as purely technical objects. The focus used to be mainly on water supply facilities, with technologies that were developed in and exported from donor countries. For operation and maintenance, developing countries were dependent on the supply of spare parts from these countries. As a result, many water supply systems were not functioning or being used.

In the early seventies, social aspects gained importance, which was expressed by the introduction of community mobilisation and participation strategies. It also became clear that the provision of safe water supply, without paying attention to safe waste disposal and proper hygiene behaviour, often did not have any significant impact on health. At that time in the developing world, water was more often than not provided free of charge. It was considered a basic need for which the users were not charged. The understanding that water has an economic value, and that the provision of water can not be maintained without (some) cost recovery can be reported as an important achievement of the Drinking Water and Sanitation Decade.

In the early 1990s, the environmental aspects of WSS provisions came to the forefront, and thanks also to the United Nations Conference on Environment and Development (UNCED, Rio de Janeiro, 1992) the environment became recognised world-wide as fundamental to

sustainability. By now, most ESAs and national governments have included the need to protect the environment in their policies.
Recently, the importance of local expertise, human resources, skills and institutional support has been accepted as important for sector development throughout the years. However, this area of what can be called the institutional landscape is still under-estimated and does require further study and conceptualisation. This landscape is now broadened because of the strong call for decentralisation and management at the lowest appropriate levels.

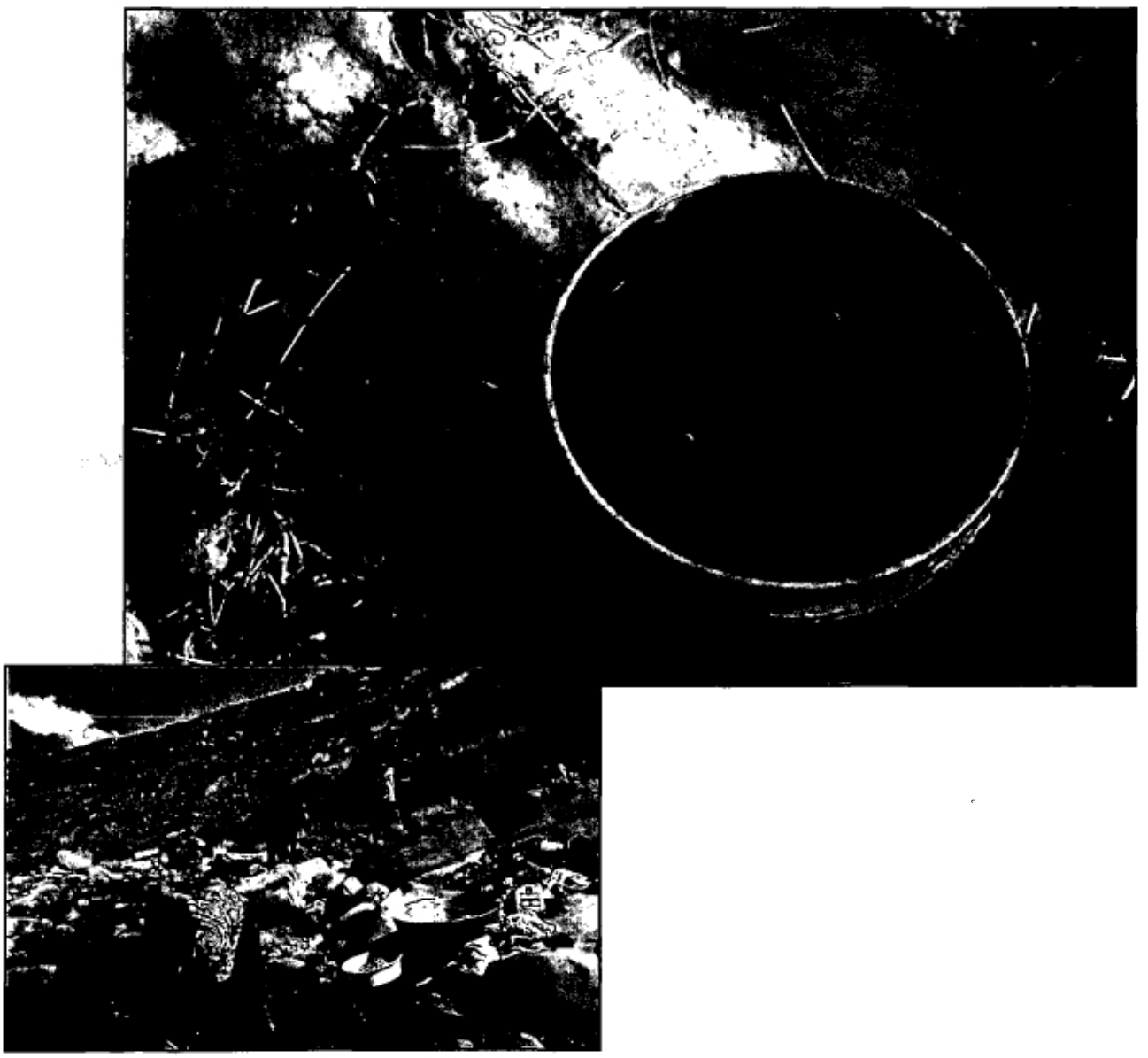
In the present decade it has also become clear that the provision of safe and sufficient WSS facilities has to be placed within the wider context of integrated water resources management. Institutions have been established and policies have been developed to enable the implementation of internationally agreed principles of integrated water resources management. These include the protection of catchment areas, the execution of specific management responsibilities at river basin level, equitable allocation of water to all specific users, the recognition of women as key managers of water at household and community level, and the need for the participation of all stakeholders.

Furthermore, it is realised that the need to aim at sustainable functioning and use of WSS provisions requires a demand responsive approach with full participation of the societal and public sector actors. They each have their specific roles and responsibilities to fulfill. The government as executing agency or facilitator, the private sector as implementer in partnership, and the users as client and often as owners of the facilities. All these actors have to be well equipped in terms of skills and capacity, and are required to account for what they are contributing. This demands clear lines of communication and information exchange with monitoring mechanisms in place. More flexibility in project management is needed, and participatory learning processes are gaining recognition.

The public sector encompasses not only the national receiving government, but also the international (donor) government. The latter also has to play its own specific role, and should allow the national government full ownership and control over its own sector developments.

Chapter 4

Current issues in the WSS sector



Chapter 4
Current issues in the WSS sector

At international fora and in documents, bilateral and multilateral ESAs, representatives of governments, and umbrella organisations are bringing up issues which reflect the newest developments in the water supply and sanitation sector. At country level, steps are being taken to introduce these new trends in WSS policies and strategies, and supportive institutional structures are being created. This chapter summarises the issues which at present are considered relevant for the improvement of WSS sector performance, as pointed out by the various ESAs and other key stakeholders in the sector.

4.1 General ODA policy issues

4.1.1 Perceived benefits of improved WSS

Insufficient and/or contaminated drinking water and the absence of or unhygienic sanitation are largely responsible for the high morbidity and mortality in developing countries. An estimated 80% of all diseases and one-third of all deaths in developing countries are caused by the consumption of contaminated water and food, and at least 10% of productive man and woman hours are lost due to WSS related diseases such as diarrhoea, cholera, etc. (NEDA, 1998).

A study on 13 bilateral and 6 multilateral organisations (Mikkola, 1997) shows that almost all organisations mention that the ultimate goal of improving WSS services is to contribute to poverty alleviation. Furthermore, WSS services are always justified as a way of promoting health improvements. Other benefits often mentioned in WSS policies are improvements in the quality of life (convenience, privacy and water as a basic need), environmental protection (particularly in the case of sanitation interventions), time and energy saving, especially for women and children, and indirect economic benefits through improved health and quality of life.

A lack of or poor access to safe drinking water and sanitation facilities leads to poor living conditions, which is one aspect of poverty. Furthermore, improvements in WSS may decrease costs of curative health care and costs of reduced labour productivity resulting from these diseases. WSS facilities may also produce economic benefits through an increase in available water for income generating activities, and through a reduction in time and energy spent on the collection of water, which can then be spent on other activities. The recycling of solid waste and waste water can also bring substantial economic benefits.

4.1.2 Sustainability

To achieve the benefits which result from water supply and sanitation, interventions have to be sustainable, meaning that systems operate for a longer period without major external intervention. The central principle to ensure sustainability of WSS facilities is to design, implement and operate facilities which are desired by and can be afforded and managed (or co-managed) by the users themselves, which meet reasonable environmental and health standards, and which work satisfactorily during a reasonable depreciation period without external contributions to operational cost.

Analysis of the current water supply and sanitation situation suggests that governments and ESAs need to adopt strategies which address the five critical aspects of sustainability (Ministry of Housing, Spatial Planning and the Environment, 1996):

Social sustainability, meaning that consideration needs to be given to equity and effectiveness in achieving the social goals of improved health and quality of life with emphasis on rural and urban poor. Social sustainability requires awareness raising, full stakeholder participation in planning and management, and gender sensitive approaches which assure the optimum involvement of women and men at all levels of decision making.

Environmental sustainability involves adopting an integrated approach to the management of freshwater resources, and making sure that water supply, sanitation and waste water do not have a damaging impact on the living environment, biodiversity, and on long-term sustainability of surface and groundwater resources for all uses.

Institutional sustainability includes a sound legislative, regulatory and enforcement environment in which water and sanitation agencies operate, mechanisms for social networking among different stakeholders, and taking into account traditions and customs through which decisions are made in urban and rural communities. The partnership approach now recognised as vital for sustainable progress requires a balance of power, especially where decentralisation and/or privatisation is involved, and an enabling environment of effective legislation, administration and institutions. In many countries this means that there is an urgent need for programmes that build institutional and human resources capacities among all stakeholders.

Financial sustainability through giving priority to enabling the unserved poor to gain access to affordable water and sanitation services, while assuring a sustainable flow of funds to manage and expand services for all people, thus recognising that water has a social and an economic value. Financially sustainable management of WSS facilities includes cost recovery, variable tariffs, innovative mechanisms of resource mobilisation, and credit systems.

Technical sustainability is largely influenced by the choice of technology and service level for different groups of water users. In this respect, user involvement and compatibility with national norms and standards are crucial. There is also a need for further development of appropriate technologies, particularly in the field of low-cost sewerage and wastewater treatment, and for information sharing to ensure that successful technologies can be replicated and adapted. Also, more focus is needed for creating conditions for sustainable management of facilities.

4.1.3 Improving gender balances

The pivotal role of women in WSS is taken into account in almost every ESA policy. The fact that the poorest groups in developing countries consist predominantly of women, makes it even more vital that they are involved in WSS projects. Concerning the focus on women,

an evolution of the issue from Women in Development to gender focused approaches can be seen. The Women in Development approach promotes the involvement of women in WSS projects confirming their traditional roles in society, thereby not changing the existing imbalances in access to and control over resources. However, there is a gradual recognition that women and men should be able to equally be involved in management and decision making, and be able to share benefits and burdens equally. This is indicated as the gender approach. The goal of gender approaches is to create an environment which enables women to come out of their traditional roles and take up activities in planning, technical operation and decision making in water committees etc. The active involvement and empowerment of women, without adding to their burden (which in practice happens a lot), promotes sustainability of services. However, it is also important that men share this workload; added burdens on women's time and energy must not be the unintended consequence of greater self-reliance and participation. Also differences in socio-economic, ethnic and religious backgrounds among women and men have to be taken into account.

4.1.4 Protection of the environment

The protection of the environment has become a significant element in WSS policies of most ESAs. In practice, environmental problems are caused by inappropriate sanitation as well as inappropriate water supply systems. Regarding sanitation, there is a close relationship between water quality and waste problems. Human excreta, solid waste and waste water contain a lot of pollutants which are harmful to human health and which pollute the environment. The volume of human excreta, solid waste and waste water is increasing, particularly in rapidly growing urban areas in developing countries. Many of these cities cannot cope with the increasing volumes, and water and soil are becoming rapidly more polluted.

Water supply systems can also negatively affect the environment. If water resources are not managed in a sustainable way, groundwater sources can be depleted, water catchments can be affected by erosion or overgrazing, and water points can become polluted by users. Therefore, environmental impact assessments are necessary for the planning of WSS interventions, and environmental management should be integrated into national policies and WSS programmes and projects.

4.1.5 Capacity building

The construction and management of WSS facilities requires institutions with good technical and management capacities. These are often lacking in developing countries. Large externally funded projects often make use of a temporary project organisation, in which responsibilities are transferred to local organisations after the project is completed. Experience shows that local organisations are often not at all prepared for this, and that this method of working generally contributes little to developing the local capacities to implement and manage WSS facilities.

Capacity building is needed to support institutional development which results in strong institutions with sound management, motivated and capable people, and an enabling

environment of appropriate policies, legislation and incentives. Capacity building should be aimed at three levels: 1) creating an enabling environment with appropriate policy and legal frameworks, 2) institutional development at all levels, and 3) human resources development and strengthening of managerial systems (Alaerts et al., 1991).

4.2 Inter-sectoral linkages

Box 4.1

The greatest need in rural areas now appears to be the widest possible dissemination of approaches used successfully, and the creation of institutional arrangements which emphasize work in partnership with communities and devote as much energy and funds to health education and other developmental issues as to water supply and sanitation (World Water Council, 1998).

The documents reviewed point out the importance of integrating water supply, sanitation and hygiene education to achieve health improvements. The linkages of water and sanitation with the health sector traditionally have been strong. The crucial role that water supply and increasingly sanitation play in health improvements is widely recognised. On the other hand, preventive health care should include water supply, sanitation, hygiene and food programmes.

Furthermore, the need of linking WSS to water resources management is growing. Drinking water supply must be assured among competing user categories such as industry, irrigation and hydropower, all with different water quantity and quality requirements. In recent policies a holistic approach to water supply and sanitation is emphasised. Generally it means taking a water supply and sanitation point of view in water resources management, environmental protection, agriculture and forestry, waste management and health issues. Also the links to municipal and urban development, city planning and housing are mentioned.

Box 4.2 Definition

Sanitation *refers to the hygienic principles and practices relating to the safe collection, removal or disposal of human excreta, solid waste (refuse, garbage) and waste water, and includes the improvement of hygiene behaviour.*

4.2.1 Sanitation

Many countries give lower priority to sanitation compared with water supply, both in policy and investments. However, experiences in the last decades have shown that the safe disposal of different types of waste is crucial in the eradication of WSS related diseases. The issue of sanitation, perhaps more than most development issues, needs to be seen in the context of an integrated development strategy, because of the impacts of inadequate sanitation services on various sectors. These include the impact on the available water resources, particularly on water quality, and the impact on the health and well being of the population. For these reasons water supply and sanitation are inextricably linked to the broader development process that aims to lead to improved health and socio-economic conditions.

4.2.2 Water resources management

Rapid population growth and urbanisation have lead to an increasing demand for water and to increasing volumes of waste in many countries. In most countries, a disproportionate

amount of attention is given to installing facilities to meet the growing demand of water, particularly on the part of the productive sectors, resulting in depletion of water resources, environmental degradation, and increased pollution.

All international agencies now recognise that water is a limited and vulnerable resource, and that there is a need for the sustainable development of the available water resources. There is an increasing recognition that water resources should be managed in an integrated and sustainable way, taking into account all users and uses through administrative, economic and legislative procedures and frameworks. Important elements of integrated water resources management include: the validation of water, stakeholders participation, appropriate management instruments and methodologies, knowledge and information management, and capacity building to establish an enabling political, administrative and legislative environment, appropriate institutions and human resources.

4.3 Institutional setting of projects

4.3.1 Decentralisation and good governance

Decentralisation and self-sufficiency are trends being supported by bilateral and multilateral agencies. For this to happen, key issues are participation and delegation. National governments need to develop and implement sector policies and legislation that promote decentralisation and create an enabling environment for all stakeholders to take up their new roles and responsibilities. The responsibility for the implementation and management of WSS facilities is transferred to the lowest levels possible, usually being the community and local government or private agencies. Besides certain supply responsibilities, the government acts as enabler which includes the promotion, coordination, capacity building, mediating and to a certain extent controlling the process. Key issues are innovation, flexibility and mechanisms for information and collective decision-making.

4.3.2 Public private partnerships

The private sector at different levels already plays a role in WSS programmes. At community level, artisans often construct and maintain WSS systems, performing an important marketing role as well, particularly in sanitation. Private sector involvement is increasing in design and manufacture of hardware, in the implementation of schemes, in the delivery of services, and in O&M. Private media can also play an important role in promoting behavioural changes.

Participation of the private sector is mentioned in almost all ESA policies. Often the privatisation of some operational utility functions is considered advantageous, but seldom it is recommended to privatise the whole operation; the government always stays in the role of executing institute. Some policies stress the business-like management and commercialisation regardless of the choice between public and private. Private sector involvement aims to enhance the level of efficiency, the mobilisation of private sector financial resources, and the devolution of a large part of the tasks of water conservation and exploration to private firms and households. Innovative means of privatisation and ownership are being sought. In rural areas, this is done through co-operatives, communal

ownership, NGOs, and community based public service companies; in the urban areas through autonomous sewerage options for commercialised utilities, private managers, outright private ownership, etc. Partnerships with research and academic institutions at local and regional levels, and with external technical support centres are being stimulated.

4.4 Project approaches

4.4.1 Advocacy and communication

There is an increasing recognition of the importance of advocacy and communication strategies as key elements to improve programming in the WSS sector. Advocacy is primarily aimed at national policy makers, senior politicians and civil servants, and the media. Its main objectives are to raise the profile of WSS, to create awareness of the importance of an enabling policy and legislative environment, and to promote community decision making, accountability and management for integrated sanitation water and hygiene.

Box 4.3: Advocating Changed Behaviour

Greater emphasis on sanitation, hygiene education and social mobilisation in support of sector improvements are essential. Experience has shown that health and other socio-economic benefits will not be realised fully unless behavioural change is actively promoted and achieved. The aim is to create a demand for, and ensure the use of, WSS facilities as well as to promote hygienic attitudes and practises through education and communication.

With respect to communication strategies, the main issue is structuring communication, thereby ensuring an optimum mix of planned communication approaches in each WSS programme. Communication strategies among others focus on community participation and management, and communication for behavioural change which includes social marketing and public health communication. The idea is that communication strategies are characterised by quality seeking, learning approaches that reward feedback, and continuos improvement rather than inflexible blue-print models. IPC, Improved Programming through Communication Information and Education, is geared not only to the individuals, the households and communities but also to agencies and the way the sector operates (Water Supply and Sanitation Collaborative Council Working Group on Advocacy and Communication Strategies, 1998).

4.4.2 Involvement of all stakeholders

For sustainable development, collaboration is necessary among all stakeholders. Therefore WSS projects have to work with a participatory approach, where the users' perspective is placed in a central position. To adopt a participatory approach that allows for the involvement of all stakeholders, behaviour change is needed at political and governmental level, as well as among other WSS stakeholders. Awareness raising and social mobilisation are needed to ensure this behaviour change.

4.4.3 Community participation and management

Many WSS facilities have proven to be unsustainable because they are not matched to the aspirations and possibilities of the users, particularly the poorest users. Funding and implementing agencies have often focused too much on the supply driven construction - rather than the management - of high value facilities. User participation has often been limited to the free of charge provision of labour and materials during construction. This has resulted in users not being able or willing to contribute sufficiently to the maintenance of facilities, which has lead to serious break downs.

Box 4.4: Involving the Community

Community involvement is an essential element for sustainability. Successful projects are those in which communities have played a major role, and community management has proved to be a key strategy for sustainability. The best projects often have women playing lead roles. Clearly this requires local capacity building, greater use of indigenous skills, and adapting approaches to local cultural, social, environmental, political and economic situations (UNICEF, 1995).

Now it is being recognised that community members are the future users and often owners or co-owners of the WSS facilities, and particularly in rural areas have a shared responsibility for its financial and technical management. Therefore they should be involved in all stages of the project cycle, to enable them to participate in decision making on key issues such as service levels and service delivery, including technology choice, site selection, organisation of O&M, and O&M contributions. Therefore communities should be involved in decision making in planning, design, implementation, monitoring and evaluation. When dealing with communities, differences among rich and poor and different ethnic, religious and caste groups should be taken into account for an equitable participation in decision making and sharing of benefits among all.

4.4.4 Demand responsiveness

To enhance ownership and sustainable use and functioning of WSS facilities, interventions should be based on real demands of the future users. Managers must convert to the idea that they are selling a product, not providing a service. The gender specific differences in consumption and demand within a community and even within a household should be taken into account when planning for WSS services. The users, women and men, should be informed properly and should be able to choose their services knowing the price they can and are willing to pay. The obstacle to increasing coverage of safe sanitation is no longer the availability of technological options, but the interest of potential users (Caircross, 1992).

The use of economic Willingness-to-Pay (WTP) studies for water supply and sanitation is being promoted by various organisations, since it focuses on users' preferences and effective demand. Services should follow rather than precede community initiative in seeking improvements.

4.4.5 Paying for water

Water is a basic need and in general is considered a public property. Access to clean water and sanitation is a basic right of all human beings and central to sustainable socio-economical development. However, water also is a scarce and vulnerable resource, and therefore it has an economic value. It is now widely recognised that the service of providing safe drinking water can not be given free of charge, and that therefore consumers have to pay for the water they use. However, there are various problems related to letting consumers pay for water. Water tariffs are often kept very low for electoral reasons, leading to little or no cost recovery from users. This also results in a lack of incentive to exploit and maintain facilities effectively and efficiently, no accountability to users, and consumers lack a means of demanding improvements and indicating preferences because there are no price mechanisms. Particularly in urban but also in rural areas there are huge problems with the billing of water due to illegal connections, leakage and the resistance of users to pay for water. Many authorities are exploring the feasibility of more active pricing for water supply, with the usual motive of improved cost recovery. Particularly in urban WSS, there are a lot of developments regarding the pricing of water, including the development of water markets to enable the selling of water rights, and increased emphasis on demand management to minimise water wastage.

4.4.6 Cost recovery and financial self-reliance

Box 4.5 Cost Recovery and Poverty Targetting

There is no contradiction in seeking maximum cost recovery from water and sanitation investments while at the same time giving priority to providing basic services for the unserved poor, but it does require careful consideration of tariff systems and innovative ways of mobilizing local, national and international financial resources (Ministry of Housing, Spatial Planning and the Environment, 1996).

Because the supply of safe drinking water is no longer considered a free good, cost recovery has become an important principle in the policies of all ESAs. There is a consensus that beneficiaries should cover O&M cost for water supply from the start. Cost recovery is justified in terms of financial sustainability and self-reliance, but also because of the important contribution it makes to creating a sense of ownership. Cost recovery is thought to enlarge consumers' freedom to choose the level of services they want (rather than need), and are willing and able to pay for. However, cost recovery from the poor must take into account their ability to pay. Mere emphasis on 'ownership' of facilities through payment may undermine rights of access of the poor, and household water security of more marginal users may be seriously compromised. Cost recovery of higher than basic levels of services is much more important, as subsidies here typically absorb substantial resources and largely benefit the better off who are able to pay the full cost of services.

Cost recovery in sanitation programmes is not accepted unanimously. The health benefits of quick realisation of improved sanitation is said to justify the subsidy practice often used.

4.4.7 Technology options

Box 4.5: Reasons for failure

A high proportion of rural water supply schemes fail or develop serious problems. The most common causes of this are the choice of unsuitable technology, the choice of systems which are not those that consumers really want, the absence of clear responsibility for technical and financial follow up, and the absence of a proper system for cost recovery (DFID, 1997).

Although the solutions for improved sector performance are to be sought less in technology and products and more in social, institutional and financial domains, ESA policies recognise that attention should also be given to technology aspects of systems. A first consensus is that better use should be made of what already exists. Various donors explicitly move away from capital intensive infrastructure, and prioritise rehabilitating existing facilities over the construction of new ones. When new construction is needed, the technology should be simple, such as the use of handpumps and gravity systems in the case of water supply. Furthermore the use of local materials and skills is being promoted. For health considerations, a minimum of 20 litres of water per user per day is needed. Maximal acceptable walking distances and most appropriate technologies should be determined locally. The involvement of users in technology choice, and their agreement on the level of the service and its payment, is essential.

Despite faced water shortages, little attention is being given to introducing or reintroducing non-conventional sources of water such as rainwater harvesting or the reuse of waste water (Ministry of Housing, Spatial Planning and the Environment, 1996).For sanitation, agencies recommend to promote low-cost, on-site sanitation. The use of centralised removal and treatment could be recommended only in areas of high population density and/or inappropriate soil properties. When sewage is the only possibility, small bore sewers can be considered. For waste water treatment in tropical or sub-tropical regions, anaerobic water treatment and/or oxidation ponds are often the best solution.

4.4.8 Operation and maintenance

Operation and maintenance of WSS systems has been neglected in the past in a great number of developing countries. According to the World Health Organisation, it is estimated that 30 to 60% of existing water supply systems are not operational. This has raised the importance of integrating O&M components into the planning, implementation, management and monitoring of project activities. It is also realised that O&M is not a purely technical issue, it involves also social, gender, economical, cultural, institutional, political, managerial and environmental aspects.

Sector agencies realize the need to redefine the roles and responsibilities of the various actors involved in O&M. Governments are gradually reducing their role as providers, and communities have increasing responsibilities in O&M as well as management of WSS facilities. New actors, such as private entrepreneurs from the informal or formal sectors, are now being considered as potential actors for O&M.

4.5 Project management

4.5.1 Sector monitoring and evaluation

Sector monitoring and evaluation deserve emphasis. Systematic but simple and easily implementable monitoring is proving to be an indispensable management tool at key stages of WSS programmes. Monitoring supports a process of assessment, analysis and action and can include use, hygiene and O&M indicators. Communities can effectively play and important role in monitoring, bringing significant benefits. In this context there is a shift from monitoring only on the basis of budget disbursements and achievements of physical targets to the assessment of also efficiency, effectiveness and the benefits of programmes.

4.5.2 Research and development

Promising concepts and products in the field of WSS have emerged from applied research in developing countries. However, the exchange of results between developing countries and feedback to the field are often still poor. Also, too little use is made of local research institutes, and these institutes often do not have much say in determining research priorities. There is still a need for new developments, particularly in the field of user-oriented management, technology options in difficult areas, and sanitation in peri-urban areas. When no appropriate technologies are available, research and development should be stimulated for the development of appropriate products and systems and the adoption of new technologies. The exchange of information and research outputs will enhance this development.

4.5.3 Donor coordination

Box 4.2: Do's and Don'ts for Donors

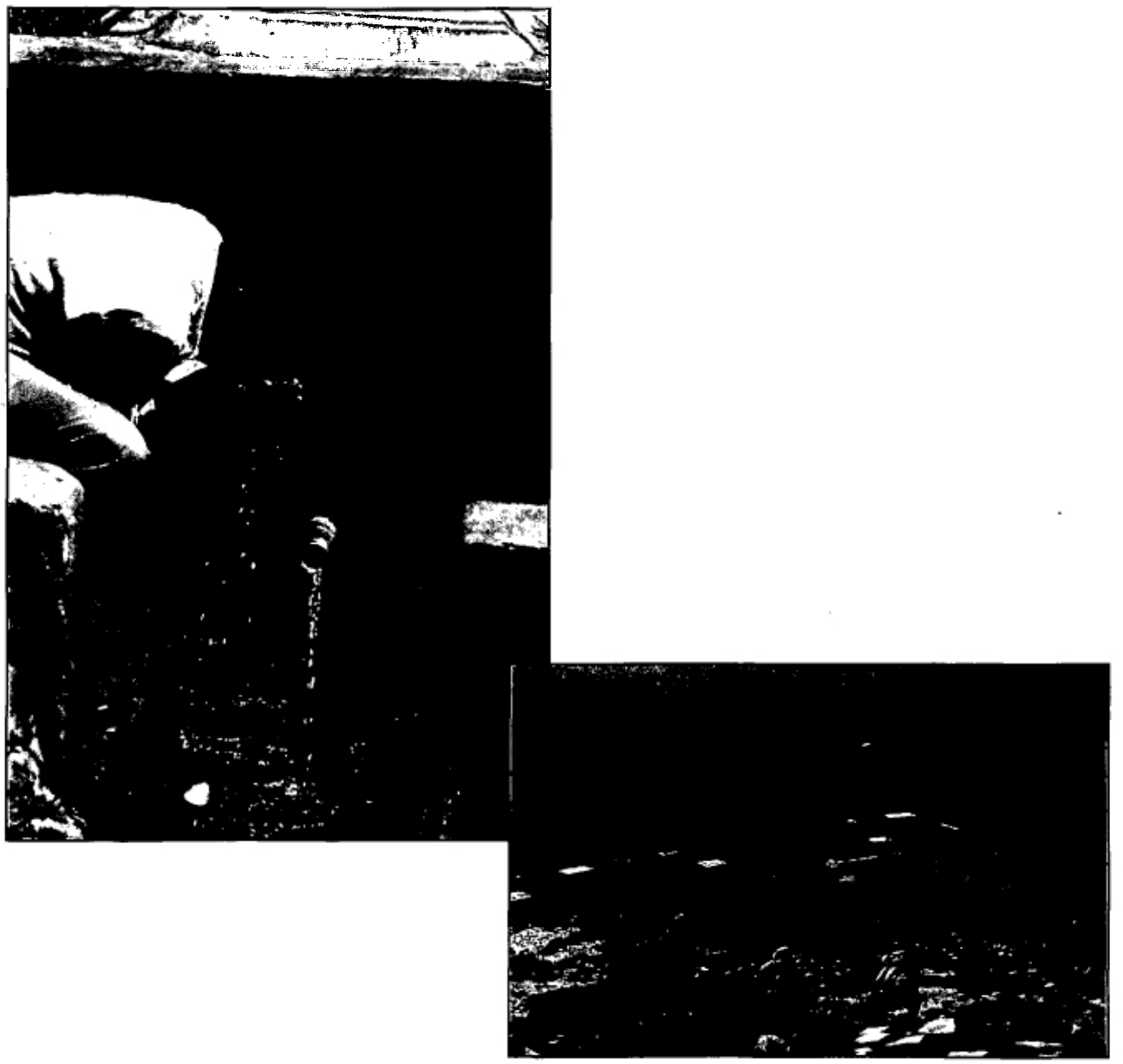
There is a basic satisfaction with the forms of support provided by ESAs. However, there are indications of a lack of compliance by ESAs with government policies and strategies. Problems mentioned include: donors are bypassing central government mechanisms, unadapted technology, tight deadlines for the provision of ESA support, and donor mandated technological options or levels of service which do not consider community priorities (Ministry of Housing, Spatial Planning and the Environment, 1996).

There has been an improvement in coordination and co-operation between donors, leading to more convergence in sector policies of the various donors. But there are still major differences in the strategies for achieving policy objectives, forcing executing agencies in partner countries to satisfy a multiplicity of donor requirements. There is a need for standardisation of the equipment and harmonised regulations for the acquisition of goods by the various donors, as well as a harmony in methods, institutional arrangements and procedures.

A call is made for more collaboration among donors and to share knowledge systematically. For that, one recommendation is the establishment of information networks among agencies, resource centres and sector professional organisations. There is a trend to decentralise decision making to country level donor representations. At this level, agencies are taking steps to co-ordinate WSS sector activities.

Chapter 5

Irish Aid experiences versus international trends and issues



Chapter 5
Irish Aid experiences versus international trends and issues

The following chapter gives a comparison between Irish Aid experiences in the WSS sector in sub-Saharan Africa, as it is reflected in the documentation, and international trends and issues as found in the latest literature.

- The **objectives and justification** of water supply and sanitation interventions of Irish Aid that are related to addressing basic needs and health improvements can be found in the policies of almost all ESAs. Additional objectives mentioned by other ESAs include poverty alleviation, improvements in the quality of life, environmental protection, time and energy saving for women and children, and economic benefits.

- Regarding health improvements, it is internationally recognised that the **integration of water supply with sanitation and hygiene education activities** is needed to achieve significant impact. This recognition can be found in some of the newer Irish Aid supported projects, but in other projects a stronger focus on sanitation and hygiene education is needed.

- **Inter-sectoral linkages**, particularly with water resources management and with the health sector, are increasingly considered to be very important for the effectiveness and impact of WSS projects, as well as for the sustainable development and management of existing water resources. Irish Aid supported WSS projects historically do have a strong link with health, although at field level planning and implementation is usually not integrated or coordinated. Integrated water resources management is an issue that is not yet being addressed in Irish Aid projects.

- **Improving the gender balances** is an internationally accepted key issue which forms a very solid cornerstone of the general Irish Aid policy, and is further being supported by a thorough and practical gender policy. The level of gender sensitive analysis and the way in which gender is taken into account in projects varies considerably, but promising gender approaches are being developed in various projects.

- **Protection of the environment** is an international principle in the WSS sector that is included in Irish Aid's policy, but not yet significantly taken care of in WSS projects. The potential adverse effects of improved water supplies are usually not completely foreseen, and pollution problems caused by unsanitary conditions (facilities and behaviour) are not sufficiently catered for.

- Irish aid supported WSS projects do seem to be in accordance with international trends regarding **decentralisation** and good governance. Furthermore, **capacity building** and working through existing government structures have become important features of Irish Aid projects, and are in accordance with the latest international sector developments. However, except for Zambia, Irish Aid does not

seem to pay particular attention to supporting institutions to deal with their changing roles and responsibilities. The government as facilitator instead of implementor and public private partnerships are not specifically addressed in project documents.

- **Community participation** is internationally recognised as one of the key issues to sustainability, and has become the cornerstone of Irish Aid interventions in the WSS sector. Both globally and among Irish Aid supported projects, an evolution can be seen from merely asking communities to contribute with labour and materials during construction, to treating community members as the future owners of the facilities, involving them in decision making during all phases of the project. Community management has come to the forefront during various international conferences. In practice there are generally still only a few projects that are able to provide communities with the information, knowledge, skills and room to effectively manage their own supplies, with the support from local government and other agencies.

- Internationally a shift can be seen from supply driven WSS projects to more **demand responsive** interventions. Although Irish Aid supported projects in general are addressing basic needs, there are no assurance that interventions are based on the real demands of future users, and that users are willing and able to pay for the water.

- Increasingly in Irish Aid projects communities are obliged to contribute to the construction of facilities and to pay for O&M. Unfortunately, the setting of **tariffs and cost recovery** mechanisms are not elaborated on in most of the project documents, even as financial self-reliance and sustainability. Internationally, the acceptance that water has an economic as well as a social value, and the focus on appropriate financial systems to improve cost recovery and financial self-reliance, have become major features of WSS projects.

- Very gradually, the importance of **advocacy and communication strategies** in WSS programmes is being acknowledged internationally. These strategies focus among others on informing and mobilising stakeholders on various levels from community to national, community participation, and hygiene education and promotion. Unfortunately advocacy and communication strategies have not been elaborated on in Irish Aid documents.

- Concerning **technology options,** Irish Aid projects are very strongly in line with international recommendations concerning the use of simple, low-cost and appropriate technologies, and preferring the rehabilitation of existing systems over the installation of new ones. Also similar to international developments, the projects do not seem to give a lot of attention to alternative water sources, such as rainwater harvesting or the reuse of water or waste water.

- **O&M** problems are very outstanding for WSS facilities in all developing countries. There are a lot of developments in concepts and strategies to combat O&M problems, which unfortunately are not elaborated on in Irish Aid documents. However, in Lesotho O&M problems seem to be minimised.

- **Research and development** is not coming out as a clear feature of Irish Aid involvement in the WSS sector. Not only in the field of alternative technology options, but also with respect to various management tools, research and development is considered a crucial element for donor support by many ESAs. Linked to this is the need for further exchange of information and experiences, which is also recognised within Irish Aid as an important issue.

- Within development cooperation, **monitoring** is moving away from only measuring budget disbursements and achievement of physical targets to the assessment of also the efficiency, effectiveness and impact of programmes. Although this might at present be developed and implemented at field level, there is no evidence in the documents that Irish Aid projects are following this international trend. Internationally, health impact studies are generally hardly carried out, mainly because of the difficulty in proving that health impacts are a direct result of improved WSS.

- The strong focus on rural areas, as well as the gradual shift from project based aid to support for sector programmes initiated by partner organisations, are characteristics of Irish Aid support as well as of other ESAs. Both internationally and within Irish Aid **donor aid** is recognised to need further coordination, cooperation and adjustment to national strategies and instruments.

- Within Irish Aid supported projects, **sustainability** is usually addressed as technical sustainability focusing on O&M. In some projects institutional sustainability is elaborated on. The box below shows the key factors for sustainability:

Box 5.1: Critical Aspects for Sustainability

a ***Technical sustainability,*** *which focuses on technology choice and operation and maintenance;*

b ***Social sustainability,*** *which includes equity in access to facilities, community participation, gender sensitive approaches, and the use of facilities;*

c ***Financial sustainability,*** *balancing the social and economical value of water and assuring cost recovery and self-reliance of the management of WSS facilities;*

d ***Environmental sustainability,*** *ensuring that the use of the natural resources does not lead to depletion and deterioriation; and*

e ***Institutional sustainability,*** *which includes a sound legislative, political and administrative environment, efficient and effective institutions, and sufficient human and institutional capacities to manage the WSS sector.*

Chapter 6

Elements for a WSS policy

Chapter 6
Elements for a WSS policy

Based on international recommendations as well as experiences from the various Irish Aid review and evaluation reports, the following first list of WSS policy principles has been identified. However, these principles solely reflect the views and experiences of external support agencies. Therefore it is essential to discuss and further develop these elements with the various key stakeholders in the field, including Irish Aid field staff, national and local government officials, NGOs, community based institutions and users.

Ensuring health improvements

- Access to adequate water and sanitation services is a basic human need.
- WSS projects should particularly serve to poor and unserved in rural and peri-urban areas according to their needs and demands.
- Water, sanitation and effective hygiene education need to be integrated in WSS programmes and projects to ensure significant health improvements.
- There should be a balance in terms of priorities, time allocated and finances between software and hardware activities in WSS programmes and projects.

Integrated water resources management and environmental protection

- The planning and implementation of drinking water and sanitation programmes should be carried out in the context of an holistic water resources development framework, including the health dimension (UNCED, 1992).
- Establish effective watershed management, water source protection and sanitary zones adjacent to sources of drinking water supply with regulations governing special natural resources use and conservation practices to minimise environmental impacts (Ministerial Conference, 1994).
- Establish wastewater treatment plants and the use of recycled water within an environmentally sound system, their planning to be accompanied, where appropriate, by an environmental impact assessment (Ministerial Conference, 1994).
- Establish pricing policies aimed at promoting the efficient use of water taking into account affordability at all levels (also considering health impact considerations), resource conservation through demand management, and utilisation of the polluter pays principle (Ministerial Conference, 1994).
- Promote the development and use of non-conventional sources of water supply, such as the reuse of wastewater, rainwater harvesting, desalination of sea and brackish

water, and the conservation of traditional sources (Ministerial Conference, 1994).

- Promote, where not existent, the adoption of appropriate country specific standards or guidelines on drinking water quality, taking into account the WHO's drinking water guidelines (Ministerial Conference, 1994).

Stakeholder involvement

- Involve in the implementation of WSS programmes and projects all stakeholders in a participatory process, such as consumers, planners and policy makers at all levels.

Gender

- Women play a pivotal role as providers and users of water an guardians of the living environment, and they are key agents of change. Policies and strategies are needed to address women's specific needs and to equip and empower women to participate equally as men at all levels in water resources programmes, including decision making and implementation (Dublin Statement, 1992).

Community management

- Particularly in rural areas, but also in peri-urban settlements, communities should have prominent roles in planning, resource mobilisation and all subsequent aspects of the management of WSS facilities, supported by national plans and programmes.

Changing roles and responsibilities

- A changing role of the government, from provider to promoter and facilitator, will enable local public, private and community institutions to deliver better services and manage those accordingly. Therefore, ongoing decentralisation and privatisation processes have to be supported, and community management, which involves communities and other local institutions, should be enhanced.

- Involvement of the private sector in WSS projects should be encouraged and further optimised, for the private sector can play a major role in service delivery and represents an largely untapped potential of resources.

Capacity building

- Capacity building is needed to support institutional development which results in strong institutions with sound management, motivated and capable people, and an enabling environment of appropriate policies, legislation and incentives. Capacity building should be aimed at three levels: 1) creating an enabling environment with appropriate policy and legal frameworks, 2) institutional development at all levels, and 3) human resources development and strengthening of managerial systems (Alaerts et al., 1991).

- Human resources development (HRD) at all levels, from community members to politicians, is essential to institutional development. Information, education and communication strategies must be integrated within HRD policies.

Information, education and communication

- WSS programmes and projects should make use of appropriate information, education and communication strategies to achieve improved functioning and used WSS services.

Operation and maintenance and technology options

- Due attention must be given to operation and maintenance arrangements which will ensure sustainability before investments are made. Choices of technology and levels of service are major factors in determining construction, operation and maintenance costs of new projects. Rehabilitation of defective systems, reductions in wastage and unaccounted for water, recycling and reuse of wastewater, and improved O&M can often be more effective than investment in new services.

- Technology options for WSS facilities should be responsive to the needs and demands of users and owners, and to the constraints imposed by the conditions.

Efficient and effective use of financial resources

- Equitable and efficient financial management must be ensured by progressively devolving decision making and management to the lowest appropriate levels, and effective tariff or price setting, facilitating the financially autonomous functioning of WSS institutions while assuring that the poor to benefit from the services (Ministerial Conference, 1994).

- Effective cost recovery requires sector institutions that have sufficient autonomy and authority, and decentralised collection so that revenues are available for management and operation of services. Appropriate charging mechanisms must be adopted with participation of consumers, which reflect local socio-cultural and economic conditions. Involving consumers in choice of technology and service levels has proved to have a positive impact on cost recovery (UNDP, 1990).

- Community cost sharing of capital and recurrent costs of WSS services must take into account the willingness and capacity of community members to pay for the services.

Knowledge development and exchange

- Research and development must continue to play a role in improving sector performance. Exchanges in information and experiences within and among developing countries must be further developed.

- Establish or strengthen domestic resource centres, including domestic institutions for information collection and dissemination, applied research and support services (Ministerial Conference, 1994).

Donor coordination and cooperation

- Equipment should be standardised, and regulations for the acquisition of goods by the various donors should be harmonised, as well as a methods used, institutional arrangements and procedures.

- Closer collaboration among donors and systematic sharing of knowledge has to be promoted. For that, one recommendation is the establishment of information networks among agencies, resource centres and sector professional organisations.

For further information on Ireland Aid, please contact:

Ireland Aid

Publicity and Information Officer,
Ireland Aid Information Section,
Development Co-operation Division,
Department of Foreign Affairs,
76/78 Harcourt Street, Dublin 2, Ireland.
Tel: 01 478 0822 Fax: 01 478 0952
Website: www.irlgov.ie/iveagh