Ireland Aid Evaluation and Audit Unit

Ireland Aid

Ireland Aid in the Water and Sanitation Sector

Volume 2

December 1999

Synthesis Review

Ireland Aid in the Water and Sanitation Sector

Volume 2 – Annexes

December 1999

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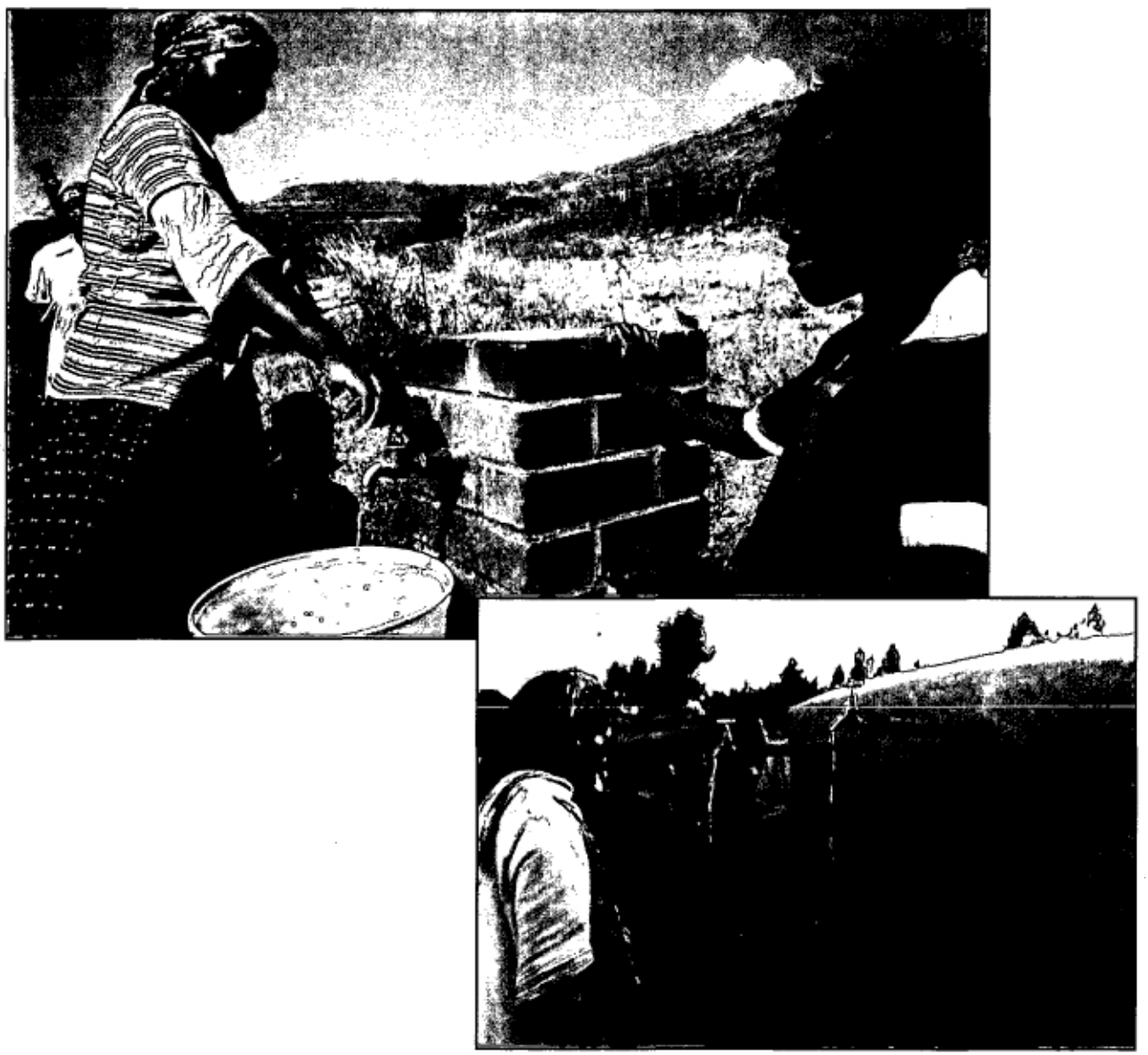
Terms of Reference



Annex A: Terms of Reference

1.0 Overview

Irish Aid has been supporting relatively large-scale water and, to a lesser extent, sanitation projects in a number of the priority countries since 1982. The bulk of the expenditure has been on rural/village water supply projects. There has been limited support for rehabilitation of town supplies and for upgrading of services in urban compounds. Support has been provided through dedicated projects in some cases and as components of integrated area-based programmes in others; in some cases there has been direct implementation, while in others there has been mainly budget support for components of national or local programmes. In addition, indirect assistance has been provided in a wide range of countries through the NGO co-financing programme.

The longest running programme is that in Northern Zambia which started in 1982; total expenditure to date (1996) in current (1997) prices has been £6.2 million on the water programme and an additional £0.5 million on a pilot sanitation project. (Water and sanitation projects have been supported also in selected urban areas of Zambia through the compound upgrading programmes). Support for village water supplies in central Sudan began in 1985 and has continued to date with some interruptions; expenditure up to end-1994 has been £2.6 million in current prices.(?? figures post 1994). In Lesotho, support for village water supplies began in 1986 and has continued to date; total expenditure to end-1996 has been £2.0 million in current prices plus £0.3 million on a rural sanitation programme in one district. In Ethiopia, water projects have been supported within the area-based development programmes initiated in 1994.

In Tanzania and Uganda, water and sanitation projects have made up a small part of district programmes and there has been some limited support for urban supplies. In Zimbabwe, support for rural water supply and hygiene education in Matabeleland was initially provided through UNICEF; an Integrated Rural Water and Sanitation Project commenced in 1996. In Mozambique, support has been provided to date largely through NGOs. In South Africa, support has been provided since 1995 for a National Community Water and Sanitation Institute attached to the University of the North. (See attached tables for details of expenditure to date on main projects)

This study will examine in particular the experience in Ethiopia, Lesotho, Sudan and Zambia but will draw also on relevant findings from the other countries.

2.0 Country/project Background

2.1 ETHIOPIA

The country programme is focused mainly on three geographic areas - the administrative zones of Tigray, Sidama and Gurage; in each there is an integrated development programme. These programmes have emphasised community participation, partnership with district administrations and working towards prioirities set by the people themselves. The Tigray programme has included village water supplies (mainly boreholes??) and latrine construction. Water supply components in Sidama have included spring protection in highland areas and rainwater catchment ponds in the lowlands. The country programme review and planning exercise carried out in 1997 includes key source documents.

2.2 LESOTHO

Support for village water supply and rural sanitation was provided within the context of national programmes using relatively standard approaches and operating procedures; limited technical assistance was provided. Funding, initially provided for programmes in Berea and Leribe Districts has now ceased. In more recent years funding has been made available for Qacha's Nek, Mokhotlong and Thaba Tseka Districts (implementation of one project through an NGO). Key source documents include reports/evaluations on the national programmes, Irish Aid reviews and the Health Impact Evaluation of the Rural Sanitation Project in Mohale's Hoek (1987/88).

2.3 SUDAN

A substantial village water supply programme was supported in the mid-1980s and again in the early 1990s; a new programme began in 1995. All support has been concentrated in the Central Zone and the programmes have been implemented by the Rural Water Corporation (with some technical assistance in the early years). The soil/water conditions have required relatively sophisticated technologies (pumps). Source documentation includes Irish Aid reports and review documents.

2.4 ZAMBIA

The water programme in Northern Province has been under way for 15 years and now covers six districts (Kasama, Mbala, Isoka, Nakonde, Kaputa and Mpika); a pilot sanitation project has been supported in one district (Kasama) since 1992. The programme has concentrated largely on shallow wells (with bucket and windlass) and has involved a high level of community participation; health education has been an integral component almost since the outset. Community participation is now being formalised through Water, Sanitation and Health Education Committees at local level. The programme is implemented directly by Irish Aid (using mainly local staff) but in close consultation/cooperation with national and local authorities. In some areas, ground conditions have required borehole construction and thus the use of contractors. Key source documents include project reports, Irish Aid reviews and a background paper prepared for the 1995 country programme review and planning exercise. There have also been significant water and sanitation components within the urban upgrading projects in Lusaka (Kamanga), Mazabuka (Ndeke) and in Northern Province (Chiba in Kasama and Maround in Mbala). A key source document is the 1996 review of the urban upgrading programme.

2:5 Other Countries

The need to include other countries (eg Interventions focussing on Water and Sanitation intervention in South Africa which is implemented through Mvula Trust) may be identified during the desk phase.

3.0 Objectives of the Study

The main objective is to produce an overview and critical analysis of support to Water and Sanitation projects in the light of evolving Irish Aid objectives and in the context of wider international experience. The lessons learned will be used to guide the selection, design, appraisal and implementation of ongoing and new projects/programmes.

4.0 Scope and Focus

The study has two main components:

- a thorough review of best practice and international experience in relation to design, implementation of water and sanitation projects with particular reference to Sub-Saharan Africa, and
- an evaluation of selected larger water and sanitation projects funded by Irish Aid. The study will cover all stages of the project cycle from identification and preparation, through implementation and monitoring, to completion, evaluation and post-project developments (where possible). It will balance technical and social factors and give particular emphasis to cross-cutting issues such as participation, gender and environment. Although improvement of health status is the principal justification for water and sanitation projects, this study is not expected to measure the health impact of particular programmes. As noted by the World Health Organisation (WHO): *"The evaluation of health impacts usually requires major investments of time and skilled manpower and should be limited to research projects with adequate resources"*. However, the study will draw upon other studies in this area and extrapolate the results. It will also recommend appropriate impact evaluation approaches for different types of projects.

Some of the key questions to be addressed by the study are:

4.1 Project Design and Evolution

- How were the projects identified, e.g. part of national programmes, component of integrated area project ?
- Who designed the original projects/programmes and subsequent phases?
- How were beneficiaries involved in planning and evolution?
- Was project design coherent and realistic?
- How were decisions made about the balance between water provision, health education and sanitation facilities?
- Were assumptions/pre-conditions identified and addressed?
- Were adequate monitoring and evaluation procedures included in the design?
- What lessons for the future may be drawn from past experience?

4.2 Relevance

- How does support for water and sanitation programmes relate to Irish Aid policy?
- In particular, what is the likely impact on poverty reduction?
- What was the intervention logic underlying choice of projects and components?
- What evidence is there of prioritisation of water and sanitation needs by potential beneficiaries?
- How much attention/analysis was devoted to alternative solutions?
- Are the strategies and approaches adopted still considered to be relevant and appropriate?

4.3 Effectiveness

- What immediate results have been achieved and how do they compare with plans?
- What has been the experience with regard to functioning and utilisation of facilities provided?
- How reliable have the facilities been, e.g. dry season water supplies. What has been the experience regarding water quality? How have problems in this area been addressed?
- What has been the effect of hygiene/health education on behaviour?
- Who benefits from the projects/programmes?
- To what extent have there been unintended results and unforeseen beneficiaries?
- Have the underlying assumptions been realised? If not, how did this affect the project and what changes were made to take account of this?
- What additional actions were taken to optimise effectiveness?
- Have data collection and monitoring been adequate to assess effectiveness?
- Have any studies been undertaken to measure health impact?
- Are there any detectable changes in behaviour (hand washing, water storage etc)?

4.4 Efficiency

- Were the project inputs (e.g. finance, personnel) adequate and timely?
- Were project organisation and management effective and efficient?
- Were the projects effective in mobilising community participation?
- How well did cost-effectiveness compare with similar projects, e.g. unit cost per beneficiary?
- What were the major constraints inhibiting efficiency?
- Was reporting adequate and timely?
- Has there been regular auditing of project finances?
- Were reviews/evaluations carried out on schedule and to an acceptable standard?
- Were appropriate actions taken in response to monitoring and evaluation reports?
- Was coordination with other government/donor projects adequate and effective?
- Are cost differences evident between rural and urban interventions ?

4.5 Sustainability

- Was sustainability addressed from the outset of the project/programme?
- If not, when and how did it start to be addressed?
- Was the choice of technology conducive to sustainability?
- What has been the record as regards breakdowns and repair times?
- Were the organisational arrangements, including integration into central/local government and/or community structures, appropriate for sustainability?
- Were appropriate structures established at local level to ensure supervision and maintenance?
- What training or other capacity-building measures has been undertaken?
- Is there evidence of a sense of ownership on the part of beneficiaries and relevant support agencies?
- What has been the scale of beneficiary contributions to construction and maintenance?
- Is there a commitment on the part of central or local authorities to continue support to the communities?
- Are mechanisms in place to ensure ongoing health/hygiene education?

4.6 Participation

- Was participation a core objective and/or means from the outset? If not, when and how was it addressed?
- What were the principal forms of participation (e.g. in planning, management) and how well did they work in practice?
- What steps were taken by the projects to improve participation?
- How did the forms and levels of participation differ from other relevant projects?
- What lessons might be learned from the experience with regard to participation?

4.7 Gender

- To what extent were gender and other social issues taken into account in project design and implementation?
- Has the monitoring of gender impact been an ongoing activity?
- What was the gender balance within local consultative and/or management structures, e.g. village water committees?
- What was the gender balance among trainees in various areas?
- What has been the impact of projects on the work load and the status of women ?

4.8 Environment

- Were environmental considerations adequately taken into account from the outset?
- If not, when and how were they introduced?
- What environmental impacts resulted from the programmes and how well were they addressed?
- How well has the consideration of environmental issues compared with other similar projects?

5.0 Recommendations and Guidelines

On the basis of wider donor experience and specific lessons learned from Irish Aid projects the study should recommend suitable guidelines for the preparation and appraisal of future water and sanitation projects. Key issues for consideration include:

- whether integration of water and sanitation components is necessary or desirable
- balance between physical inputs (wells, latrines) and hygiene/health education
- appropriate organisational arrangements to maximise prospects of sustainability
- factors influencing the choice of technologies
- optimal scale of projects taking into account both efficiency and social criteria
- successful approaches to widening and deepening participation

6.0 Methodology

A learning process approach will be adopted in relation to this study, i.e. rather than planning the full exercise ab initio, the lessons from the earlier phase will help shape the later phases. The first phase will consist of a desk study, covering the key summative documents in this area and, in particular, a review of the basic documentation in relation to each of the main projects/programmes. It is envisaged that this will take 4-5 weeks including report drafting.

The second phase will consist largely of project visits and in-country consultations. It is expected that the Lesotho and Sudan projects can be addressed through a combination of desk study and local consultants working under guidance. The core team will then concentrate on Ethiopia (one selected area-based project) and Northern Zambia, spending two weeks in each.

The third phase will include synthesis of findings, report drafting, discussions with Irish Aid and finalisation of report - three weeks is provided for this.

6.1 Study Team

The expertise required includes water and sanitation technologies, health planning, social/gender analysis, environment, project organisation and evaluation; in particular, a wide and deep experience of similar projects will be required. It is expected that a number of these requirements will be found in the same persons and that the core team will be just two consultants. Local consultants will be used to carry out preparatory investigations, to provide complementary areas of expertise/experience for in-country work and, in some cases (e.g. Sudan), to carry out the full country study.

7.0 Time Schedule

The initial desk study will be carried out in May . Following this, preparatory work will be initiated in country; field visits by the core team will be in July/August . The whole exercise should be completed by September.

8.0 Reporting

Reports will include:

- Initial report on the desk study with recommendations for subsequent phases;
- Specific reports commissioned from local consultants;
- Country reports by the core team for areas visited; and
- Synthesis Report summarising analysis, main findings and recommendations.

Brian Wall

E&A Unit 12th May 1998

Annex B

Individual Project Assessments

Annex B: Individual Project Assessments

This annex presents the main features of each one of the projects reviewed. The findings are purely based on documentation available at Irish Aid headquarters in Dublin. Therefore it does not necessarily reflect the views and experiences from people in the field.

It is expected that this collection of summarised project sheets will contribute to an easy retrieval of information on the various WSS sector projects in general and in particular on the topics that where identified for this review. It should not be seen as a comprehensive description of on the projects.

As not all project files are homogenous regarding the information they contain, the projects descriptions do not always provide information of the same level on all the topics that were identified for the review. Consequently, the information that can be found on a specific topic is not equally elaborated on among the different projects. However, an effort was made to group the information on each project according to three main topics: the project setting, the institutional setting and the effectiveness and impact at field level.

1 Checklist used for the screening of Irish Aid supported WSS projects

1. Basic information

- Project title
- Duration
- Location/area
- IA contribution
- Contributions from others

2. Overall

- Immediate results achieved, how do they compare with plans
- Strengths and weaknesses
- Who benefits from projects/programmes
- Any unforeseen beneficiaries or unintended results
- Balance between hardware and software inputs
- Optimal scale and targeting in terms of efficiency and social criteria
- Any health impact studies done
- Impact project/programme on work load and status of women
- General lessons learned

3. Relevance

- Local conditions
- National WSS policy
- Ireland Aid policy (especially poverty reduction)
- International developments and experiences

4. Integrated approach

- Are water supply, sanitation and hygiene education (environmental health) integrated
- Is strategy selected still considered to be relevant and appropriate
- Strengths and weaknesses

5. Project design and evolution

- How were projects identified (part of national programme, component of integrated area project)
- Who designed original project/programme and subsequent phases
- How were beneficiaries involved in planning and evolution
- Was project design coherent and realistic
- How were decisions made about balance between water, sanitation and HE
- Any evidence of needs of potential beneficiaries
- How much attention was devoted to alternative solutions
- Is sustainability addressed
- Are gender and environmental issues addressed
- Were assumptions and pre-conditions identified and addressed
- Were M&E procedures included in design
- Strengths and weaknesses

6. Institutional structures

- Implementing agency/ies
- Other institutions Involved
- Main institutional structures existing and functioning at various levels (permanent and non permanent, institutiogramme with GO, NGO, private sector, community)
- Project/programme integrated or parallel to GO structure
- Role of the government
- Role of Ireland Aid
- Role of communities
- Gender balance in institutions
- Existence and involvement of private sector
- Gaps and overlaps in roles and responsibilities
- Effectiveness and functioning of institutions
- Institutional sustainability
- Strengths and weaknesses

7. Human resources

- Ratio foreign/local staff
- Local staff in up to which positions
- Gender balance in staff
- Resources spent on staff training and education
- Staff capacity at various levels to implement project/programme
- Type of training/education given, gender balance
- Strengths and weaknesses

8. Project/programme management

- Were project inputs (e.g. finance, personnel) adequate and timely
- Ware project organization and management effective and efficient
- Is reporting adequate and timely
- Has there been regular auditing of project finances
- Inter-departmental collaboration and coordination
- Collaboration and coordination with other programmes adequate and effective
- Collaboration, coordination, communication and information between and within IA country offices and IA Dublin
- Is there a IA WSS policy at country level
- Planning and implementation initiated at which level
- Gender perspective integrated and implemented
- Strengths and weaknesses

9. Monitoring and evaluation

- Regular monitoring of projects/programmes (what, by who, tools, use of information)
- Does it measure effectiveness
- Is monitoring gender specific, is impact of gender strategy measured
- Were reviews/evaluations carried out on schedule and to an acceptable standard
- Were appropriate actions taken in response to M&E reports

10. Decentralisation

- Do IA programmes fit into (local) development plans
- Institutional setting (e.g. decentralisation)
- Do IA programmes assist in decentralised planning and implementation
- Strengths and weaknesses
- Are interventions based on demands
- How are demands being requested and processed (agreements)
- Are demands reflected in planning (which level)
- Do communities contribute to WS (kind/cash to capital cost, O&M)
- How are community contributions collected, managed and used
- Are key decisions made by women and men in community (site selection, technology choice)
- Are WSS facilities being appreciated
- Are WSS facilities meeting demands and expectations of users
- Strengths and weaknesses of approach

12. Community involvement

- Was participation core objective and/or means from the outset, if not, when and how as it addressed
- What were principle forms of participation and how well did they work in practice
- Strategy/steps for community participation
- Who manages facilities
- Gender balance in local committees
- Who owns facilities
- Strengths and weaknesses

13. Sustainability of sanitation facilities

- Are facilities available, being used, functioning and being maintained
- Is technology affordable, willingness and capacity to pay
- Who uses latrine
- Is hand washing facility close by
- Do people wash hands
- Are latrines being appreciated, what are benefits, any problems
- Strengths and weaknesses

14. Sustainability of WS facilities

- Are facilities available, being used, functioning and being maintained
- Are facilities reliable (quality, quantity)
- Is technology affordable
- Are people willing and able to pay, what do they pay/contribute
- Is O&M easy how is O&M organised (manpower, tools, spares)
- What has been record regards breakdowns and repair times
- Is technology appropriate
- Who uses facilities
- What water sources are used for which purpose
- Are facilities being appreciated, what are benefits, any problems
- Strengths and weaknesses

15. Sustainability of hygiene education

- What is effect of HE on behaviour, any detectable changes in behaviour
- Are there mechanisms in place to ensure ongoing HE

16. Financial issues

- Financial contributions Ireland Aid vs. local contributions on long and short term
- Is financial management of WSS facilities sustainable
- Financial sustainability of institutions
- Cost-effectiveness of project/programme, e.g. unit cost per beneficiary
- Is there commitment on the part of central and local authorities to continue support to communities
- Are cost differences between rural and urban interventions evident

17. Environmental issues

- Were environmental considerations adequately taken into account from outset, if not, when and how were they introduced
- Environmental impact of WSS interventions (positive and/or adverse effects)
- Sustainable use of resources (water quality, quantity, land uses)

18. Final remarks

2.1 Ethiopia: Priority country

Sidama Development Programme

Project title: Duration: Area:	**Sidama Development Programme** 1994 - 1998 Sidama Zone, Southern Peoples, Nations and Nationalities Region, Ethiopia.
Implementing agencies:	Zonal Water, Mines and Energy Development Bureau (town water supplies, ponds) and the Health Bureau (spring protection).
Other institutions involved:	Irish Embassy in Addis Ababa, the Sidama Development Programme, Zonal Planning Bureau, Water Supply and Sanitation Joint Committee, and the Regional Government.
Total Ireland Aid contribution:	£2,473,500
Contributions from others:	Communities - payment for water Local government - technical equipment and maintenance assistance.

The Country Programme has been evaluated in 1997

1. Project setting

Relevance

Sidama is one of the most densely populated and poorest areas of Ethiopia. It has a long history of underdevelopment and a high prevalence of water related diseases. Only about 20% of the population has access to safe water.

Ireland Aid policy in Sidama includes four guiding principles: poverty focus, participation of communities, gender sensitivity, and sustainability. Sustainability focuses on four principles: activities that can be absorbed and sustained locally, maximum use of local expertise and resources, implementation through local structures and strengthening of local capacity, and low intensity of intervention in terms of technology. The changes in governance, policy-making and economic institutions since 1991 have created a strongly supportive context for decentralized, participatory, poverty-focused and sustainable development initiatives.

Results and lessons learned

The initial focus of the programme was in highland areas, with as main activity the protection of springs. Up to June 1997, 205 springs have been protected, which is below the original targets (150 protected springs were planned for 1995). The installation of water supplies in 4 highland towns was implemented as planned.

It is estimated that approximately 300,000 people directly benefit from the construction of springs since 1994, largely in the highland areas. Stated benefits include proximity to a safe

water supply, less physical demands and greater time available, particularly for women and children, a reported decrease in the incidence of water related diseases, and community autonomy in water resources management. An important contribution has been made to the development of management and implementation capacity at the Zonal Water, Mines and Energy Development Bureau.

The approach used by the programme was found to be appropriate, innovative and effective. Feedback from beneficiaries has been positive. Although pace of implementation has been slower than originally planned, initiatives to improve efficiency have been developed and commitment of those involved is evident.

The Programme initially responded to the requirement for capacity building at the Bureau for Water, Mines and Energy Development, which has facilitated the implementation of subsequent micro-projects from this bureau. Many acknowledged needs in the field of capacity building remain at zonal and district level. A major challenge will be to strengthen the capacity of Government water officials.

Integrated approach

The focus of the programme is very much on the provision of safe water supply. Sanitation is limited to the provision of latrine facilities when institutional buildings are being constructed. There is no linkage between the construction of these buildings and the provision of water. Integration of the health, water and education activities of the programme seems to be minimal. The 1997 evaluation mission identified that support for sanitation activities has been quite limited (to latrine facilities at health centres and schools), and that it should be more effectively incorporated in the programme.

Project design and evolution

Sustainability has been anticipated from the onset, and focuses on the following factors: the involvement of communities in identification, construction and management of water supply facilities, capacity development within the Zonal Water Bureau, use of technologies that are appropriate to the local context, and the modification of a form of water catchment that is rooted in local tradition and practice.

2. Institutional setting

Institutional roles and responsibilities

Zonal Water, Mines and Energy Development Bureau (town water supplies, ponds) and the Health Bureau (spring protection).

Since the establishment of the Water Resources Department early 1996, the project is being implemented by this department, which falls under the Water, Mines and Energy Development Bureau. Before 1996 it was implemented by the Sidama Development Programme. Since the department is still under-resourced the Programme continues to play an active role in implementation.

Overall management is the responsibility of the Irish Embassy in Addis Ababa (one Irish Programme Officer assisted by locally recruited development advisors) and the Sidama Development Programme office in Awassa. At Awassa level the project is coordinated by the Head of the Zonal Planning Bureau who reports to an advisory committee composed of representatives of the key ministries (bureaus) involved in the programme. The advisory committee meets at least once a month to review programme progress, identify weaknesses and propose solutions.

Community representatives have been involved in project design and planning of activities at community level. Furthermore communities are actively involved in preparation of and actual construction.

The 1997 evaluation recommended that greater attention should be given to collaboration between infrastructure sectors as education, health, water and engineering at the planning and implementation stages of micro-projects. Also better collaboration between water and health staff in the education of communities is suggested.

Human resources

The 1997 evaluation recommended that priority attention should be given to the training and capacity building of water officials at zonal and district (Woreda) levels.

3. Effectiveness and impact at field level

Community involvement

Community participation is planned to be at the core of the project since its beginning. The 1997 evaluation confirmed that there is a strong emphasis on community participation. There is a process of consultation with community representatives in the identification and planning phases prior to decisions regarding the location of any planned water installation, in addition to community contributions to the construction and ongoing management of the installation.

The Programme has a COLTA Unit (Community Organising and Leadership Training for Action). It's activities are based on PRA and DELTA (Development Education and Leadership Teams in Action) methodologies, focusing on learning from rural people and organizing people to address their problems and work on solutions.

There is a Gender and Development approach used by IA Ethiopia. For the water project this is translated to the amount of women in local water committees, which should be at least 60%. It is found that women have a majority representation on village water committees.

Functioning and use of WS facilities

According to a hydrological survey, the protection of springs is the most favoured approach in the highland areas.

2.2 Ethiopia: Priority country

East Tigray Water Project (part of East Tigray Development Programme)

	Project title:	**East Tigray Water Project (part of Tigray Development Programme)**
	Duration:	Since 1997
	Location/area: Implementing agencies:	East Tigray Zone, Tigray Region, Ethiopia. Implementing agency is the Water Resources Department.
	Other institutions involved:	The Co-ordination Unit and water committees are the implementing organs.
	Total Ireland Aid contribution:	£51,200 (?)
	Contributions from others:	Beneficiaries of installations are expected to contribute a small fee to cover ongoing costs,

The Country Programme was evaluated in 1997.

1. Project setting

Relevance

East Tigray is the poorest and most food insecure of the areas that are assisted by Ireland Aid. The area is worst affected by war and suffers from chronic food insecurity due to soil erosion, drought conditions and over population. The provision of safe drinking water has been identified as the second most important development priority (first was agricultural development) by the Tigray Regional Authorities. In 1994 an initial baseline study indicated that only 10% of the rural communities in East Tigray have access to safe water and sanitation facilities.

The changes in governance, policy-making and economic institutions since 1991 have created a strongly supportive context for decentralised, participatory, poverty-focused and sustainable development initiatives. The Regional Authorities have formulated a draft Sanitation Plan for the next five years. Action in this area has not yet reached a significant scale. The water activities are being implemented as part of a five year water development plan for the region.

Results and lessons learned

Construction outputs include the construction of 23 bore holes, 24 hand dug wells, 2 protected springs, 1 town water supply, and 200 latrines. Water supply coverage of the East and South Zones of the Tigray Region has increased from 10% to respectively 26% and 17%. Coverage of the Central Zone is 8%, that of the West Zone almost 6%. These improvements are also attributed to projects implemented by other agencies (Rest, World Vision, UNICEF and the Catholic Church).

Beneficiaries are largely those living in peripheral areas and include the poorest members of

communities. Discussions with women have confirmed the benefits of the project for them, including reduced time for fetching water, less daily physical exertion, more time for other activities. In most instances, women are well represented on water committees and are ultimately responsible for the management of the water installations.

Although there has been some anecdotal reporting of a decrease in water related diseases, there is no data to demonstrate that this has in fact happened.

The implementation of this project has been satisfactory: There is a high degree of community participation in construction and management activities, there is a very positive feedback from beneficiaries, and it is very cost effective, particularly hand-dug wells and protected springs.

Qualitative aspects of monitoring should be developed, and should include the protection of water points from animals and regular water quality testing.
The sanitation programme of the East Tigray Development Programme should be revisited in the light of the draft regional plan. In the meantime, awareness of sanitation issues and latrine construction should be main streamed to a greater extent in other project activities.

Integrated approach
The 1997 mission identified that support for sanitation activities has been quite limited, and that it should be more effectively incorporated in the programme. Many of the health posts, clinics and some of the schools visited did not have a functioning water supply. Stronger inter-sectoral cooperation between the water, health and education offices is needed, as well as improved monitoring.

The evaluation team recognised that mobilisation of a community for the installation of a water supply has a very significant potential for imparting health and hygiene education, which can be strengthened.

Project design and evolution
Sustainability has been addressed in the earliest proposals, with a focus on: management and technical training of water committees, use of appropriate and well tested technology, arrangements for ongoing protection, anticipation of maintenance requirements, arrangement of cost recovery mechanism for ongoing O&M, and linkage with district Water Officials for supervision and major maintenance activities.

2. Institutional setting

Institutional structures
Implementing agency is the Water Resources Department. Other institutions involved include the Co-ordination Unit and water committees.

The responsibility for the development of water resources lies with the Water Resources Development Department of the Bureau(Ministry) for Water Resource Development, Mines and Energy.

The 1997 evaluation found a number of weaknesses in communication and coordination. In some cases, there is insufficient communication between water committees and district Water Officials. Links between water and health committees should be well established, as well as greater linkages between village water committees and district water officials. Furthermore, linkage with the experience of other agencies working in the water sector such as REST, Catholic Church, UNICEF, Water Aid, World Vision, would be beneficial.

Human resources

The 1996 evaluation found a lack of training of people involved or to be involved in the project, particularly on O&M. There is uncertainty regarding the capacity of district level Water Officials to deal with maintenance problems which are beyond the competence of water committees. There is a need for capacity building of district level water officials.

The 1997 evaluation recommended that priority attention should be given to the training and capacity building of water officials at zonal and district (Woreda) levels.
Community members receive training in water resource management.

It also recommended that greater attention should be given to collaboration between infrastructure sectors as education, health, water and engineering at the planning and implementation stages of micro-projects. Better collaboration between water and health staff in the education of communities is also suggested.

Monitoring

Monitoring is being done by the Water Resources Department and the Construction Advisor of the co-ordination Unit. It largely relates to the quantitative aspects of implementation. According to the 1997 evaluation, project monitoring should include data on the participation of women in water committees and alert those involved in project implementation to the possible implications. Monitoring forms on constructed buildings should include a completion statement on water supply.

3. Effectiveness and impact at field level

Community involvement

In the 1996 evaluation it was found that since most of the water supply systems constructed are boreholes, there was no significant community participation in the process of site selection and construction. The communities had no opportunity to contribute labour or local materials. However, there is a high level of community participation in terms of labour and materials for the installation of hand dug wells and protected springs (evaluation 1997). Beneficiaries of installations are expected to contribute a small fee to cover ongoing costs.

All water supply systems have a water committee that manages, operates and maintains the system. According to the 1997 evaluation water installations are being used and effectively managed by the water committees. Each committee consists of 5 members of which at least two are women. In most instances, women are well represented on water committees and are ultimately responsible for the management of the water installations.

Functioning and use of sanitation facilities

The focus of the sanitation component has been largely on the construction of latrines in conjunction with the provision of public physical infrastructure. Many of the latrines constructed have been located in the homes of acquaintances of Zonal Health Officials and in Regional environmental sanitation offices. Whether this produces a demonstration effect is not known.

Functioning and use of WS facilities

A 1996 review indicated that most of the water systems installed were free from operational problems and were managed efficiently, except for one case where a motorised pump had been supplied. This suggests that greater thought should be given to animal-powered pumps and lifting devices. With hand pumps, there is often a long queue at peak times. Animal powered pumps, storage tanks and multiple spigots would eliminate this problem. According to the 1996 evaluation, most of the wells and pumps are not sufficiently protected due to a lack of fences.

In the cases of hand dug wells and protected springs, 20 to 30% of the capital cost is borne by the beneficiaries, which is highly cost-effective. Boreholes are considerably more expensive with lesser opportunities for community participation during construction. However, in many cases they are the only feasible option.

There is a very positive feedback on the activities from the beneficiary population.
Many of the health posts, clinics and some primary schools visited during the 1997 evaluation did not have a functioning water supply.

Notes:

- Evaluation and proposal writing for Tigray and Guraghe are combined in one mission, which has been carried out by one technical engineer. The reports are almost identical.
- The report from 1996 is very technical; however gender focus is addressed; community participation to a certain extent.

2.3 Ethiopia: Priority country

Guraghe Development Programme

	Project title:	**Silti and Sodo Development Programme**
	Duration:	1994 - 1996
	Area:	Silti and Sodo Woredas (Districts), Guraghe, Zone of the Southern Peoples, Nations and Nationalities Region, Ethiopia.
	Implementing agency:	The implementing agency of the project is the District Bureaus of Agriculture, Silti and Sodo Districts in Guraghe Zone.
	Other institutions involved:	Irish Embassy in Addis Ababa.
	Total Ireland Aid contribution:	£ 473,900
	Contribution of others:	Communities (materials and sometimes free labour); local authorities: supervision and monitoring of the project.

Review of the Silti and Sodo project: 1995
Evaluation country programme: 1997

1. Project setting

Relevance

The area is very poor with infertile soils, resulting in considerable migration to urban areas, especially by men. There is a critical shortage of drinking water, particularly in the dry season when fetching water can take up to half a day.

The Ireland Aid policy in Ethiopia includes four guiding principles: poverty focus, participation of communities, gender sensitivity, and sustainability. Sustainability focuses on four principles: activities that can be absorbed and sustained locally, maximum use of local expertise and resources, implementation through local structures and strengthening of local capacity, and low intensity of intervention in terms of technology. The changes in governance, policy-making and economic institutions since 1991 have created a strongly supportive context for decentralised, participatory, poverty-focused and sustainable development initiatives.

Results and lessons learned

In September 1996, 1 pond was constructed, and of the other 8 construction was almost completed. Also 7 springs were protected. The programme in two pilot districts appears on the whole to be relevant, carefully sited and well executed at the individual and micro-project level.

There is a great commitment of project and district staff, and significant experience has been gained from failures and successes. Participation of community in the earth work of ponds has been successful, specially at sites where women are assigned to be supervisors.

Integrated approach

The 1997 evaluation mission identified that support for sanitation activities has been quite limited, and that it should be more effectively incorporated in the programme.

Project design and evolution

Sustainability is discussed in the proposal, focusing on four principles, being providing assistance at level and pace that will allow local capacity to absorb and sustain it, maximum use of local resources and expertise, implementation through local structures with strong emphasis on strengthening local structures, and low cost technology interventions that are appropriate to the resources of the zone and individual households (see also Ireland Aid policy in Section on relevance).

Gender issues are said to be integrated into all project components. However, signs of implementation of a gender strategy can only be found in relation to community committees: being that at least 70% of its members should be women.

Environmental concerns are mentioned in the proposal. Without proper justification, the proposal states that it is expected that it does not to have an negative impact on the environment.

2. Institutional setting

Institutional roles and responsibilities

The implementing agency of the project is the District Bureaus of Agriculture, Silti and Sodo Districts in Guraghe Zone. Other institutions involved include the Irish embassy in Addis Ababa.

The 1997 evaluation recommended that greater attention should be given to collaboration between infrastructure sectors as education, health, water and engineering at the planning and implementation stages of micro-projects. Also better collaboration between water and health staff in the education of communities is suggested. Many schools built lack water points.

Human resources

In 1996 it was found that for pond construction, supervisors assigned to sites are not fully aware how the works are to be carried out. Recommendations included that sufficient and relevant training should be given continuously for those that are or will be involved in the project, and sufficient technical manpower should be allocated to projects. Priority attention should be given to the training and capacity building of water officials at zonal and district (Woreda) levels.

3. Effectiveness and impact at field level

Community involvement

The project is designed to ensure community participation. Before excavation committees have to be established. Zonal and district staff are trained to develop an awareness among government officials of the need to have a community participation strategy that is not

limited to the contribution of materials but involves communities in planning and management. Water committees should have at least 70% female members.

Community contribution consists of excavation of ponds and trenches and digging of wells. Although stated differently in the project proposal, it seems to be focused on labour inputs only.

Functioning and use of sanitation facilities

The focus of the sanitation component has been largely on the construction of latrines in conjunction with the provision of public physical infrastructure.

Functioning and use of WS facilities

Ponds are the most popular means of rain water harvesting in the lowland areas of Guraghe. In 1996, a number of weaknesses were found in construction: some works were not constructed to the desired level of accuracy and schedule of completion, and significant leakage and improper arrangements of facilities for washing and cattle for a number of protected springs was found.

The 1997 evaluation states possible weaknesses in the modified pond design, which include: use of average rainfall data instead of focus on low rainfall years, insufficient variation in catchment area to allow for slope, infiltration and evaporation effects, and lack of access control or rationing arrangements in he event of water supply being lower than demand. Given the expected year-round unreliability of the pond system, no further ponds should be constructed until performance of the present units have been assessed over a two year period. Water quality and quantity should be measured systematically.

Notes:

- A lot of the proposal for extension in 1996 is literally from the Sidama project proposal.
- Earlier reports from 1995 and July 1996 are very technical; however gender focus is addressed; community participation to a certain extent.
- Evaluation and proposal writing are combined in one mission, which was carried out by a technical engineer.

2.4 Kenya: Integrated sanitation systems for low income urban communities

	Project title:	**Integrated sanitation systems for low income urban communities**
	Duration:	1998 - 1999 (one year)
	Area:	Kibera settlement, Nairobi, Kenya
	Implementing agencies:	United Nations Centre for Human Settlements (HABITAT).
	Other institutions involved:	KWAHO (Kenyan NGO) and Manus Coffey Associates.
	Total Ireland Aid contribution:	US$ 80,000 (requested) in the form of technical assistance
	Contributions from others:	not clear

No review or evaluation reports available (also not from HABITAT or other organisations involved).

1. Project setting

Relevance

Problems with sanitation are often most apparent in urban areas where outside defaecation is difficult or impossible. A HABITAT study shows that there is a very strong demand for a latrine emptying service and a willingness to pay for such a service. Local government and private pit emptying vehicles have been unable to address this demand; opening new pits is not an alternative due to space limitations. The proposal does not make reference to the Kenya situation, but in Kibera the technology is very much needed.

The objective of the vacu tug, a latrine pit emptying machine prototype, is to support people living in urban slum areas, who are considered to be among the poor. The project aims to assist poverty alleviation through providing affordable pit emptying services. It also purposely links income generation with environmental improvement and reduction of health risks.

Results and lessons learned

The vacu tug has proved to be fully sustainable from a technical point of view, and affordable for its target beneficiaries. Repairs can be undertaken locally without any specialised skills, and it has provided a source of regular income to some of the local community.

Integrated approach

The project focuses on sanitation in urban areas and does not have an integrated approach. It is a very technical project, with some emphasis on financial sustainability of the technology developed.

Project design and evolution

This project was initiated by HABITAT. Proposals for the design of a latrine pit emptying machine were solicited by HABITAT, and Manus Coffey Associates was awarded a sub-contract to design a prototype for trials in Kibera, namely the vacu tug. The project has been

implemented for 2 years through a local Kenyan NGO called KWAHO. Plans for phase 2 include exposure of the tug to other countries for optimalisation of the technology, possibly Tanzania, Bangladesh and India, and the development of a transfer system for hauling the wastes to disposal sites in areas where the capacity of the tug would warrant transfer to a larger container.

According to the proposal, beneficiaries include urban poor, community groups, local authorities, health services, the local private sector, and women and children.
One of the project outputs is expected to be an integrated sanitation system, while the project focuses only on developing an appropriate technology for pit emptying.

Risks and assumptions not seriously addressed. Monitoring is mentioned: HABITAT will make reports available on a six monthly basis. Community participation and gender are not addressed. Sustainability of the technology is addressed in technical and financial terms. An improved environment is expected, but further not elaborated on.

2. Institutional setting

Institutional roles and responsibilities

The implementing agency is the United Nations Centre for Human Settlements (HABITAT). Other institutions involved are KWAHO (Kenyan NGO) and Manus Coffey Associates. There is no further information on the institutional embedding of the project.

3. Effectiveness and impact at field level

Functioning and sanitation facilities

The vacu tug seems until so far a very appropriate technology for pit emptying in peri urban areas. It is composed of a pedestrian controlled engine driven tug which includes a vacuum pump and pulls behind it a 500 liter sludge tank. It travels at approximately 5 km and can easily cross rough unsurfaced and potholed roads, climb relatively steep gradients, and pass through laneways as narrow as 1.35 metres wide. It is designed to be operated and maintained with the minimum of servicing and spare parts.

Notes:

- The proposal is well written but extremely brief. The project is purely technical.
- Ireland Aid has been asked by HABITAT to support the implementation of the 2nd phase of their project. Of this phase, there is only a project proposal available.

2.5 Lesotho: Priority country

Support to the Village Water Supply Programme

Project title:	**Village Water Supply Programme**
Duration:	1990 - 1999
Area:	Initially Berea, Lebire and Butha Buthe Districts (ceased); Now in Qacha's Nek and Mokhotlong Districts; Thaba Tseka and Qabane/Motsekuna recently included
Implementing agencies:	Department of Rural Water Supplies, which was called the Village Water Supply Section before 1995.
Other institutions involved:	Village Water Committee; District Engineer: Irish Technical Assistant funded by APSO; Government of Lesotho GOL.
Total Ireland Aid contribution:	£2,364,600 (capital costs, maintenance of vehicles and wages and allowances for field staff)
Contributions from others:	Community (payment for water); local government (technical equipment and maintenance assistance); APSO (District Engineer); GOL (wages and allowances for office staff, subsistance allowances, fuel, and office overheads).

Country programme review:	1994.
Project reviews:	1991 and 1994.
Project evaluation:	1996.

1. Project setting

Relevance

Studies indicate that poorer people tend to live in the mountain districts, and the poorest in the more remote parts of these districts. As the Department of Rural Water Supplies serves the remoter areas of the district, poorer people will increasingly gain access to an improved system. The 1996 proposal is in line with the National Rural Water Strategy.

Results and lessons learned

The Lesotho programme started in 1975 and is Ireland Aid's longest established country programme. Initially the project was implemented in Berea and Leribe, which has now ceased; now the project is in Qacha's Nek and Mokhotlong Districts. Thaba Tseka and Qabane/Motsekuna Districts are recently also being included.

Initially support was for a handpump programme in Berea District in 1987/88, and involved the drilling and installation of 256 hand pumps in 28 villages. This programme lasted 16 months (planning was 12 months). In 1988, another programme in Leribe and Butha Buthe Districts resulted in the installation of 250 hand pumps in 16 months. In total the two projects installed 489 hand pumps serving 44,000 people. A 1988 review found that

engineering and construction standards were high, and reporting and monitoring procedures were good. Concern was expressed that maintenance problems were likely in future. The review recommended to stop borehole and handpump programmes because of possible maintenance problems, focus on more easily sustainable systems such as gravity systems, and allocated funding to provide the Village Water Supply Section with a degree of continuity and security. Consequently, the focus of the project has moved from boreholes in the lowland to spring protection in highlands.

In the early years a health impact study was done, which showed that there was no evidence of improved health in the water project areas.

Efficiency 1990 - 1996:

- Qacha's Nek: 22,119 people served (31,360 planned) and 46 water points constructed and rehabilitated (52 planned);
- Mokhotlong: 16,352 people served (25,429 planned) and 52 water points constructed and rehabilitated (69 planned);
- Thaba Tseka: 13,981 people served (29,879 planned) and 34 water points constructed and rehabilitated (64 planned).

The 1996 evaluation concluded that in general construction standards are high. The water supply systems fulfill the requirement of the national standards. The area based policy has not yet been properly formulated and implemented in any district. In the past, many of the villages targeted have not been served. The department has greatly improved project planning and preparation in recent years. Water quality has been tested and no faecal coliform were found.

The most recent coverage estimate (early 1995) in Qacha's Nek District is 38%.
Based on the figures of this evaluation, it will take 12,5 years to serve the complete population of the District, without taking into account rehabilitations. This also assumes that maintenance can be done and it does not include population growth.

The evaluation further recommended that less emphasis should be put on community contributions for O&M. The average amounts collected are high compared to the other mountain districts. The collection of financial contributions causes frictions within the village, and although most villagers realise the purpose of the collections, the funds are not used for maintenance purposes for several years after construction. Emphasis can be given to necessary or regular (yearly) contributions.

Suggestions from Village Water Committees include giving more emphasis on organising labour, more consultation with all members of the community before construction, and the purpose of contributions for O&M should be made clearer.

Integrated approach

There are no sanitation or health/hygiene education activities as part of the project.
The review reports of 1991 and 1994 recommended the development of health and sanitation components, and a closer collaboration with the already existing rural sanitation programme. There is no evidence of follow up on this recommendation. The 1996 proposal mentioned the crucial importance of health education.

It is recommended that Ireland Aid does not get too involved with sector coordination issues (integrating with sanitation and health education). This is because experiences with this, particularly of ODA, have not been successful in Lesotho. An 1993 evaluation had already recommended that relevant Government Departments should initiate such activities. Currently Village Liaison Officers are encouraged to liaise with Village Health Workers.

Project design and evolution

Project proposal of 1989 is officially written by Government of Lesotho, GOL. In this first proposal the following issues are not discussed: community participation, gender, environmental issues, monitoring and evaluation, risks and assumptions, sanitation and hygiene, hardware vs. software, evidence of beneficiaries' needs, sustainability.

The 1996 proposal mentioned environmental issues, gender and sustainability, but does not elaborate seriously on any of the issues. No mentioning of community participation, monitoring and evaluation, risks and assumptions, hardware vs. software, evidence of beneficiaries' needs.

2. Institutional setting

Institutional roles and responsibilities

The implementing agency is the Department of Rural Water Supplies, which was called the Village Water Supply Section before 1995. Other institutions involved include Project staff and the Village Water Committee. Project staff consists of the District Engineer (Irish Technical Assistant funded by APSO), a Senior Technical Officer, Draughtsman, Construction Supervisors, Maintenance Supervisor, Village Liaison Officer and Masons, which are all funded by Ireland Aid. The store keeper, accountant, mechanic, driver, labourer, watchmen are funded by GOL.

The department has made much progress in the localisation of key positions. One of the aims is to contract out construction activities to the private sector. However, up to August 1996 everything is still being done by the project. As early as 1985 the department was decentralised to Qacha's Nek.

Human resources

There is a general feeling by the district staff that their project is left out of training programmes. Only 3 out of the 14 Village Water Committees visited have received training. Of the 10 water minders interviewed, 8 considered that the training given was either inadequate or no training was given. Village Liaison Officers require more training and experience.

Monitoring and evaluation

Activities are monitored by construction supervisors (monthly site report), District Engineer (monthly progress reports), Regional Engineer (quarterly progress reports).
The reviews are descriptive and mainly technical, focusing on outputs and some finances. Women's issues, environment and sustainability are mentioned but not really in-depth discussed.

3. Effectiveness and impact at field level

Demand driven approach

Village Water Committees sent an application letter to the project, and most of them waited about one year before implementation started. Because of the area based approach no prioritisation is given to individual communities on the waiting list.

Community involvement

In the first proposal (1989) villagers are required to contribute with labour. Villagers are required to elect an Village Water Committee which is then responsible for collecting a maintenance contribution from households and depositing in a bank account. They are also responsible for organising labour during construction. Minor repairs are supposed to be carried out by the water minders.

In Qacha's Nek, Mokhotlong and Thaba Tseka respectively 44%, 58% and 79% of the villages has a water minder. Less then half of them has a toolbox (respectively 41%, 21% and 48%), and most had a bank account (80%, 82% and 81%).

Community participation is influenced by the season, and is poor in winter. Tribal relationships also play a role. According to district staff poor participation is also related to not getting food or money for labour (in contrast with other government programmes), drunkenness in the afternoon, political meetings, feasts, and because villagers think the level of service is low (no house connections). The support of the village chief is seen as crucial for the success of the project.

Functioning and use of WS facilities

The 1996 evaluation concluded that Qacha's Nek has a good record regarding maintenance activities. Requests for the department maintenance services are quickly and efficiently attended. Supporting gravity fed systems were chosen by Ireland Aid after earlier experiences with hand pumps in lowland areas. In 1994 the department has re-evaluated the choice of technologies, and hand pumps are the last option.

Functioning and service level

The percentage of collection points functioning is 95% in Qacha's Nek, 90% in Mokhotlong, and 68% in Thaba Tseka. The districts exceeding the DRWS level of service standards. This indicates mis-allocation of resources. Research needs to be undertaken to ascertain the levels of service acceptable to beneficiaries.

Community contributions

Most people seem to pay for maintenance. Exceptions for the poor are made (payment in installment, brewed beer, or paying a percentage). Most people know it is for maintenance purposes and belongs to the community.

On average, women have contributed more labour during construction than men.
About 30% of the people thought the construction process was a major inconvenience, mainly because it disrupted farming activities.

Appreciation of facilities

About 88% of people asked are satisfied with the level of service. The vast majority of people enjoy greater proximity to a water point, 19% stated that the queuing time is shorter, and 10% noted that there is less time required to fill containers. Also the system is felt to be more reliable. 72% Of the people interviewed felt that the service had made a difference to their lives. People perceived both positive and negative water quality and health benefits from the water supply, although majority was positive.

Water minders

Four out of 14 villages visited did not have a water minder. Statistics show percentages of villages that have a water minder in Qacha's Nek, Mokhotlong and Thaba Tseka of respectively 44%, 58% and 79%. Both from the National Data Base and from the evaluation visits, no correlation can be found between the existence of a water minder and system functioning. It appears as if a number of repairs are carried out by other villagers.

Village Water Committees

All communities visited had a Village Water Committee (about 25-30% of the communities served by the Department since 1990 were visited). When asked about their overall experience, about half of the Village Water Committees were positive, the other half negative. Negative experiences are mainly related with difficulties in organising labour and the collection of O&M contributions. Also for a number of them going to the bank is quite a troublesome.

The contribution of O&M had not been used by the majority of the Village Water Committees, and only 3 had used it for maintenance purposes (others for opening ceremony).

According to villagers, VWC members are elected democratically. According to district staff the members elected are usually the rich and/or famous members of the community, usually not the most suitable for the task.

2.6 Lesotho: Priority country

Berea Rural Sanitation Project

	Project title:	**Berea Rural Sanitation Project**
	Duration:	1988 - 1995
	Area:	17 sites in Berea District
	Implementing agencies:	Berea Rural Sanitation Project under the National Rural Sanitation Programme.
	Other institutions involved:	Environmental Health Section of the Ministry of Health, Village Health Workers, and Local Latrine Builders.
	Total Ireland Aid contribution:	£431,140 (financial support not constant)
	Contributions from others:	Government of Lesotho (GOL) (continued financial support)

Project reviews: 1990, 1993 and 1997.
Country programme review: 1994.

1. Project setting

Relevance

The first proposal mentions that, despite increased water coverage, studies have revealed that health is not improving, and therefore there is a need for sanitation.
The project is part of a national sanitation programme of GOL.

Results and lessons learned

In a 1993 review, the overall programme in 10 districts which was supported by UNDP and UNICEF was found to be successful. This is primarily focused on increased coverage figures over 10 years from 15 to 35%. In 1993 review project outputs are called impressive, meaning increase in coverage. The review considers not using subsidies and involving people in a real way also successes.

In 1997 the review results were:

By the end of September 1996, 537 Local Latrine Builders were trained, 3,145 VIPs constructed, 17 work sites throughout the district established and an area coverage estimate at 80%. By the end of 1997, the project had achieved most of its set targets with the exception of VIP latrine construction at households and schools.

Low demand from the community, work in the fields during certain seasons, denial to use locally available material and poverty were identified by staff as the main reasons for the failure to reach some of the targets.

Of the 121 people interviewed, 16% had a VIP latrine, 45% had ordinary latrines and 40% had no latrines. Most of the school latrines visited were in need of maintenance in the form of replacement or repair of seat covers, fly screens, doors and roofing. The level of cleanliness of some of the latrines was also found to be poor.

Word-of-mouth was the most commonly mentioned source of information on some of the proper sanitation practices, followed by clinic/hospital, schools and Village Health Workers. None of the respondents mentioned pitsos, focus group discussions, house to house visits, health education campaigns and HE materials. These methods are also being considered to be the corner stone of the programme.

People's perceptions on the impacts the programme has had on the environment are conflicting. Both project staff and community stakeholders felt that more support from local authorities is required to ensure the sustainability of the programme.

With the current status of most of the latrines and the low number of latrines in the villages, the effectiveness of the school sanitation programme becomes very low. School latrines pose some health risk, and students come from different villages most of which do not have improved latrines or any latrines at all.

The biggest constraint to wider adoption mentioned by all the different groups interviewed was that of poverty or lack of financial resources. All reported that people are poor and are therefore unable to pay for the material that is required to construct a latrine and the labour cost charged by the local latrine builder. A number of options to solve this problem have been discussed during the review, but no recommendation is made.

Women are found to be very good information disseminators and play a very crucial role in motivating communities to build VIP latrines. Women were also said to have better understanding of health issues.

Concluding remarks are that there is no evidence of proper community awareness raising and mobilisation. Technology is considered too expensive and no alternatives were promoted. Upgrading should have been taken into account. This was already recommended in 1993. An estimated 40% of the populations cannot afford the latrines. Hygiene education is not thoroughly elaborated; the focus (at least of reporting) is very hardware oriented.

Based on the 1997 review, it was decided to withdraw from the project.

Integrated approach

The programme is purely a sanitation programme, with seemingly from the documents a little amount of hygiene education. Already according to the 1993 review, the proposed integration with the Village Water Supply Section had failed, and rather than force integration of separate agency activities, it recommended to focus more on improved coordination.

Project design and evolution

The project proposal (1990?) only focuses on construction and training of people involved in construction. Hygiene education is not specified. There is no mentioning of alternative solutions, sustainability, gender, environment, assumptions and preconditions. Monitoring is mentioned as one of the objectives.

2. Institutional setting

Institutional roles and responsibilities

The implementing agency is the Berea Rural Sanitation Project staff under the National Rural Sanitation Programme. Other institutions Involved include the Environmental Health Section of the Ministry of Health, Village Health Workers, and Local Latrine Builders. Project staff is comprised of an Acting District Sanitation Coordinator, Technical Officers and Health Assistants.

The project is part of the National Rural Sanitation Programme of the Ministry of Health and Social Welfare. The Acting District Sanitation Coordinator (DSC) in charge of daily running of the project, coordinating all sanitation activities in the district, and supervision of staff based at sites, Health Assistants and Technical Officers. Officially the DSC is reports directly to the NRSP Coordinator in Maseru with copies to the District Medical Officer, but in practice the DSC considers the DMO as head of the department.

Technical Officers are managing all field activities, and training and initial supervision of local latrine builders. Health Assistants are expected to perform all environmental health activities (health education, follow up of TB and leprosy patients, supervision of local latrine builders, promotion of latrines, inspection of latrines and shops, etc.).

The positions of District Sanitation Coordinator and Health Assistants are established government posts, while technical Officers and drivers are not established government posts. The driver is paid through donor funds.

There is no gender balance in district sanitation staff. However, women are working as Village Health Workers and Local Latrine Builders. There are local hardware stores selling latrine components. It is not known to what extend local latrine builders are involved in this sector.

Human resources

The Acting District Sanitation Coordinator, who is in a key position for the success of the project, does not have a job description, nor does he receive any training or guidance from the national level.

According to the 4 Technical Officers operating in the district, at least another three people are needed to provide good coverage. Also a shortage of Health Assistants was reported, which places a threat to viability and effectiveness of the project. There seems to be a high drop-out rate from Local Latrine Builders, meaning that a lot of them are not active as builders after the training. Reasons mentioned are: lack of tools, other commitments and thus too high workload.

3. Effectiveness and impact at field level

Demand driven approach

There seems to be a low demand from the community for latrines (1997 review, but various opinions are voiced on this).

Project management

As money is being spent it is not based on the line items in the budget and as a result one cannot tell at any time how much money has been spent under one line item or component and how much is left.

The management capacity of the National Rural Sanitation Programme has been a cause for concern and poor project progress, the lack of project reports and the under-utilisation of funds has caused a number of donors to consider withdrawing from the programme (1997 review, in 1993 review management is called excellent).

Monitoring

Monitoring is being done at district level, national level, and by the donor. District staff reported the need for more support from the national level.

There is only reporting on latrines which have been supervised, not on sanitation improvements in the district in general. Thus spin-off is not known.

Functioning and use of WS facilities

Technically the Berea VIP latrine is very good and appreciated as such by the users (1993 review), but the main drawback is in the cost. In 1991 it was estimated that about 40% of the households had no wage earner and therefore could not afford a latrine.

2.7 Lesotho: Priority country

Lesobeng Water Supply Project

	Project title:	Lesobeng Water Supply Project
	Duration:	1997 - 2000 (3 years)
	Area:	Mont-Martre area, Lesobeng Valley, Mantsonyane area, Lesotho
	Total Ireland Aid contribution:	£222,104 (?) (staff salaries, vehicles and construction materials)
	Contribution from others:	Local contributions mainly through labour amounting to about 700,000 Maloti (total budget 1,608,000 Maloti); Department of Rural Water Supply, Primary Health Care Department and St. James' Mission Hospital;

BILANCE

1. Project setting

Relevance

Water supply is second on the list of priorities in Lesotho made during a mapping exercise in 1990. The mapping revealed that the Lesobeng Valley is between 32 and 40% poorer than the central Maseru area. Clearly poverty and altitude are closely related. The remote mountain areas stand out as poorest, most distant geographically and in terms of poverty from Central Maseru.

The St. James Mission Hospital has built up considerable expertise in organising water supply in the remote mountains. The project will build water systems following nationally accepted standards of the Department of Rural Water Supply.

Planned activities and outputs

The augmentation of the project is planned to serve an estimated total of 55 water systems built in 41 villages and for 3 schools, serving a population of 4392 people. The total Lesobeng Valley includes approximately 12,000 inhabitants in about 120 villages. Adhering to national standards, which lead to project reformulation in 1994, meant a reduction from 60 to 27 villages in the first phase.

Other outputs include capacity building of Village Water Committees and water minders, a health baseline study, effective health education, and the training of project staff. Women are expected to be the main beneficiaries through reduced labour and time involved in water collection. The project will pay attention to labour organisation and division issues during VWC training to try to avoid that women get an even higher workload.

A health baseline study is planned as part of the project. The study will include prevalent water related diseases and existing health and hygiene risk behaviour, and will build on the local knowledge available.

Results and lesson learned from the first phase

An 1996 evaluation concluded that the project has been efficiently carried out, also from the financial point of view. The project goals are likely to be reached, the technical standards are high, and the national standards are generally being met, despite very difficult working environment and disappointing support from the Department of Rural Water supply.

Without the very active participation and high motivation of the Lesobeng community, and particularly the women, the first project phase could never have been a success.

The evaluation showed that the training of Village Water Committees on maintenance issues could be improved, and a pre-construction training on dealing with village contributions added. Furthermore it was suggested to carry out the long planned training for water minders.

It was also found that health education is not sufficient in quality and quantity terms, to ensure maximum health impact. It is felt desirable to involve Village Health Workers more in the project.

Other suggestions included setting up a system for the local supply of maintenance materials, setting up a steering Committee to advise the project management and review whether or not the hospital is a suitable environment to carry out this project.

Integrated approach

The project says to use an integrated approach, which is explained by a focus on water supply as core activity with community participation and health education. There is no environmental sanitation.

Project design and evolution

The Lesobeng Spring Protection Project is part of the St. James' Mission Hospital's Primary Health Care Programme initiated in 1976, and which has been financially supported by many donors. Water activities by the hospital started in 1987 (spring protection).
A proposal that focused on the construction of 60 simple water points in Lesobeng was approved by CEBEMO (now BILANCE) and started in September 1993. A revised project proposal to accommodate national construction and service level standards was approved in 1994. The project has an area based approach, trying to include every village in the area whether big or small.

The project has been designed by the hospital, based on the feedback and requests received from people in the area (number of application letters). Only low cost simple technology options are considered because of cost and availability. Some more detailed feasibility study will be undertaken on solar pumps.

Environmental effects expected include: the protection of springs should not affect the yield, the project will reduce quantities of polluted water in the vicinity of houses, the quantities of water involved will not cause negative environmental impact. Sustainability is addressed through keeping national standards, training of community institutions, and ensuring a system of local supply of materials for maintenance.

Monitoring of finances, construction and training outputs is included and in hands of the Project Coordinator and other staff. Activities undertaken as part of the HE programme will be written down. Risks and assumptions (including a logframe) are discussed and addressed as much as possible. The proposal includes possible social and economical effects, both positive and negative.

2. Institutional setting

Institutional roles and responsibilities

The implementing agency is St. James' Mission Hospital. Other institutions involved include the Department of Rural Water Supply, Ha Lephoi Clinic, Village Water Committees, water minders, Village Health Workers, and the funding agency.

The St. James' Mission Hospital's responsibilities include the employment of project staff, daily management, planning, organisation and transport of materials, supervision and training of staff, project administration, community mobilisation, training of village institutions, construction, monitoring, health baseline study, setting up health education, and reporting. By carrying out this project, the hospital becomes the second biggest NGO in Lesotho in water supply activities.

The Department of Rural Water Supply is expected to provide technical officers for surveys and designs, approval and registration of designs, delivery of training curriculum and staff to train Village Water Committees, major maintenance of completed works, and active membership in the Steering Committee.

Communities are responsible for: organisation and administration of community contributions, performing a population count, writing an application letter, assuring household contributions to the maintenance fund, contribution of local materials, transport of building materials from the project store to their village, accommodation of masons during construction, and the provision of two water minders for simple maintenance tasks.

Project management

The St. James' Mission Hospital provides the Project Management and the Project Coordinator. Arrangements for communication and coordination are rooted in the hospital's and project structure. Regular meetings and field visits are planned for.

3. Effectiveness and impact at the field level

Demand driven approach

Many villages have applied for assistance after seeing what is going on in neighbouring villages. Some have elected a Village Water Committee, collected maintenance funds, and have started gathering local materials without any encouragement from the project's side.

Community involvement

Community participation has been a component of the project since its beginning.
The project encourages, motivates and helps communities organising themselves through meetings and training, and offer advice when conflicts or problems arise.
The decision to join the project is made on community level. Then communities are required to elect a Village Water Committee and two water minders. The Committee is responsible for organisation and administration of community contributions, performing population count, writing an application letter, assuring household contributions to the maintenance fund, contribution of local materials, transport of building materials from the project store to their village, accommodation of masons during construction, and the provision of two water minders for simple maintenance tasks.

The motivation of women to participate is greater than of men. Village Water Committees consist of 64% women, although men are more often chairperson. Women often have the role of secretary and treasurer. More than half of the water minders are women. The project promotes that water minder's tasks can easily be done by women, and that at least one of the two water minders should be female.

However, the hospital has no written policy on gender issues, and activities are generally not evaluated on their effect on gender relations. It is still a very sensitive issue in Lesotho, and especially senior staff find themselves in the middle of a tension field when confronted with high rates of domestic violence, alcohol abuse, and the spreading of sexually transmitted diseases. The hospital positions itself as a provider of curative and preventive care that should be accessible for everybody regardless of sex, age, status, etc.

Functioning and use of WS facilities

The only technology considered feasible in the mountain area is gravity fed water supply systems. Pumping systems (except for solar pumps) and boreholes are not considered feasible because of cost and availability.

Sustainability of hygiene education

Health and hygiene education is part of the project. HE activities will be based on the outcome of a baseline study.

The baseline study and HE programme will be carried out under the responsibility of the Primary Health Care Coordinator of the hospital. Village Health Workers, who belong to the government structure, are planned to play a role in the HE programme, but are not included in planning or management.

Note:

Evaluation report 'Village water supply in remote areas; an evaluation of the Lesobeng Spring Protection Project of St. James Mission Hospital, Mantsonyane, Lesotho' by David Hall, Sechaba Consultants, 1996, does not seem to be available.

2.8 Mozambique: Priority country

Country Programme

	Project title:	**Country Programme**
	Duration:	1997 - pilot projects 1998 - 2000
	Area:	Urban Water Project in Maputo; Area based support to Niassa and Inhambane Provinces; Development of national Government Programme on water
	Implementing agency:	Government of Mozambique.
	Other involved:	Embassy Head of Cooperation, Embassy Irish Programme and Mozambican Project Officers, Mozambican Monitoring Officer (only for IA funds), Director of Planning and Finance, Provincial Departments, and Provincial Steering Committees.
	Total Ireland Aid contribution:	£280,000

No reviews or evaluation have been carried out yet. No information or evaluation on the IA/CARE joint health education and sanitation programme

1. Project setting

Relevance

Mozambique is one of the poorest countries in the world. Water supply and sanitation services are characterised by extremely low coverage, poor service quality and weak sustainability. The access to safe water supplies is around 30%. Civil war, poor policies and the influx of several hundred thousand refugees since 1992 have contributed to this situation.

The National Water Policy of 1995 gives priority to rural people in low income groups. Important elements include participation of beneficiaries at all stages, decentralisation of water services, government no longer involved in implementation, existing sources will be rehabilitated, recruitment of staff at provincial and district levels, and involvement of the private sector. Priority will be given to areas of lowest coverage, small piped systems for schools, hospitals and commercial establishments. The government strategy will involve community maintenance of hand pumps and cost recovery through user fees.

Ireland Aid policy is used in all aspects of programme planning, implementation, monitoring and evaluation. A country specific gender strategy is currently under preparation.

Results and lessons learned

A pilot programme in Niassa and Inhambane started in 1997 and included a number of pilot projects to identify key components of a comprehensive 3 year area based programme.

Results include an initial collection of data at provincial level in Niassa and Inhambane; a number of 'vertical' type projects where boreholes are constructed to support other Ireland Aid activities such as schools and health posts; the identification of a water supply project in Zimpetu; and of one in an urban area of Maputo. In such areas, many of the poorest Mozambicans live and yet pay some of the highest water charges to opportunistic private sector suppliers. The activities to be carried out in 1999 and 2000 have yet to be identified.

In northern Inhambane, Ireland Aid supports a health education and sanitation pilot programme which will be co-funded and implemented by CARE. This programme enjoys considerable success and it is anticipated that improved practices will be developed, and significant results will be available for dissemination after three years.

Ireland Aid involvement in water at medium term in Niassa and Inhambane provinces will be a combination of 'vertical' projects supplying water to support other IA activities. It will also support national developments such as the provincial inventories and the donor coordination.

According to the 1998 - 2000 development plan, the area based programmes are very much untested. It is proposed to continue to learn by doing and maintain a flexible response to situations as they arise. This flexibility must be reflected in the future programme in each province.

Integrated approach

The programme does not use an integrated approach, the focus is on water supply only. There is a separate health project.

Project design and evolution

Projects are identified as part of a country programme that involves both area based and sector support. There are no specific water supply projects identified yet. The projects are designed by Ireland Aid Maputo, with inputs from the Government of Mozambique - GOM.

Gender, sustainability and environment are not addressed in the proposal. Monitoring is limited to standard Ireland Aid monitoring procedures. In the pilot projects a number of boreholes were constructed. It is not clear whether any alternative technologies were considered. Risks and assumptions are mentioned in a satisfactory way.

2. Institutional setting

Institutional roles and responsibilities

The implementing agency is the GOM. Other institutions involved include the Embassy Head of Cooperation, Embassy Irish Programme and Mozambican Project Officers, Mozambican Monitoring Officer (only for IA funds), Director of Planning and Finance, Provincial Departments, and Provincial Steering Committees. The Country Programme will be implemented through the GOM at both provincial and national level. The role of the Irish Embassy involves financial monitoring and advising the programme.

Support to the two provinces aims to stimulate ownership by allowing management decisions to be made by the Provincial Government, and to maximise institutional sustainability by working within the capacity and wage structures existing at provincial level.

Human resources

The only Irish experts involved in the programme are at Embassy level. The Embassy also has Mozambican staff, up to Project Staff.

3. Effectiveness and impact at the field level

Community involvement

Not addressed in country programme.

Functioning and use of WS facilities

The pilot projects have only installed a number of boreholes at schools and health centres. It is not clear whether alternative technologies were considered.

2.9 South Africa: Support to Mvula Trust

	Project title:	**Programme for Community Water Supply and Sanitation Service Development**
	Duration:	1997 - 2000 (three years)
	Area:	Projects in Northern Eastern Cape, Mpumalanga and Kwazulu-Natal Provinces
	Implementing agency:	Mvula Trust is the implementing agency.
	Other involved:	Department of Water Affairs and Forestry; Department of Constitutional Development.
	Total Ireland Aid contribution:	£480,000 .

No reviews or evaluations carried out yet. Also no reviews or evaluations of other projects of the Trust available. However, the proposal looks very promising.

1. Project setting

Relevance

South Africa is embarking on a major programme of water and sanitation service development amongst the 18 million South Africans who lack access to safe and sustainable services.

The government water policy includes the following principles: development should be demand driven and community based, basic services are a human right, some for all rather than all for some, equitable regional allocation of development resources, water has economic value, the user pays, integrated development, and environmental integrity.

There is a lack of capacity associated with implementing projects which are sensitive to community and environmental needs, and the ongoing management of WSS infrastructure in a sustainable way. The other major problem identified is the lack of a national plan for education and training in the sector that will include schools, PHC school training and training at universities and technikons.

Ireland Aid support to South Africa is exceptional since it is not a least developed country but has enormous disparities in resource distribution. It is transitional; donors are not expected to stay long, and it has the particular aim of empower those who have been disadvantaged by apartheid.

Work of Mvula Trust meets with Ireland Aid policy on the following issues: support to rural and community development, provision of basic needs being WSS, poverty focus, capacity building at local level, focus on education being health and hygiene education, concern for gender issues, and policy development.

Results and lessons learned
Implementation has just started. No results known yet.

Integrated approach
As mentioned above: Water supply, sanitation and hygiene education are integrated in this project. The balance among the three and between hardware and software is not clear from the proposal.

Project design and evolution
The proposal is designed by the Mvula Trust. There is no evidence in the proposal of beneficiaries being involved in problem identification and project design. The project is an expansion of similar activities of Mvula Trust in other areas. The provinces in which the project will operate are the ones that are most severely hit by apartheid, mostly townships, with lowest coverage figures.

The proposal does not elaborate on the approaches that will be used, and it remains unclear how the balance between water, sanitation and hygiene education activities will be. Environmental issues are addressed, the Trust includes an environmental impact analysis prior to WSS implementation, which includes a feasibility study plus water sources survey. It is further addressed during appraisal and in various trainings.

Women's roles and practical and strategic needs related to WSS are recognised, and a study on the role of women, their specific training needs and options for enhancing their representation in decision making is included. An action plan is intended.

Sustainable development is assumed to be enhanced through a demand driven and client oriented approach. Monitoring and reporting procedures are mentioned. A logframe is included which specifies important assumptions.

2. Institutional setting

Institutional roles and responsibilities
Mvula Trust is the implementing agency. Other institutions involved include the Department of Water Affairs and Forestry, and the Department of Constitutional Development.

The Mvula Trust works in close partnership with various government departments, among which the Department of Constitutional Development, and the Department of Water Affairs and Forestry with whom it has a collaborative agreement and department representatives are on the Board of Trustees. The proposal does not further elaborate on the different institutions involved, nor on their roles and responsibilities. Probably the private sector is involved in implementation. Mvula Trust staff act as facilitators and monitor progress during preparation and implementation.

3. Effectiveness and impact at the field level

Demand driven approach

The approach aims to be completely demand driven, both for water supply and sanitation. A community establishes a water committee who prepares a proposal for Mvula Trust. If approved, funding is provided in tranches to the committee. The responsibility of implementation lies with the committee, who receives training.

Community involvement

Community participation is said to be one of the corner stones of the Trust's approach. The proposal does not elaborate at all on how participation will take place.

Functioning and use of sanitation facilities

The proposal mentions VIP latrines. The range of technology options feasible is not clear, nor the reasons for preferring VIPs.

2.10 South Africa: Support to the National Community Water and Sanitation Institute

	Project title:	**Support to the National Community Water and Sanitation Training Institute**
	Duration:	1996 - 2000 (5 years)
	Area:	Pietersburg, South Africa
	Implementing agency:	National Community Water and Sanitation Training Institute.
	Others involved:	Department of Water Affairs and Forestry; University of the North: Mvula Trust; Water Research Commission.
	Total Ireland Aid contribution:	£535.344
	Contribution of others:	UNICEF and United Nations Education and Training Programme for South Africa (training fees); University of the North (premises); Water Research Commission (salary of the Director)

Country Programme review: 1997.
Mid term review of support to the NCWSI: 1998

1. Project setting

Relevance

Recent evaluations have shown that there is considerable capacity in South Africa to implement projects from a civil engineering point of view. However, there is a gap in the capacity to undertake ongoing service provision effectively, particularly in rural areas. This responsibility falls primarily to rural local government working together with community based organisations; these structures are new and under-resourced.

The genesis of the institute was the White Paper on Community Water and Sanitation (1994) which stated the Minister's intention to establish the institute and specified the role it should play.

The project currently meets with Ireland Aid policy, such as providing benefit to the poorest people, water and sanitation, and capacity building. This will lead to a wide range of indirect benefits related to health, the workload of women and subsistence agriculture. Furthermore it will help community development, and supports the transition of local government in the post-apartheid era, which provides the elements of partnership and accountability the IA policy demands.

Results and lessons learned

The project has been very effective. The institute, with the support of the project, has made a considerable impact and has done a great deal of useful work. It is too early to properly assess the efficiency of the project.

The institute should carry out a very much reduced, but financially sustainable, range of activities, or increase the scale and range of profitable activities to a level that will support the desired non-profit making activities.

The institute should offer tailored training to specific target groups such as district councils, rural councilors, water committees, training agents and project agents.
The feasibility study has predicted self-financing after three years and proposed a wider set of objectives, which in a large way have contributed to the problems faced during the review.

However, the 1998 review concluded that for the institute to survive beyond Ireland Aid support, sound financial footing is needed. Recommended are a business plan including a detailed marketing study and evaluation of resources needed. If the institute can not shown to be sustainable, Ireland Aid should seriously consider the withdraw of the remaining £150,000 of funds.

Integrated approach
The institute is addressing water supply, sanitation and hygiene education. The balance among the three is not clear.

Project design and evolution
The request to support the establishment of the institute to Ireland Aid did come from the Minister of Water Affairs and Forestry, which has designed the proposal.

The proposals then prepared do not address sustainability, gender, environmental issues, monitoring and evaluation, and risks and assumptions.

2. Institutional setting

Institutional roles and responsibilities
The implementing agency is the National Community Water and Sanitation Training Institute. Other institutions involved include the Department of Water Affairs and Forestry, the University of the North, Mvula Trust, and the Water Research Commission.

The constitution of the institute defines its role in a very different way from the set out in the White Paper. The original proposals were quite clearly limited to research, training and liaison. However, the mission statement and goals in the feasibility study expanded the basic mission by the addition of 'contribute to capacity building in respect of human resource development, institutional strengthening and policy reform in the WSS sector'. This change was made with little justification and no discussion.

The institute has not gained the status of a statutory body, which affects its actual mandate and functioning.

Collaboration with other institutes, e.g. the National Sanitation Coordination Office which has developed guidelines for training and capacity building in sanitation projects, is not clear.

3. Effectiveness and impact at the field level

Financial issues

Funding and the activities of the institute are very poorly synchronized, primarily due to a lack of proper consideration of financial issues when setting and revising objectives.

From the beginning, the Department of Water Affairs and Forestry has stated that it would not support the institute financially and that it would have to be self-sustaining by the time the IA finished. This still is the case. Unfortunately it is now clear that the potential income from training activities will not support in the long term the wider range of activities expressed in its mission.

The feasibility study conducted in 1995 came to the unjustified conclusion that the institute would be sustainable and self-financing by the time that IA support would end.

2.11 Sudan: Village Water Supply Rehabilitation Project

Project title:	**Village Water Supply Rehabilitation Project**
Duration:	1st phase 1985 - 1997
Area:	Gezira, Blue Nile and White Nile Provinces in Central Sudan; 3rd phase: Kosti and Ed Duem Provinces of the White Nile State.
Implementing agency:	National Rural Water Development Corporation (also called Rural Water Authority and National Water Corporation).
Others involved:	Kosti Province Government and communities (in 3rd phase).
Total Ireland Aid contribution:	£1,209,490
Contributions from others:	Sudanese Government; community contributions (in 3rd phase).

Reviews of the project: 1987 and 1993.

1. Project setting

Relevance

The area was selected because of the following reasons: no other donors involved, seriously affected by droughts, presence of Ireland Aid dairy project, and serious problems with WSS related diseases. However, the region is the richest in Sudan (irrigated agriculture). It is mentioned that poorer areas were addressed in the 2nd and 3rd phases.

Results and lessons learned

After the first phase, 34 water yards had been constructed, giving water to 40 rural communities with a population of 100,000 and their livestock. Phase two consisted of the rehabilitation of 29 water yards, and phase three planned to rehabilitate 21 water yards. It is not clear how many water yards are functioning and being used at present.

All three phases were purely focused on hardware. No evidence of software inputs.
The planned results, which were purely technical, were probably largely or completely achieved.

It is assumed that women spend less time on water collection, although they still use alternative sources.

Because of political considerations, Ireland Aid has planned to phase out of the project in 1998.

Integrated approach

The project is purely a water supply project. At the end of the 2nd phase, sanitation and hygiene problems were identified during a review, but not taken up in the proposal for the third phase. This review also mentioned a more successful approach of a UNICEF project where sanitation and hygiene were included.

The 1993 review recommends to go into 3rd phase only with a comprehensive programme including sanitation and health, being prepared by a multi-disciplinary mission. Despite this recommendation, the third phase has not significantly changed from the second phase.

Project design and evolution

The project has evolved from an emergency project. It is unclear who has written the subsequent project proposals. The two project proposals available, of the 2nd and 3rd phase, are almost identical.

No evidence that the needs of potential beneficiaries have been taken into account.
No study was done to look into alternative water sources. It was said that the National Rural Water Development Corporation strongly proposed the water yards. In the 1993 review alternatives are mentioned, however, nothing is done with this suggestion. Financial and technical sustainability were mentioned in the proposals for the 2nd and 3rd phase, but the problems identified during reviews were not properly addressed.

The environment is mentioned but not addressed, no assessment was made. No impact foreseen, while a number of earlier constructed water yards have run dry. Environmental problems regarding the ground water level were mentioned in the review report at the end of the 2nd phase.

In the proposal for the third phase it is mentioned that the project envisages to be beneficial for women. No evidence of a strategy or activities to particularly address women's issues.

Regarding monitoring, planning included funds for purchase to be monitored by the Irish coordinator. Furthermore, monthly progress reports were to be prepared by the field project manager for the DG of the Water Authority and the Irish coordinator in Sudan. Assumptions and pre-conditions were not identified.

2. Institutional setting

Institutional roles and responsibilities

The implementing agency is the National Rural Water Development Corporation (also called Rural Water Authority and National Water Corporation). Others involved are the Kosti Province Government and communities (in 3rd phase).

In 1994 the administrative structure of Sudan changed, and the formerly Central Region was divided into four states, Gezira, White Nile, Sennar and Blue Nile States.
The roles and responsibilities of the Bilateral Aid Programme (BAP) and the National Rural Water Development Corporation were not clear.

Project structure and relations with other institutions are not clarified. An Irish technical engineer was assigned to the project.

3. Effectiveness and impact at the field level

Demand driven approach

There is no evidence that the formulation of this project was based on existing demands, nor that it meets actual demands.

Community involvement

Community involvement was not an issue in the 1st and 2nd phase. In the proposal of the third phase community participation is mentioned in the form of the provision of cost of fuel and oil, materials, and allowances for field staff. What happened in practice is not clear.

Functioning and use of WS facilities

The technology chosen in the first and second phase (upgrading of water yards) has proven to been inappropriate and unsustainable: too expensive for the Rural Water Authority to maintain, spare parts difficult to acquire, capital cost very high. The technology was strongly suggested by the National Rural Water Development Corporation.

Alternative water sources are used to save money and avoid the salinity of the well water. In the rainy season, people drink from surface water sources that are usually shared with animals.

Water is charged at 1L.s per person in the 2nd phase, which is considered low. O&M falls under the responsibility of the National Rural Water Development Corporation. It is unclear whether this is organised on national, state or provincial level. O&M faces difficulties due to a lack of spare parts (that have to be imported from Ireland) and lack of financial resources. Technically, local people are able to do repairs, at least during the 3rd phase.

Environmental issues

Environmental considerations were not taken into account. The project assumed to have no impact on the environment. However, impacts on the environment identified include lowering of the ground water level, unsanitary conditions around water points, and possible overgrazing around water points.

The 1993 review mentions that the hydrological condition of the area does not allow for a sustainable use of the ground water resource with the technology chosen.

Financial issues

The cost per unit was found to be very high, £50,000 per water yard in the 2nd phase. In 1986 and 1987 the average cost/beneficiary was respectively £19 and £39. The per capita cost in the 3rd phase was estimated to be £5. Financially the water yards have proven to be a non-sustainable option. Not only is the investment cost very high, maintenance is too expensive for the Sudanese Government.

Both in proposals and reviews it is thought that the National Rural Water Development Corporation will not be able to financially manage the water yards on the short, medium and possible longer term. Continued external support is envisaged.

In the 1993 review it is mentioned that communities are legally obliged to contribute for water supply construction as well as pay for consumption. It is not clear how this worked out in practice. In the review the capacity of people to pay is seriously questioned.

Final remarks

Although a number of problems have been identified and suggestions made in early stages of the project, there is no evidence that the project design changed significantly over the various phases:

1. The financial and technical inappropriateness of the water yards was mentioned in a review of the first phase in 1987.
2. Sanitation and hygiene problems were identified in a review mission at the end of the second phase, but there is no evidence that it was taken up.
3. Problems with ground water levels were identified and alternatives mentioned, but not taken up.

2.12 Tanzania: Priority country

Kilosa Town Water Supply Project

	Project title:	**Kilosa Town Water Supply Project**
	Duration:	?
	Area:	Kilosa Town, Kilosa District, Morogoro Region, Tanzania
	Implementing agencies:	Regional Water Department and District Urban Water Department in Kilosa.
	Others involved:	Ministry of Local Government.
	Total Ireland Aid contribution:	£403,000
	Contributions from others:	Regional Water Department (Work, all local costs).

Review of the Kilosa Town Water Supply Project: 1993.
Country programme review: in 1996.

1. Project setting

Relevance

Tanzania is one of the poorest countries in the world, and Morogoro is one of the poorest areas in Tanzania. Basic needs poverty is widespread in Kilosa District.

The focus of Ireland Aid in Tanzania is based on the government -GOT- priorities and Ireland Aid policies, and comprises of rural development, education and health. New projects will be in agricultural research, tourism and local government training.

Results and lessons learned

Problems identified in 1992 include slow progress, especially in intake construction at Mkadage, poor reporting, and lack of work plans and rather ad hoc implementation.

The 1993 review concluded that an overall plan which would have been able to give a more long term direction to the somewhat disjointed scheme was not addressed. Such a plan should include detailed examination of the current drawings and plans, reassessment of the recommendations coming from previous reports, costing of simple treatment works, and the roles of communities.

The 1993 proposal as much as possible takes the recommendations of the 1993 review into account. The proposal does not only focus on the rehabilitation of the WS system, but also on increasing capacities to manage the system and develop a Water Master Plan for Kilosa town.

The implementation has gone quite well from an engineering point of view. However, the scheme is not self-sustaining from a financial point of view (government subsidies). No attempt was made to incorporate community management.

The 1996 country review and planning framework did not mention any water activity. The district based programmes in Kilosa Ulanga, Kilombero and Muheza do not include water or sanitation activities.

Integrated approach
The project is almost completely a hardware project, only focusing on water supply.

Project design and evolution
Project initiated and designed by the Development Cooperation Division. The 1992 proposal is 100% technical and very brief. Sustainability (management and funding of O&M) and environment (positive due to improved drainage) are very briefly mentioned.

The 1993 proposal is much more elaborate and comprehensive. This time risks and assumptions are mentioned, even as gender, environment, community participation, sustainability and M&E. Sustainability is elaborately discussed in terms of technical (no problems perceived) and particularly financial aspects. However, there is still no real evidence of existing needs.

2. Institutional setting

Institutional roles and responsibilities
The Regional Water Engineer and District Urban Water Engineer in Kilosa is the implementing agency. Other institutions involved include the Ministry of Local Government.

The project does not have outside technical assistance. It was identified that the Regional Water Department had the capacity and expertise to carry out the rehabilitation.

Human resources
The country programme review found that the capacity of the Rural Water Engineer in design, support and supervision of the work has been over estimated. Furthermore, there has been an shortage of about 50% on staffing levels. Also there seems to be a need for more training activities, among others of pump mechanics.

3. Effectiveness and impact at the field level

Community involvement
Community participation has not been an issue from 1988 to 1992. In the 1993 proposal it is included, as was recommended by the 1993 review. Pipeline trench excavation must be carried out by communities, and potential users are involved in choosing sites of stand posts. The solution to construct stand posts to overcome people's inability to pay for house connections was arrived after much discussion with the communities. Cleaning and reporting of faults are responsibility of the community. No special committees are established, existing community structures are being used. More community awareness campaigns are planned to increase community understanding of roles and responsibilities. The scheme is likely to remain largely government run and maintained.

2.13 Tanzania - Ireland: UCG and UDSM Hydrology Projects

Project title:	1.	**Support to the NUI Galway Department of Engineering Hydrology (also called University College Galway), NUI (Galway) or UCG**
	2.	**Support to the Hydrology Department of the University of Dar es Salaam, UDSM**
Duration:	UCG:	1978 - 2000
	UDSM:	1982 - 2000
Area:	Galway, Dar es Salaam	
Implementing agency:	Hydrology Departments UCG and the UDSM	
Total Ireland Aid contribution:	£1,425,000	
Contributions from others:	UCG (£ 210,000 per year and provision of premises, other fellowships)	

Project review UCG: 1995.

Project review UCG and UDSM Hydrology Projects: 1997

1. Project setting

Relevance

Set against the Education and Training Policy, both projects have been successful. Even the failure of the Galway project to focus on priority countries must be set against the need for it not to compete wit the Dar es Salaam project.

Set against ODA Policy, the projects do not meet key targets such as water, sanitation, health, primary education and environment. The Galway project does not target priority countries.

The UDSM project does not have a direct focus on key development issues such as water, sanitation, health, primary education, gender, environment, sustainability and counterpart training. It also does not target priority countries. In contrast it is successful in the areas of self-reliance, partnership and bringing benefits to Ireland. Indirectly is has a significant effect on the provision of water supplies (therefore benefiting women) and management of the environment. It has been difficult to recruit qualified female candidates and qualified candidates from southern Africa.

There is less linkage with the Education and Training Policy which is directed at institutions in Ireland. The project performs badly in addressing the poorest people and the poorest countries.

Results and lessons learned

The 1997 review recommended a phasing out of the direct support to both UCG and UDSM projects over a period of 3 years, but to keep involved in supporting specific activities. For UCG these include the provision of fellowships to keep postgraduate activities going whilst

3. Effectiveness and impact at the field level

Demand driven approach

Based on the amount of requests for application received yearly, it can be assumed that both MSc courses fulfill a demand.

Financial issues

UCG

Largest source of income for the UCG are the fellowships. Yearly a few students are admitted with other fellowships. Other sources of income are consultancy and contract research, neither of which was very significant in 1997. UCG makes a significant contribution in the form of staffing and resources that is covered by course fees.

The net cost to IA for MSc training is about £11K per student which is considerably in access of the norms for engineering undergraduates or for MSc by taught course. This can be made more cost effective by increasing the number of students, e.g. by increasing IA fellowships or by seeking other sources of funding.

The annual expenditure of UGC is running between £390K and £400K which is within the planned budget. Around one third goes to local (Irish) salaries, over half goes towards fellowships.

UDSM

In 1997 IA contributed about half of the funding given to the programme. The remainder comes from Germany, the Netherlands, Belgium and UNESCO, principally in the form of fellowships.

It has proven very difficult to untangle finances of the programme and the assess whether expenditure was in line with the budget plan. A tentative analysis indicated significant unplanned expenditure or over-expenditure on family travel, school fees, house maintenance and office furniture and fittings. There has been under-spending on equipment and books, research, and fellowships (which is taken op by other agencies).

The under-spending of IA funds by UDSM is primarily due to the support received from others in the form of fellowships.

2.14 Uganda: Priority country

Kibaale District Development Programme

Project title:	**Kibaale District Development Programme - KDDP**
Duration:	1995 - 1999
Area:	Kibaale District, Uganda
Implementing agency:	District Administration.
Others involved:	Project Coordination Unit (consisting of two expatriate advisers); Project Steering Committee; District Water Officer (coordinating all donor support to the sector as well as the implementation of activities financed by IA).
Total Ireland Aid contribution:	£835,817

Country programme review 1996

1. Project setting

Relevance

Access to safe water supply is with 20% in Kibaale among the lowest in the region. Kibaale is a very remote area. As 90% of people live in rural areas, this area has been consistently identified as that of greater need, in terms of poverty reduction. The District Programme is clearly focused in a poor rural area.

The District Programme comprises of five major areas, which represent the needs in the district at all levels: capacity building, education, health, feeder roads, and water and sanitation. These also reflect Ireland Aid policy.

Results and lessons learned

Ireland Aid, on the suggestion of the Water Department of the Ministry of Natural Resources and the Ministry of Local Government, is supporting the District Water Master Plan to achieve 100% coverage in 10 years. It also finances a 5 year plan which includes the activities of all donors supporting the sector in Kibaale District.
Institutional support to District Water Officer (completion of compound, employment of additional technical staff, and support to the training of skilled workers).

Support to sanitation is confused by vertical projects relying on very expensive (and often questionable) technology such as VIP latrines. One VIP is estimated to cost US$ 560, which is well beyond the budget of rural families.

Recommendations from the 1996 review state that Ireland Aid should maintain support at the current level, which is recommended at £1.3 million. The temptation to increase levels of funding will be counter productive and will drive the process away from any possible community involvement. It would also require additional staff to those available in the

District. Any move in this direction would result in the development of a parallel structure and must be discouraged. Furthermore, the expanded use of PRA and other community focused planning techniques is recommended.

Integrated approach

The four objectives of the Water and Sanitation Project cover increased access to safe water supply, promotion of better health practice through HE, improvement of sanitation at institutional and household level, and improve capacities of the District Water Office. A background paper prepared for the review team notes the particular need to focus on health education.

This seems a very powerful approach, especially because of the combination of priority areas: capacity building, health, education, feeder roads, water and sanitation, and trunk road. The country programme review report suggests a major improvement of objectives for the WSS project.

Project design and evolution

The KDDP approach is based on Ireland Aid experience in district programmes, particularly in Tanzania. It emphasis integration and capacity building in the District Administration, a long-term commitment, and a strong emphasis on community participation.

The focus on five main components at district level: capacity building, health, education, water supply and sanitation, and feeder roads, should present a solid base for viable basic needs support in new districts considered by Ireland Aid. Extension with similar level support to Kumi and Kiboga Districts is planned. Ireland Aid experience to date indicates that detailed attention to institutional support and appropriate and effective training become corner stones for effective change in the basic needs sectors.

The programme identified was suggested by the district authorities (and a number of districts was suggested by the national level). The sectors identified by the district reflect, according to them, the biggest needs in the district. The Ireland Aid country office has designed the programme, no evidence of beneficiary involvement in planning.

Alternative technologies for both water supply and sanitation have been discussed and recommended by the review team. There is no research and development component for technology options. Country review and planning report contains a logframe, including important assumptions.

2. Institutional setting

Institutional roles and responsibilities

Implementing agency is the District Administration. Other institutions involved include the Project Coordination Unit (consisting of two expatriate advisers), and a Project Steering Committee. The District Water Officer has responsibility for coordinating all donor support to the sector as well as the implementation of activities financed by IA.

The KDDP design was influenced by Dutch assistance into district programmes in Tanzania and Danish experience in Rakai District, Uganda. It comprises 2 external Technical Advisers, one as overall Coordinator, the second as engineer to support any infrastructure development within the District Department of Works. In Phase 1 a Programme Coordination Unit - PCU was established. This will be fully integrated into the district structures in Phase 2. Gradually both posts will be fully integrated and phased out at a mutually agreed date when sufficient capacity has been developed.

Human resources

Two Irish ex-patriots in the PCU to check expenditure of IA money and to give advise, who will be gradually phased out. All other staff are local staff who achieve up to implementing responsibility. Also local staff are in the Steering Committee.

About 2% of the WSS Project budget is spent on training and extension.

Decentralisation

Kibaale District has been fully decentralised in 1995. It receives a block grant from the Central Government, and a part from the revenues that are collected at sub-county level. Although District Councils will be held accountable by their electorate, decentralisation is still in a transitional stage.

3. Effectiveness and impact at the field level

Functioning and use – sustainability of WS facilities

Rainwater harvesting is suggested as alternative technology for the programme, for example for schools, which is expected to have a direct impact on health education and improved sanitation. It is recommended that the possibility of extending a cost-effective form of this technology to the household level should be explored.

Monitoring and evaluation

An internal planning and monitoring system must be established to facilitate efficient and effective implementation. It is envisaged to be designed once the additional staff are in place.

2.15 Zambia: Priority country

Northern Province Development Programme

Project title:	Northern Province Development Programme
Duration:	1983 - 1998
Area:	Kasama, Mungwi, Mbala, Mpulungu, Nakonde, Isoka, Nbawalya (Mpika District) Districts Phasing out of Kasama Implementing agency: Northern Province Development Programme up to 1998. Since then its the D-WASHE committees.
Others involved:	Communities
Total Ireland Aid contribution:	£4,569,2412
Contributions from others:	Communities(unskilled labour for construction and rehabilitation, maintenance funds -Kw. 30,000 in cash or kind for well spares-, initial contribution)

Kasama RWS Project review 1987.

Northern Province Development Programme review 1993.

Country programme review 1996.

Review of Ireland Aid support to water sector 1998.

1. Project setting

Relevance

Government policy now encourages involvement of communities at all stages.

Community involvement and management are now factors included in both policy planning nationally as well as within Ireland Aid. Support to district level capacity building is in line with decentralisation policy and is supported by donors in most sectors.

The Water and Sanitation Act was promulgated in September 1997. The act makes no reference to rural water and sanitation, nor to inter-sectoral coordination, since it is primarily concerned with the setting up of commercially viable utilities. This has led to an uncertain position of responsibility for rural water supply and sanitation.

Water supply and sanitation strategies for rural areas are outlined in the National Water Policy (1994). These strategies are: i) ensuring that RWSS programmes are community based, ii) developing a well defined investment programme for sustainable RWSS, iii) promoting appropriate technology and research activities, iv) developing an emergency and contingency plan to mitigate impacts of droughts and floods, v) develop a cost recovery approach, vi) develop and implement a well articulated training programme.

Results and lessons learned

In 1997, about 27% of the Zambian programme budget was spend on WSS.

The three project areas, being Kasama, Mbala and Isoka, run as separate entities with their own budgets and plans, and to some degree their individual ways of operating.

Phase	Approach
First phase 1983 - 1988	• *Community participation in construction* • Little emphasis on sustainability or long term commitment • Direct response to requests, no priority listing • Health education integral part
Second phase 1988 - 1992	• Inclusion of preventive maintenance education and payment for spare parts • Scoring system for prioritising • Survey forms for extension workers and councillors • Involvement of council
Third phase 1992 - 1995	• Little change in approach • Project still largely parallel structure to GRZ • Proposed phasing in Kasama and establishment of maintenance system delayed as more construction and well deepening was required • Introduction of initial contributions
Fourth phase 1995 - 1998	• Little change in approach, apart from more emphasis on drilling, until mid 1997 • Project began re-structuring to integrate seconded staff to ministries and to build D-WASHE capacity to coordinate • In 1998 D-WASHE and associated ministries started to take over most project functions • Maintenance system still delayed

The **review in 1998** has come up with the following results: Community management seems to be less effective. Communities seem able to cope with small problems such as repairing and sometimes replacing buckets, but increasing numbers of wells are going out of use with age, often for quite minor reasons. There is a tendency to keep using more than one source of water, depending on its convenience rather than its quality.

At present all districts are making efforts to develop more integrated approach. Construction results in 1995 were 72 new wells and 27 boreholes; in 1996, 81 wells and 26 boreholes, and in 1997, 174 wells and 105 boreholes. In total up to December 1997, 710 water points were constructed and more than 216 latrines were installed. Cumulative costs per community are about $10,000, as they were in 1994. The overall cost per community compares favourably with other projects in Zambia, operating on a similar project basis. However, since 'software' components were relatively low, factors such as high transport and staffing costs have had a greater influence. It has not yet been possible to compare cost with the D-WASHE-based system.

Most capacity building above community level over the past few years has been through on-the-job training, courses for project staff, and to some extent support to the Department of Water Affairs at provincial level. In 1998, considerable effort has been put in support in D-WASHE committees.

According to the 1998 review, weaknesses include the relative low output per production centre, vulnerability to falling water levels in many wells. Also, generally it is not a demand driven approach, so low motivation to keep systems operating. Capacity building has been mainly individual not institutional (but mainly as a result of the institutional uncertainties in the sector). Building up of community management and behavioural change appears to have had limited sustained effect. It is a difficult time to lead major new responsibilities on GRZ institutions as they cannot take on new staff and have little chance to increase budgets.

Strengths in the Northern Province Water Projects include the fact that both N-WASHE and the project have put considerable effort into increasing gender awareness both within project staff and in associated committees. There is an emphasis on gender and development in training and establishment of D-WASHE to give opportunity for women to have more influence in decision-making. Ireland Aid is acting as a catalyst in altering people's perceptions towards gender, which accelerates changes. Outputs include over 500 reliable sources established, serving around 100,000 people. Cost comparable to or less expensive than other project-based systems. The project is responsive to local demand, especially in Kaputa. Furthermore, highly trained personnel returned to GRZ, and technical innovations developed which are relevant to other areas.

For many people, particularly at district level, gender awareness is still regarded as a donor-driven initiative. At district and sub-district level most motivators are men, and particular effort may be needed to build up women's understanding of technical matters in that this appears to be the main way in which they may gain the respect of the community as a whole.

Integrated approach

The sanitation project will be integrated into the water project from 1998. Health education is mentioned in the annual report of 1992.

Project design and evolution

The project proposal in 1993 for extension to Isoka and Nakonde includes assumptions and risks, focusing on the provision of spares and the role of community education. The proposal trusts the project will make a positive contribution to the lives of women, based on the 1993 evaluation of the Kasama Project which came up with similar results. The 1993 project in Isoka and Nakonde expects to positively contribute to the environment, because water will stimulate gardening, and secondly health education will stimulate the construction of latrines.

2. Institutional setting

Decentralisation

Support to district level capacity building is in line with decentralisation policy and is supported by donors in most sectors. Decentralisation has put considerably more emphasis on district level decision-making. National and district levels institutions have been strengthened, provincial level powers have been reduced.

Institutional roles and responsibilities

Implementing agency has been the Northern Province Development Programme up to 1998, since then its the D-WASHE committees. Until the beginning of 1998, the NPDP tended to operate autonomously within the districts. Acting as a parallel structure, it fed its own plans into D-WASHE rather than D-WASHE being the decision-maker in terms of objectives and programmes. Selection of communities was done on a project basis, usually with little or no referral to local council or D-WASHE priorities, and most works were carried out by project-employed staff and those seconded to the project acting quite independently of their ministries. The high degree of project dependency changed when concrete plans were made, partly under the 'Integration Strategies for Ireland Aid supported WASHE Initiatives'.

The overall goal is to transferal of the functions previously undertaken by the projects to D-WASHE committees and their associated ministries. This is planned to be achieved almost completely in around twelve months. Other rural water supply projects in Zambia which have undertaken or are undertaking such integrating have taken a minimum of three years, and usually more, starting from a less project dependent base. It is now commonly accepted that the government is not able to provide all required services to rural areas, and therefore, it is moving towards becoming more a facilitator than an implementer.

One problem identified in the 1998 review is that currently almost all sectors are undergoing reforms which adversely affect their productivity in the short term.

Unlike many parts of Zambia, Northern Province district councils generally do not have district planning officers, which in other provinces have proved to be very instrumental in strengthening D-WASHE planning capacity. This strongly influences municipal budgets, which are much lower in districts without planning capacity.

Most D-WASHE committees, especially in Mbala, Mpulungu and Kaputa have made a positive effort to increase the influence of women by incorporating female teachers and community health workers, as well as one or two representative women from communities.

In Isoka and Mungwi women now take the chair in D-WASHE committees. Changing people's attitude towards gender remains difficult partially because most extension workers in health and education are men, and only in community development, which has very limited resources, there are many women to provide alternative role models for the rural population.

Human resources
Salaries, job security and motivation of government staff are low, few graduates are attracted to government service. Both in the Southern and Northern Province there is a severe lack of environmental health technicians to carry out health education.

Monitoring and evaluation
Quarterly reporting to the Development Cooperation Office was/is done by the technical advisor who is also the Project Manager. Every two years the project was/is reviewed. No evidence of further monitoring activities except for water quality monitoring and auditing.

3. Effectiveness and impact at the field level

Demand driven approach
Certain government policies have lead to a positive environment within which to establish demand-responsive systems. Demand in Kaputa appears to be significantly higher and more actively voiced than in other districts, because of safety from crocodiles, the lesser risk of cholera transmission, and lower salinity.

Community involvement
The capacity of community management to solve problems reflects the degree to which community mobilisation focused on long-term issues rather than simply motivation to be involved in construction and initial contributions. In Kasama District where well construction and community education have been undertaken for the longest period of time, it is apparent that back-up is still needed to support communities in motivation to keep their supplies in operation.

Communities appear to be ill-prepared for maintenance of water quality perhaps partly because there has previously been a considerable dependence on the project to chlorinate and pump out wells when quality declined.

The adoption of women in key roles within V-WASHE committees is a positive step in changing the perception of women's capacity to contribute to society without simply burdening them with yet more physical tasks. However, in general their roles in relation to well construction and maintenance tend to remain those which are a natural extension of their household roles of cleaning, carrying water, preparing food, etc.

Functioning and use of WS facilities
From various studies it appears that 25 to 30% of communities with protected sources use more than two sources; this number may be even higher. Except for Kaputa there is a variety of alternatives available and distances to water sources are short. A quantitative overview of how many wells are functioning and being used is not available. Surveys show that a variable proportion of wells in each district are out of use or go dry seasonally, and so do not provide a reliable supply at the most critical time of year. Overall it appears that some 72% of the wells are fully functioning, but around 60% for the districts where well construction has been going on for longest. Despite continued well-deepening, 30% went

dry in Kasama District in 1997 at a time when alternative sources were most difficult to find. In surveys carried out in 1998, over half of the buckets were found to be leaking badly or missing, on third of chains missing or in very bad state. In Mbala, of the 126 wells handed over, 37% of problems of non-use related to weak community management and 63% to technical difficulties, mainly wells drying out. The reform in 1997/98 (less field back-up activities) and low water levels in late 1997 seem to accelerate the number of wells going out. In Kaputa the situation was found to be very different because of the higher demand for water, and apparently the higher willingness to pay for and maintain supply facilities. Some wells have gone out of operation because water quality has declined in the dry season. In general water quality is good, with some 80% of improved traditional and rehabilitated wells with less than 10 FC/100ml, and water from boreholes and cylinder wells of the highest quality.

There is little data on water quality before Ireland Aid intervention. However, limited sampling suggests that in Kasama the difference in quality between traditional sources and new or rehabilitated improved traditional wells is small. Only for boreholes and cylinder wells seem to show significantly better quality.

The main advantage of Ireland Aid funded wells other than cylinder wells and boreholes appears to be proximity, convenience and the potential for using more water, as it was in previous surveys. Little work has been done on preferences for water sources and perceived benefits. It seems that distance remains the main reason for using a particular source. In very few cases do households tend to use one source only. Little attention has so far been paid to building up the maintenance systems needed to keep existing wells in operation. Systems of procurement need to be put in place soon.

Revolving funds were set up at district level but were returned to Kasama and seem to have become absorbed into the overall system. Therefore there is no fund at district level or any system in place to account for pieces sold, price adjustments in relation to kwacha devaluation, links to manufactures to monitor prices or negotiate discounts. there is also no call-out fee for the Department of Water Affairs, and communities are generally not aware of the real costs of such services.

Sustainability of sanitation facilities

Activities are still focused on institutions, except in Mpulungu and Mbala where low cost family facilities are being encouraged. Sanitation is now receiving more attention, especially as a component of the overall strategy to promote environmental sanitation, addressing faecal and solid waste disposal, hygiene behaviour, and safe use and storage of water.

Environmental issues

Monitoring data from Ireland Aid suggest that groundwater levels are dropping over long periods of time. Further data analysis is necessary to establish how widespread and consistent this trend is.

2.16 Zambia: Priority country

Support to the WASHE Programme

	Project title:	**Support to the National Water, Sanitation and Hygiene Education Programme (N-WASHE)**
	Duration:	since 1996
	Area:	Nation wide, Zambia
	Implementing agency:	N-WASHE and District (D-)WASHE Committees.
	Others involved:	UNICEF and the Reform Support Unit.
	Total Ireland Aid contribution:	in total around £ 480,000 up to July 1998 (?)
	Contribution from others:	UNICEF and GRZ (only 1997) have also contributed to N-WASHE.

Country programme review: 1996.

Review of IA support to the water sector: 1998

1. Project setting

Relevance

Since the mid 1980s, the Government of the Republic of Zambia (GRZ) started serious efforts to reform the water and sanitation sector. After a number of studies, the Programme Coordination Unit was established in 1993. Its mandate includes recommending policy reforms, defining responsibilities of stakeholders, recommended reorganisation and reforms needed, and make a framework for sector planning and implementation. The PCU has members from 9 ministries and government departments.

In 1994 a strategy and institutional framework for the WSS sector, as well as a National Water Policy, were being developed. The National Water Policy includes community consultation and participation in project development, implementation, operation and maintenance, use of appropriate technology, increased emphasis on sanitation services, and financial policies to ensure financial sustainability.

In 1993 the Community Management and Monitoring Unit was established, which since has completed the following tasks: i) a national water point inventory providing detailed information on more than 25,000 water points, ii) a standardised approach to community management issues and participatory training techniques and tools, iii) participatory tools to support health and hygiene promotion, iv) technical guidelines for RWSS, v) elaboration of the WASHE strategy as a decentralised, people oriented approach. A legal framework for the sector was developed in 1997.

Up to December 1997, one N-WASHE Team and 27 D-WASHE committees had been established.

Results and lessons learned

According to the 1998 review, district councils accept D-WASHE as 'theirs' and as the most active sub-committee to the District Development Coordination Committee.

All committees have made inter-sectoral plans, and decided on their capacity to implement them. Committee members have taken on training and facilitation of sub-district support to communities, and developed their own programmes and workshops. N-WASHE is carrying out its mandate as trainer of D-WASHEs effectively.

There has been assistance to make plans in all districts in the Northern Province but funding for major implementation in only seven. Some districts have been demotivated by false expectation that support to planning implied support also to implementation.

Integration of the project into GRZ has led to: return of all seconded staff to their respective departments/ministries, laying off of most contract staff, especially those involved in well construction and community motivation handing over vehicles in some districts to support WASHE activities, and the adoption of WASHE plans (in modified form) for 1998 funding. Even in the short time in which integration has been being put into practice, D-WASHE committees have begun to take on responsibilities successfully.

The 1998 review has identified a number of strengths. Multi-disciplinary N-WASHE Team established to provide training to D-WASHEs and continue development of national guidelines. N-WASHE promotes higher profile of rural water and sanitation. Different approaches have been applied in different districts, which helps to show the range of what is practicable. Increasingly well-developed district plans. Strong support available particularly for D-WASHE district planning. Real empowerment of D-WASHE committees in three districts and increasing integration in another four. Acceptance of D-WASHE by the District Development Coordination Committee and council as being part of them. Encouragement of those in GRZ to use initiative and improvisation to achieve objectives. Giving opportunity to councils from GRZ to be seen to respond to rural demands for the first time for many years.

The review further identified a number of weaknesses. There is no national focal point for D-WASHE nor donor coordination in the sector, and there are weak links between Ireland Aid and N-WASHE. There is a lack of GRZ recognition of WASHE at national level and member ministries of the Programme Coordination Unit, and a lack of national policy-making body allows donors to set up their own strategies. The GRZ lacks financial commitment to rural water supply and sanitation, and there is no strategy on future roles for N-WASHE, and responsibility of RWSS. The lack of provincial WASHE level weakens district level decision-making and links to N-WASHE. Provincial WASHE could also help to reduce the workload of N-WASHE.

D-WASHE Committees are concerned at the pace at which they are being asked to take on new responsibilities which were previously undertaken by a project with full-time staff and plentiful resources.

Focus on new works both in terms of construction and participatory education has led to neglect planning of support for existing water supplies. There is an associated feeling that the primary aim of D-WASHE is to solicit donor funding, which may obscure its role in sharing and optimising the use of those (mainly human) resources which GRZ does have. There is no reference point for D-WASHE support except through donors who encouraged their formation. There is no representative body for rural water supply and sanitation with strong links to ministry lobbying, and GRZ commitment to rural water supply and sanitation remains weak (no capital funds released in three years). Fundamental changes being undertaken in short time frame with insufficient consultation with those affected. Limited capacity of part-time committees to take over what was full time (project) management role. Lack of attention to keeping existing systems in operation and in some districts using resources available within GRZ. Danger of D-WASHE being 'groomed into donor dependence'.

There is a need to push for greater clarity in the strategies of WASHE, the formation of a national body to represent WASHE interests, to co-ordinate donors, and a greater commitment from GRZ. Stronger links with IA on national level may help to achieve this. A provincial level representation of WASHE is also needed, including a full-time advisory unite to provide some to the support the projects will no longer give, and coordinate other donors who also plan to be active in the sector in Northern Province (e.g. DFID).

Further Ireland Aid advisory support to districts should be based on D-WASHE perception of their objectives and needs in relation to their taking on more project functions, so that they feel more in control of the process of change. The pace at which the new approach can supersede the old has perhaps been a bit optimistic. If integration is to allow for the development of capacity to take over most project functions, more time will be needed.

The main weakness of both the approaches in the Southern and Northern Province has been that maintenance of existing sources has largely been neglected. The concentration by D-WASHE committees on new works tends to have lead to high donor dependence and numbers of existing supplies falling out of use. The Northern Province strategy implies a gradual build-up of capacity alongside a rapid reduction of in project-based activities. This is in contrast to the UNICEF approach which puts a gradual build-up of GRZ capacity alongside a project-type management and rapid contractor-based implementation.

If Ireland Aid is to take an increasingly faciltatory role, plans for future support need to respond to D-WASHE views of the rate at which GRZ has the capacity to take over project functions and district and sub-district level. The objective has been well defined by IA but those taking on the responsibilities need to feel that they have more control over how it is achieved.

Integrated approach

There is still relative little government recognition of the advantages of the inter-sectoral approach. The WASHE concept is therefore to a large degree donor driven.

Project design and evolution

Ireland Aid has adopted slightly different approaches in the different districts all of which contrast wit the model chosen by UNICEF for the Southern and Eastern Provinces.

2. Institutional setting

Institutional roles and responsibilities

The N-WASHE and D-WASHE Committees are implementing the project. Other institutions involved include UNICEF and the Reform Support Unit.

Within provinces, projects are determining what contributions communities should make, how much subsidy to give spare parts, what choice in technology to give communities and many other aspects for which guidelines should be being formulated by GRZ. In addition UNICEF and IA are acting as contact points and standard-setters for district plans and donor funding, among many other roles which are pro-active rather than catalytic. This they are doing in the absence of any national body with the mandate to undertake these roles, but by doing so are perhaps retarding the development of any such body.

Ireland Aid has envisaged D-WASHE as fulfilling all management roles that the projects have previously undertaken within 12 months, and implementation through member GRZ organisations. UNICEF puts management largely in their own hands and those of contractors (NGOs and drilling companies), with D-WASHEs mainly as planners and monitors of progress. The Programme Coordination Unit is and inter-sectoral committee at Permanent Secretary level which is the coordinating body for water sector reform in GRZ.

There is still little recognition of the WASHE concept at national level. Indicators of this are: i) district budgets which include WASHE activities do not get approved, ii) no provision made for a national body to represent D-WASHEs within either the Ministry of Local Government and Housing or the Department of Water Affairs, and iii) extension staff job descriptions do not include an inter-sectoral role. This situation mainly results from the WASHE concept being a bottom-up approach. As a result, there is no clear strategy, no analysis of the transition stages, and no definition of how WASHE will fit into the reorganised sector when the Ministry of Local Government and Housing takes full responsibility for rural services.

Both N-WASHE and the Reform support Unit, which are now answerable to the Ministry of Energy and Water Development, are regarded as temporary organisations which will be phased out as reform structures become operational. Apart from training and facilitation, N-WASHE is assisting the development of a rural water supply strategy to accompany the environmental sanitation strategy which has been developed with UNICEF support.

The workload of the N-WASHE Team is very high, among others due to the high level of N-WASHE support that UNICEF has planned for its 10 districts. These plans are usually defined by UNICEF who coordinates directly with N-WASHE, rather than contact between D and N-WASHE.

The capacity of the D-WASHE committees may be a limiting factor in the pace at which responsibilities can be transferred and implementation be totally by GRZ or contract. Also the capacity of departments may limit this transfer. In 1998 most councils identify D-WASHE committees as being part of the government rather than as an NGO tacked on to them. In the 1998 review no communities were found to be aware of the D-WASHE and sub-D-WASHE committees and their roles. The result has been an acceleration in the rate at which wells are going out of use, especially among the older wells in Kasama.
Two modules for WSS implementation in Northern Province are developing, both with their own advantages. In one module, the Department of Water Affairs is one of the implementors at district level, together with education, health, community development and agriculture. All these departments are coordinated by D-WASHE committee. This module is used in some form in most districts. In the other module, water activities are integrated into the activities of education, health, community development and agriculture, which again are coordinated by the D-WASHE committee. Each department arranges its own programme for mobilisation, behavioural change and promotion of environmental sanitation. This module is being used in Mbala, Mpulungu and to a lesser extent in Kaputa. To some degree the model to be adopted should depend on the capacities of each district, particularly that of the Department of Water Affairs. During a transition phase to full integration, the second module is more difficult to implement because it requires more capacity and resources in each ministry at district level. However, in the long term the second model is said to have the potential to increase district capacity more.

Human resources

The N-WASHE Team trains D-WASHE committees in participatory methods including PRA, aspects of water supply and sanitation, gender issues and planning.
There is a need for N-WASHE support in the planning process for at least another year. Furthermore, D-WASHE committees have identified training needs regarding procurement of spares, accounting, running revolving funds, low technology water quality maintenance, and contract management. All D-WASHE committees are active in holding workshops for sub-district staff.

Project management

All districts produced plans on which funding for 1998 is based (in modified form). Some D-WASHE committees have been making plans since 1996, but 1998 was the first year that IA used these plans as a basis for funding. For the first time different ministries have worked together to pool knowledge and resources, and are aware of each other's plans. Community mobilisation is being managed by D-WASHE committees only since 1997/98 except Kaputa. The coordination of sanitation construction is mainly done by Ireland Aid.

The management of construction of water points is still mainly done by Ireland Aid. Most works in 1998 have been labour-only contracts under Ireland Aid management. Kaputa D-WASHE is now selecting drilling contractors. District and provincial bodies are happy with the routing of funds via D-WASHE, with the Council Secretary as the individual responsible for funds being used as per the itemised contracts signed.

Systems for signatories to accounts are well set up. However, it is not clear what authority the council would have if any malpractice is found within one of the ministries. The planning calendar of UNICEF does not fit with GRZ for budgets by September so that WASHE activities are very dependent on donors.

Decentralisation

In some districts the support of N-WASHE concerning planning was felt to be very beneficial for the whole council.

3. Effectiveness and impact at the field level

Demand driven approach

Mbala and Mpulungu developed and completed district-wide survey and discussed selection criteria where demand exceeds supply. Kaputa has carried out a needs assessment for communities applying since 1995. Isoka uses selection criteria.

Functioning and use of WS facilities

There is flexibility in and employment of different technologies to suit different social and physical environments. Trial of different techniques for construction and different levels of community involvement. Promotion of low maintenance elements such as bucket cage and (possibly) bucket pump.

Almost no consideration given to maintenance of existing water points, and generally not included in plans. Lack of systematic hydro-geological information for technology selection and well design for reliable year-round supplies. Lack of training on handpump installation and maintenance. Lack of consideration of low cost improvements to unprotected sources. No comparative information on recurrent costs/life expectancy of bucket pump and handpump systems in steel and plastic cased boreholes. Lack of experience in and systems for spare parts procurement and sale in private or public sector.

Sustainability of hygiene education

Management and coordination of HE, behavioural change and environmental sanitation programmes is just beginning. Lack of IEC materials is a constraint in most districts except Mbala.

Monitoring

All D-WASHEs are active in monitoring and for that they are assisted by provision of allowances.

2.17 Zambia: Priority country

UNICEF WASHE Programme in Southern Province

Project title:	**Community-based Water, Sanitation and Hygiene Education Project in Mazabuka and Choma Districts**
Duration:	1997 - 1998 (12 months)
Area:	Mazabuka and Choma Districts, Southern Province, Zambia
Implementing agency:	District WASHE committees (involving GRZ Departments and NGOs).
Others involved:	Community Management and Monitoring Unit, National WASHE Training Unit, District Councils, Department of Infrastructure and Services, Ministry of Local Government and Housing, Department of Water Affairs, Ministry of Energy and Water Development, UNICEF and the communities.
Total Ireland Aid contribution:	over £ 200,000 (?) (1998 review)
Contributions from others:	UNICEF - US$ 128,396 Communities US$ 336,400 or $3,266 per community,

Country programme review: 1996.
Review of IA support to water sector: 1998.

1. Project setting

Relevance

The area is very vulnerable to droughts. UNICEF has experience in the Southern and Eastern Province, Ireland Aid in the Northern Province.

Results and lessons learned

Beneficiaries planned to include 23,000 people to have safe water supply and 2,400 people with sanitation (45 rehabilitated and 65 new handpump facilities are planned to be installed).

Outputs in 1997 include 57 new boreholes, 23 drilled-in-wells, and 23 pump replacements or repairs. Implementation through UNICEF retains more of a project, and thus non-GRZ, structure. It has helped to achieve high outputs at low cost, average per community £2,300. At present all districts are making efforts to develop more integrated approach.

Strengths of the project include the achievement of high coverage in a drought-prone area. Almost 20,000 people have benefited from just one year's output. Cost effective systems through research in cost reduction and well defined policies. Well formulated training programmes for district and sub-district levels.

Weaknesses identified by the 1998 evaluation include the fact that D-WASHE and sub-district level support are both developing but regarded as UNICEF tools, perhaps because of the early emphasis on getting results on the ground, while building up institutional capacity requires a longer time frame. Community management seems to be less effective. Communities seem able to cope with small problems such as repairing and sometimes replacing buckets, but increasing numbers of wells are going out of use with age, often for quite minor reasons. There is a tendency to keep using more than one source of water, depending on its convenience rather than its quality. Not yet fully demand driven approach.

No clear definitions of responsibilities at different levels. Sub-district support to communities is largely not using GRZ resources but may not be affordable to communities at present.

A comparison between the programmes in the Southern with Northern Province shows that both are at start of major institutional capacity building, and in transition stage. In Southern Province many of the management roles of a project are taken up by UNICEF and NGOs. The Northern Province Programme seeks to put these functions in GRZ with D-WASHE. Both have started off concentrating on new works rather than maintenance of existing ones and D-WASHEs therefore have developed with strong donor orientation. Northern Programme is using GRZ extension staff as backbone at sub-district level, Southern Programme putting more onus on community financed system. Southern Province systems are geared to a single water point technology.

Integrated approach

The project mentions water supply and improved sanitation and hygiene practices as objectives. However, only water supply is being discussed in the proposal. This one year project is not having an integrated approach.

So far most efforts have gone into the well construction programme, and the building up of sub-district capacity. Sanitation in terms of Sanplat and latrine construction has lagged behind. Uptake of sanplats is slow but gaining momentum in some areas. The integration of latrines, hand washing, safe storage of food and drinking water, garbage pits and means of managing waste water are planned to be addressed more fully in 1998.

Project design and evolution

The project will provide continuation and follow up for activities started in 1995/96 in the two districts, and is designed by UNICEF. The proposal builds on roles and responsibilities of the various stakeholders involved, among others communities, D-WASHE committees, private contractors and NGOs. District and community capacity building is central in the proposal. A participatory approach to help communities will be developed. The project wants to develop simple systems to monitor progress and the effectiveness of community WASHE initiatives. More attention to the strengthening of pump maintenance capacities at the community and district levels will be given, and private sector will be encouraged in this area. Alternative water technologies such as rainwater harvesting will be explored. The proposal includes a logframe, which mentions important assumptions. They are not discussed in the proposal. The balance between water, sanitation and hygiene education is

not discussed. Sanitation is mentioned, but only water supply is further elaborated on. Sustainability is not specifically addressed, but technology choice and institutional setting are discussed. Gender and environmental issues are not addressed.

The proposal has a good focus on capacity building of D-WASHE committees, and adopted a seemingly sound strategy for technology promotion combined with research on alternatives. However, it does not elaborate at all on the following issues: community participation and management, gender issues, organisation of O&M, financial sustainability, how monitoring will be developed and implemented, how a demand driven approach will be operationalised, and how sanitation and hygiene education activities will be designed, planned and implemented.

2. Institutional setting

Institutional roles and responsibilities

Implementing agencies are the District WASHE committees (involving GRZ Departments and NGOs). Other institutions involved include Community Management and Monitoring Unit, National WASHE Training Unit, District Councils, Department of Infrastructure and Services, Ministry of Local Government and Housing, Department of Water Affairs, Ministry of Energy and Water Development, and UNICEF.

Roles of D-WASHE committees, Environmental Health Technicians and local NGOs are clarified in the project proposal. UNICEF manages WASHE activities in 10 districts. Rather than have a project level presence in districts, they contract NGOs to carry out much of this function.

Contracts for the construction of new boreholes will be tendered out to the private sector. The project will explore all possibilities for involving the private sector in transportation of cement, making and selling of sanplats to communities or project, and the repair of pumps.

UNICEF will be responsible for the tendering and contracting of private companies.
The main role of NGOs is to get the process started at community and sub-district level, providing facilitation to communities and training to sub-district support personnel. When construction is in areas where field staff is already trained and active, their main role is as liaison with them, providing allowances and monitoring progress.

D-WASHE committees are active but focused mainly on the UNICEF programme. Plans go to UNICEF for approval and to the District Development Coordination Committee only for information. D-WASHE committees are aware of all activities in their district, but neither they nor councils are active in coordination. There seems to be a lack of clarity in the involvement of GRZ sub-district level systems.

Human resources

Both in the Southern and Northern Province there is a severe lack of environmental health technicians to carry out health education. UNICEF is building up a sub-district structure which is specifically for WASHE activities and is to be funded by community payments for services, such as pump menders. In the areas visited all pumps were said to be working, and pump menders had successfully solved problems so far, and has also repaired some private hand pumps. At the community level caretakers receive training in pump maintenance, committees in management and responsibilities, and treasurers in fund collection and management.

Project management

Overall project coordination will be provided by the Programme Coordination Unit.
The Community Management and Monitoring Unit will provide technical and operational guidance and support the development of innovative community based approaches. The N-WASHE Team is responsible for supporting D-WASHE committee training and capacity building activities.

The Management Team of the project will be composed of representatives from the Ministry of Energy and Water, the Ministry of Education, the Ministry of Health, the Ministry of Local Government and Housing, and UNICEF. The management team reviews progress and bottlenecks, advises on future action, and is responsible for ensuring coordination with other sectors.

At district level, the D-WASHE committee Chairperson acts as project coordinator, responsible for coordinating government, NGO and private sector contributions to the district WASHE plan. The Chairperson is responsible for implementation of the agreement signed between UNICEF and the D-WASHE committee. The D-WASHE committee reports to the District Development Coordination Committee, with a copy to UNICEF. The D-WASHE system is at present oriented almost totally to the UNICEF programme and in this role it is operating satisfactorily.

Some delays are occurring through problems of funding. These relate partly to UNICEF headquarters delay in processing funds when received, but also at local level from relatively minor accounting problems. Funding then comes late in the year for activities which need to be well advanced before the wet season. The planning calendar of UNICEF does not fit with GRZ for budgets by September so that WASHE activities are very dependent on donors.

Decentralisation

Proposal very much in line with decentralisation to district and village levels.
Strengthening of D-WASHE committees by the National WASHE Training Unit is planned for.

3. Effectiveness and impact at the field level

Demand driven approach

The N-WASHE Team assists D-WASHE committees and involved NGOs in the preparation of an annual action plan which gives priority listings of water points to be rehabilitated or developed, based on data from the Community Management and Monitoring Unit.

Technology is planned to be chosen by the community. Technologies with no negative impact on the environment will be promoted. Use of local materials and construction that is suitable to local conditions and practices will be promoted. Rehabilitation or repair will be preferred to new construction. In practice the project only promotes one technology.

Identification of communities is left to D-WASHE committees but their targeting is not always good, and the time to identify new communities is not always adequate. There seems to be a tendency to replace hand-dug wells even if their supply has been reliable.

Community involvement

The project builds on participatory approaches to build ownership, defining roles and partnerships.

Functioning and use of WS facilities

Visits suggest that many people are still using alternative sources. This may occur partly because health education impact takes time to develop. The dispersed nature of communities means that at most times many houses may be nearer to an alternative source than to the new one.

The present subsidy on spare parts is very high, kits which cost US$ 90 in Lusaka are being sold for US$ 5, so that affordability of the system to communities is not really being tested. This is partly caused by a real pressure on resources combined with a history of donor dependency.

Many of the wells in the two districts are not at present covered by any maintenance system. D-WASHE plans still need to spread to cover all types of well and to encourage spare parts provision through the private sector.

Monitoring and evaluation

D-WASHE committees and NGOs are planned to be responsible for monitoring the implementation of borehole construction work by private companies.

Final remarks

The 1998 evaluation team seems to have a bit of a bias against the UNICEF programme.

2.18 Zambia: Priority country

Kasama Rural Sanitation Project

Project title:	**Kasama Rural Sanitation Project**
Duration:	1993 - 1998 (?)
Area:	Kasama District, Northern Province, Zambia
Implementing agency:	Ireland Aid project team based in Kasama.
Others involved:	include the Ministry of Health, Ministry of Education, Schools, villages close to schools, Rural Health Centres, Parent and Teacher Associations, Community Education and Participation Teams, Neighbourhood Health Committees, Village Health Committees, District Water, Sanitation and Health Education Team (WASHE), and the District Health Management Team.
Total Ireland Aid contribution:	£540,600
Contributions from others:	Communities: payment of latrines

Country programme review :1996.

Review Kasama Rural Sanitation Project 1997.

1. Project setting

Relevance

The Kasama Rural Water Project has constructed and rehabilitated 291 wells, of which over 80% perform acceptably (1992). Some sanitation initiatives can be seen, but no major sanitation project has been implemented. There is a justification to complement the water project. The sanitation project will aim especially at schools that have been provided with a well.

Results and lessons learned

Results identified in the 1997 review include the construction of 697 latrines at 47 primary schools, 15 rural health centres and 6 villages, training of 5 main and 20 sub-contractors in latrine construction (pour flush and VIP), one Community Education and Participation team trained to carry out Health and Hygiene meetings, 330 Health and Hygiene meetings conducted with Village Health Committees and Parent Teachers Associations. Furthermore, a number of latrine designs were tested as to their suitability in terms of cost, functioning and cultural acceptability, and adopted. How the results compare with the planning is not clear. Most DWASHE committees have incorporated a significant element of latrine construction (generally VIPs) into their plans.

Strengths of the project include the high level of awareness on the need of latrine provision among Parent Teacher Associations and Village Health Committees, and the fact that community institutions are able to mobilise communities to contribute materials and time for latrine construction.

General lessons learned in the 1997 evaluation include that effective community mobilisation and awareness raising to create a demand are vital to overall project implementation. Community participation must be the core of the project for long term sustainability, in particular related to local resource mobilisation, O&M, speeding up of project implementation. Training of the target group strengthens community participation, improved project implementation and overall management and maintenance of the facilities. Training of local builders helps to promote latrine construction outside the project area and increases construction skills in the area.

Linking health and social impacts of the project is important (taking cognisance of the impact of social change on the health status), and therefore recognising social impacts.

Technology selection should be done by the user community, and as they have an input on design in relation to local acceptability, privacy, durability, etc., it will increase ownership. Project implementors should not promote a specific technology but advise on various options. The pour flush latrine is not suitable for transient populations such as those at Rural Health Centres or in areas where there is no water. Sanitation should not be seen as 'just health' but be integrated with water and other health projects. There is a need to strengthen links with other projects and the GRZ, especially with D-WASHE. Using contractors in stead of directly employing brick layers eases implementation because contractors are then responsible for the final construction, supervision is easier, job descriptions are clearer, planning is simplified, and implementation is more cost effective.

The evaluation team was unable to determine the health impact of the project.
Beneficiaries are school going children and patients who visit the health centres. It is hoped that the project has a spin off to neighbouring communities. No gender impact assessment has been done, so it is not known whether the burden of women for fetching water for the latrine has increased, neither is it known whether the use of latrines by girls in schools in influenced by sex segregation of the facilities. While it is acknowledged that much has been achieved under the project, it appears that most of the activities have been hardware oriented and focused on the provision of latrines rather than on the promotion of sanitation.

Integrated approach
The project is meant to complement the existing Kasama Rural Water Supply Project.

Project design and evolution
The project proposal was prepared by the Coordinator of the Kasama/Mbala Rural Development Programme (Irish). There is no evidence of beneficiary involvement in design, planning and evolvement. The project design does not address institutional or financial sustainability in any way. No evidence that the proposal is based on local needs.

A number of technology options for waste disposal are considered. There is no evidence that this is based on earlier experience in the project area or country. The alternatives are discussed from a technical and financial point of view, social acceptance is not mentioned. Sustainablity is not addressed, nor are gender issues.

The possible pollution of the ground water by pit latrines is discussed and found not to be a serious threat. A logframe is made which includes important assumptions. There is no evidence that anything will be or is done with this. M&E procedures are not included in the design.

Weaknesses in the design seem to be: no clear objectives and expected results, no monitoring and evaluation strategy or plan, no planning and management details, lack of attention to institutional issues such as responsibilities and capacities (and thus sustainability), lack of attention to financial sustainability, no attention to collaboration and coordination with similar activities in the country, no linkage with national policies and developments.

A strength probably is that it links up and closely ties up with an existing water project, although this might also raise conflicts, e.g. in terms of workload and available resources. Also it puts community participation at the centre of the project approach.

2. Institutional setting

Institutional roles and responsibilities

The implementing agency is an Ireland Aid project team based in Kasama. Other institutions involved include the Ministry of Health, Ministry of Education, Schools, villages close to schools, Rural Health Centres, Parent and Teacher Associations, Community Education and Participation Teams, Neighbourhood Health Committees, Village Health Committees, District Water, Sanitation and Health Education Team (WASHE), and the District Health Management Team.

The project has been set up and is operational from the Ireland Aid offices in Kasama. It is managed by a Ministry of Health seconded Environmental Health Technician, who is supported by a Health Education Officer (also MoH), a construction supervisor, a bricklayer, 4 drivers and 4 security guards. The project is working as an independent structure from GRZ and Ireland Aid is actually implementing the entire project. The project is viewed as 'Ireland Aid' despite the fact that both the Project Manager and the Health Education Officer are both seconded from the Ministry of Health. The secondment of the officers has resulted in undermining the capacity within the Ministry rather than building it.

The responsibility for HE has been given to the seconded Health Education Officer who has the same responsibility for the water project. Since he is based in Ireland Aid offices, it is difficult for him to get support from his ministry, as he is regarded as the person responsible for the Ireland Aid projects. Other articulated negative effects of this secondment are: the officer is unable to assist the ministry with its own HE activities, the risk exists that conflicting methodologies are being used, the project works independently from the ministry.

The role of the District Health Management Team and the District WASHE team in the project is not yet clear. Because of sector reforms the seconding of health staff to the project probably will be reviewed. Builders (brick layers) were first employed directly by Ireland Aid but since 1995 been formed into two independent contracting units.

Increased integration with other Ireland Aid projects in the area (KAPEP Project, the urban upgrading project, and the support provided to the WASHE Programme) is recommended in the 1997 evaluation. Planning carried out with communities on materials and construction should be more integrated within the sector, probably through the D-WASHE. The project does not have a clear gender strategy.

Human resources

The project has trained and thereby possibly strengthened community institutions.
Training given include the training of one multi-sectoral Community Education and Participation Team, and the training of 5 main and 20 sub-contractors in the construction of latrines.

Decentralisation

Probably the establishment of the District Health Management Team and the D-WASHE are in the light of ongoing decentralisation. Up to the evaluation in 1997 the project had not changed its institutional set-up or working methods because of this.

3. Effectiveness and impact at the field level

Demand driven approach

There is a general awareness of the need for safe disposal of excreta, particularly at the health and educational institutions. Technically, the identification of institutions targeted is done by district health and education officials who supply lists of institutions to the project manager is Ireland Aid. In reality prioritisation is based on readiness of the institution or community. Interventions are based on demands.
Effective community mobilisation and awareness raising has created a demand for latrines. Communities contribute in the form of local materials and labour. This is organised through community institutions.

Apparently technology choice has gradually moved from the project officers to the community members themselves. It is not clear in how many cases communities themselves are now choosing the most appropriate technology.

There is no gender strategy, and it is not clear whether needs and demands from the community are of both men and women, e.g. regarding siting of the facility and separate facilities for men and women.

Community involvement

The project design is based on a community participation approach, where self-help will be a major aspect of the programme. The planned steps for community participation include: development and if necessary generation of problem and solution awareness, promotion of safe excreta disposal amongst all members of society, local committees that are responsible for organising labour for pit digging and lining, constructing a superstructure, site cleaning, organising utensils for cleaning and stimulation of community participation.

There is no gender strategy, and it is not clear whether both men and women are involved in the project, or whether there is a gender balance in community institutions.

Actual steps in community involvement (evaluation 1997)

1. Meetings with community based groups (Parent Teaches Associations, Village Health Committees, Neighbourhood Health Committees) to inform about the project;
2. Discussion of technology options;
3. Selection of design by committees;
4. Discussion on community contributions such as digging, collection of sand, burning and transportation of bricks;
5. Committees mobilise community to meet contributions;
6. Delivery of materials and contracting of builders by project staff;
7. Construction.
8. Latrines are handed over to recipients who are then responsible for O&M.

Lessons learned with community participation

Communities play and active role in the contribution of materials and ten preparation for construction. There appears to be a minimal role for communities regarding monitoring of the construction, which is done by IA. Just material input is being monitored by the Parent Teacher Association. O&M is taken up by the schools.

There is a very high sense of ownership of the latrines in all schools visited during the evaluation. In Rural Health Centres latrines are much more seen as owned by the project. This has resulted in a dependency for ongoing support for O&M.

Functioning and use of sanitation facilities

The technologies offered have been pretested and adopted and are now found to be culturally appropriate, low cost and durable. The latrines visited by the evaluation team were all of very high construction quality. The pour flush latrine (90% of the constructed latrines) is not functioning in cases where there is no water (drying out wells, broken hand pumps, leaking or empty tanks). The direct drop latrine (VIP like) does not prevent flies coming in and out. Latrine designs are large, material inputs and cost could be reduced. Communities are not able to replicate design (reason not stated). During the pilot phase users were not given the room to choose a technology, and emphasis was on the pour flush system. The technology seems affordable for community institutions.

Sustainability of hygiene education

According to the 1997 evaluation, hygiene education does not appear to be cental to the overall implementation strategy of the project, and resultant changes in sanitation practices are not envisaged. Hygiene education is given before or after latrine construction. It is combined with social mobilisation for latrine construction resulting in a focus on information about latrine construction and technology selection rather than addressing issues of attitudes, practices and behavioural change. At Rural Health Centres little or no focus is places on user education resulting in many cases in the misuse of latrines. Teachers in all schools visited were unable to articulate the content of the health and hygiene education activities which the undertake with their pupils. The linkage between improved

sanitation practices and health status does not appear to be included in any of the health messages. The focus is placed on the link between water and sanitation, possibly resulting in more non-use of facilities when water is not available.

The evaluation recommends that the project looks into new developments in the field of HE and incorporates them into the project, specifically referring to the use of participatory approaches and materials, and HE not being merely information provision but being aimed at changing behaviour. Despite establishment of the Community Education and Participation teams and the ongoing training and exposure of Rural Health Centre staff, HE appears to remain centralised.

It is not clear whether HE materials distributed, such as the sanitation ladder, are actually used in the field.

Financial issues

The unit cost of the delivery in the fist 5 years of the project has been £773 per latrine. This represents 68% of the project cost. This involved the period before privatisation of the builders, and also includes the purchase of vehicles. The accumulation of all project resources within IA has isolated the input of the project from other government departments.

Environmental issues

The environment around schools and health centres seems to be improved through the provision and use of latrines. No impact assessment on the burning of bricks has been made. Bricks for houses are normally sun dried. Environmental concerns, namely ground water pollution by pit latrines and the effects of brick burning, were mentioned in the project design, but there is no clearly stated environmental strategy.

2.19 Zambia: Priority country

Urban Upgrading Projects

	Project title:	**Urban Upgrading Projects in various areas After 1996: Promotion of Community Managed Urban Services Project**
	Duration:	1991 - 2001
	Area:	Kamanga, Ndeke, Chiba and Maround compounds (communities)
	Implementing agencies:	Ireland Aid
	Others involved:	Community Based Organisations, Local Government Departments, NGOs.
	Ireland Aid contribution:	£3,220,838
	Contribution from others:	

Project reviews on Kamanga, Ndeke, Chiba and Maround Projects.
Compound upgrading Zambia review: 1997.

1. Project setting

Relevance

There is an urban upgrading policy guidelines paper, prepared the by a working group in Zambia and published by Ireland Aid Zambia. It includes context, relevant legislation, urban framework issues from the WB, community as an institution, sectoral areas such as water and sanitation, institutional and inter-sectoral issues, and recommendations and conclusion. The project strategy is in line with this policy.

Ireland Aid support to all four sites is justified in terms of location and poverty focus. Support given is and was relevant to the needs and priorities of communities, both women and men. In Zambia, about 40% of 8.3 million citizens live in urban areas. Overall sector reform is geared towards decentralisation, self-reliance, deregulation and privatisation.

Results and lessons learned

No health impact study was done.
The major achievement in Kamanga is that it has showed that disadvantaged and resource-poor communities can themselves manage key services such as water supply. All projects have shown a capacity to learn by doing and to shift over time. Lessons have also been transferred between projects.

In general there is a good degree of both allocative efficiency, in terms of the level and mix of services that residents want and need, and technical efficiency, in relation to output per unit of input.

It is too early to assess impact in any of the projects, but some indication of outcomes is emerging, particularly in Kamanga and Ndeke. It seems that initial gender strategy and planning were inadequately addressed which resulted in an over emphasis on delivery of infrastructure and an unacceptable work burden on women residents. Women contributed three quarter of the voluntary labour during implementation.

There has been an impressive investment in capacity building in Kamanga and Ndeke with large numbers of training sessions, health education, drama, workshops and meetings. These covered a wide range of topics, such as leadership, technical skills, craft and micro enterprise skills, and gender awareness.

Recommendations

There is a need for clearer desegregation of target groups, for example owners and renters, in order to ensure that they are reached and will benefit.

The remaining period of the project needs to give attention to the development of sustainable management systems for the community services developed. Options for increasing responsibility and contribution of communities for O&M should be explored.

Emphasis should be placed on fostering group and individual enterprise rather than on poor people filling long term voluntary posts in community management. Priority should go to ensuring that participation brings net benefits to all residents, especially the poorest women and men.

The Residents' Development Committees should be a continued focus of capacity building of the remainder of the project, in such a way that it further strengthens their power, accountability and ownership.

Integrated approach

The projects include water supply, sanitation and solid waste issues.

Project design and evolution

Initial project design focused on service delivery, especially the Kamanga and Ndeke projects. Sustainability was not clearly at the forefront at the beginning, and thus no clear strategies were developed. Now sustainability is addressed mainly in terms of appropriate technology and training for O&M.

Needs assessment surveys and community profiles were conducted in all four projects but well after projects were designed and operational. Increased self-reliance of communities should be the main objective of the next phase. This implies a greater contribution by the communities, and a progressively reduced role for project assistance.

2. Institutional setting

Institutional roles and responsibilities

The implementing agency is Ireland Aid. Other institutions involved are Community Based Organisations, Local Government Departments and NGOs.

The approach has had an impact outside the immediate communities through involvement of local authorities, line ministries and NGOs. Collaboration with NGOs has been an effective strategy. Democratically elected and representative structures, e.g. the Residents' Development Committees are in place and functioning. Some have their difficulties, such as political interference and finding individuals with time, skills and commitment to meet the demands of a developing institution.

There is a need to identify the minimum institutional structure required to support activities. The major role of the Residents' Development Committees is to facilitate communication between the project and the community.

Human resources

One Ireland Aid technical adviser in every project; the rest is local staff.

Project/programme management

The project framework should be reviewed annually with the Residents' Development Committees, and changes made to suit the dynamics of the situation.

3. Effectiveness and impact at the field level

Community involvement

The projects have demonstrated the viability of community management and the possibilities for partnership between residents and local authorities. In all projects initial thrust was provision of services and community participation. Empowerment was not clearly at the forefront in the beginning.

There has been a lot of debate within IA Zambia on the best approach to community participation, and there has been a noticeable shift in views from seeing it as a tool to introduce basic needs as to seeing it as an objective. Dilemma's faced include implementation vs. empowerment, capacity building through training vs. through doing, community labour vs. self help, voluntarism vs. payment, project delivering vs. supporting, decision making and locus of responsibility.

Lessons learned on participatory strategies include:

The formation of community based organisations, the Residents' Development Committee and Section RDCs. None of the compounds had CBOs prior to IA intervention, and this shift from political to civic forms of leadership is a new experience for residents.

The project has developed an appropriate gender approach. Women have suffered from the strategy of mobilising free labour on household basis. Because of the myth that women have free time, combined with the voluntary nature of community labour and absence of alternatives, such as payments or penalties for those who do not work, have made women's participation effectively that they are subsidising the men.

Working with international, Zambia based NGOs provides the communities with further linkages and communication channels which will probably (to a certain extend) remain when IA withdraws.

Involvement of local authorities in identification of compounds and as much as possible in implementation. Also building relationships between communities and councils, which are often disturbed after neglect, is found very important.

Technical assistance from mainly Zambia and one Irish technical assistant who have considerable expertise. The CTA is involved on a hands-off basis.

Scoping and pacing of project objectives and activities, not too many things at the same time, together with sufficient preparatory organisational strengthening during planning before implementation with community labour.

In Kamanga, Ndeke and Chiba the communities claim ownership.

Functioning and use of WS facilities

The amount of money being collected is not enough for O&M, and in the three projects where service charges are levied insufficient attention is being given to collection of those charges. The technologies used in the four projects are considered to be the most appropriate for the given environment.

In Kamanga and Ndeke only bore holes are feasible; spring protection is the issue in Chiba; in Maround the compound is connected to the Mbala municipality distribution network, that is upgraded under the Capital and Training Project.

Technologies are also considered to be least cost options, and the water supply systems are currently affordable to the residents. Although O&M is taking place, here are also problems with O&M. Construction standards might be one of the reasons.

Functioning and use sanitation facilities

Sanitation is not yet a significant focus of activity in Maround and Chiba projects. Even in Kamanga and Ndeke relatively little has been done. The technology seems to vary between sanplat and VIP, and at this stage it is not clear what the people prefer or what the projects are advocating. While there was considerable interest shown in improved latrines in Kamanga, and 52% of the households applied for their construction, so far just 2% have been built. Cost might be one of the reasons.

The projects are aware that further work is required to identify a suitable, affordable design for residents.

There is a strong focus on training builders, a limited subsidy to the family and health education awareness. In Ndeke and Kamanga the health and sanitation awareness activities are chiefly being implemented by NGOs, with IA implementing the technology and infrastructure components. Studies for refuse removal have been done for Kamanga and Ndeke compounds but the solutions recommended may not be sustainable. The Kamanga Project, in an effort to compliment community initiatives, has provided a lorry to carry solid wastes with community members paying for the fuel. However, this arrangement is not sustainable in the long term.

Sustainability of hygiene education

Extensive HE activities have said to be carried out. However, there is no elaboration on the approach used. Impact and other results are not known.

Financial issues

The Kamanga and Ndeke projects have contributed to developing the commitment of the respective councils and of the ministry to supporting compounds such as these.

A 1996 report indicates that per capita investment in water is approximately US$ 12 (excluding overhead of the project), which is considerable lower than that used in other projects such as a WB funded project where the capita cost is estimated at US$ 25.

Monitoring and evaluation

Projects should develop informative monitoring systems to track progress on process issues. Community monitoring is intended to be developed.

2.20 Zambia: Priority country

Capital and training project

Project title:	**Capital and Training Project**
Duration:	1995 -
Area:	Mbala, Kasama and Isoka Districts, Northern Province, and Mazabuka District, Southern Province
Implementing agency: Others involved:	Capital and Training Project. Department of Water Affairs and the Mbala District Council.
Total Ireland Aid contribution:	£1,580,050
Contributions from others:	inputs from client departments is included but not specified. There are no guidelines, and in general they are only a small portion of the overall cost.

Country programme review 1996.
Project review 1997.

1. Project setting

Relevance

Urban water supply facilities in Mbala, Nakonde and Isoka municipality have been neglected and serve a much larger population now. There is a large number of breakdowns, low revenue collection, and low motivation of involved staff. There is an urgent need for rehabilitation. Water sector reform is being implemented within the context of the Public Sector Reform Programme, which focuses on decentralisation and improved efficiency and effectiveness of the public sector. The project satisfies the need for flexibility during the transition period.

Concerning Ireland Aid policy: it is assumed that the project has contributed to improving the quality of life of beneficiaries, the project plays a role in capacity building, and it is addressing basic needs (water and health).

Results and lessons learned

Although the project says to focus on both capital and training, the majority of the funds and expertise are focused on hardware. Two technical engineers are the main responsible and training advise is only focused on technical issues.

The 1997 review showed that the project was effective in meeting its objectives, and well integrated in government structures in the Northern Province. It has improved water supply and to a lesser extent the quality, especially in Mbala. Overall efficiency was good: it encouraged accountability in client departments, administrative costs were low, and management was effective in approving and implementing the project. Cost effectiveness could be improved, especially in health sector.

Some problems were found with client departments not being able to meet running and replacement cost, as well as weak maintenance systems. The project meets with Ireland Aid guidelines, but greater levels of community involvement should be explored.
The training budget is very small compared to the capital inputs and there is a poor definition of the types of training that are eligible. In 1995 no training was undertaken because no applications were received.

There is not enough inclusion of women or the community in preparation and monitoring.

The review recommends continued funding of the project with an increased number of districts and budget. However, it would be better to focus on one region (not both Northern and Southern Province). The poor focus on training needs should be urgently addressed. Training should focus on maintenance and human resources development, and should be in line with any national capacity building programme.

The Ireland Aid management team should hold pre implementation workshops with all client departments. Client departments should nominate a key liaison person to work with the management team at all stages of the project. The subcommittee should have clearer guidelines for approving projects, and members of the committee should not be involved in making applications. Client departments should involve the community more in pre implementation, consultation should involve those directly benefiting from the project, both women and men. The issue of sustainability should be considered more in detail.

Integrated approach
The project only focuses on water supply.

Project design and evolution
Under the Northern Province rural water programme, it was found that providing a small but strategic capital and training fund would assist the government Social Sector Rehabilitation and Development Programme. The project has been designed by Ireland Aid Zambia, no evidence of beneficiary involvement or real needs. It is not clear why these four urban schemes were selected.

The project objectives are not formulated very well, one is on improving facilities, one on cooperation, and one on improving management of hospitals. Gender and environmental concerns were included in the Memorandum of Understanding and in the project proposal. Sustainability is addressed only in terms of human resources. The proposal mentions assumptions and risks, which all focus on the Zambian structure and conditions. The proposal is very brief and does not discuss any approach or strategy.

2. Institutional setting

Decentralisation
The project is set up to facilitate the decentralisation process which is at the core of the sector reform. The hand-over of the Department of Water Affairs to local district councils is proceeding but the schedule is unclear. A number of district councils, particularly Isoka

and Nakonde, were unhappy with their level of involvement with the project to date. A number of district councils expressed their desire to be involved in the subcommittee and thus approval process.

Institutional roles and responsibilities

The Capital and Training Project is the implementing agency. Other institutions involved are the Department of Water Affairs and the Mbala District Council. The project manager provides technical advice on training and electrical engineering, and the technical advisor advises on civil engineering.

The project mainly works as a funding programme, which each intervention forming a separate project.

The Department of Water Affairs lacks the capacity to carry out their role in the sector reform. There is a problem in poor understanding by the client departments of the role of the management team, and they have a reactive rather than pro-active approach to partnership. The experience gained by the management team through implementation should be transferred as far as possible to client departments. Project approval and implementation has focused on the inputs required rather than its outputs.

Human resources

There is an Ireland Aid Management team, a steering committee with Ireland Aid staff, and a subcommittee with Ireland Aid staff. Although it is presented as a partnership approach, there seems to be a heavy weight of Ireland Aid staff. The Department of Water Affairs lacks the capacity to carry out their role in implementation.

Monitoring and evaluation

Each project funded is subject to ongoing monitoring to ensure that is complies with the MoU. Where this is not the case funding may be suspended. Monitoring indicators generally measure inputs of the project. There is not enough consideration for gender and environmental issues in monitoring and review.

3. Effectiveness and impact at the field level

Community involvement

Particularly in Mbala District communities have been involved in the project.
Women mention improvements in terms of reduced conflicts over water and a reduction of sickness. There should be better consultation with all beneficiaries.

Functioning and use of WS facilities

Revenue collection has slightly increased in all districts after rehabilitation, but is in 3 districts below 30% of what has been billed.

Not enough is being done to ensure good maintenance. Trained operators, electricians and plumbers do not have any guidelines or basic tools.

2.21 Zimbabwe: Participatory Hygiene Education and Sanitation Project

Project title:	**Participatory Hygiene Education and Sanitation Project**
Duration:	Initially 3 years (1995 - 1998)
Area:	Matebeleland, Zimbabwe
Implementing agencies:	UNICEF and the Ministry of Health and Child Welfare.
Others involved:	National Action Committee, National Coordination Unit, Provincial Water and Sanitation Sub-Committee, Ministry of Local Government, District Water and Sanitation Sub-Committee, and the Ward Development Committee.
Total Ireland Aid contribution:	£521,800
Contribution of others:	Not clear

Evaluation of the project: 1997.

Synthesis paper on IA involvement in Zimbabwe, 1998.

1. Project setting

Relevance

It addresses the poorest region of Zimbabwe and that most affected by the ongoing drought. It also addresses the basic needs of the poorest section of the population.

Problems identified include low sanitation coverage (21% for rural areas in 1990), unhygienic water collection and storage, lack of hand washing practice, no use of latrine by children under five.

The project is fully supported by the Zimbabwean authorities who have effectively implemented the pilot phase. In 1993, WHO and UNDP/WB WSS Group for East Africa introduced the PHAST initiative in the region. The Ministry of Health and Child Welfare has fully endorsed a participatory approach for hygiene education for the country in 1995 after a successful pilot project in three districts.

Results and lessons learned

The balance between hardware and software inputs seems to be satisfactory. The project is very widely spread (national coverage has taken off at far greater pace than anticipated), but because no monitoring is being done efficiency and effectiveness are unknown. A major concern regarding going to scale is to do with the health benefits. At this moment not enough is known within the project to draw conclusions on this.

The evaluation of 1997 has come up with a number of results. It is not known if the originally stated desired outputs are being realised. Completion of a toolkit and trainer's kit (with support from Belgium Govt.). People at provincial, district, sub-district and ward level trained in PHE. The estimated minimum number of people trained was 9,232 in November 1997; of these, over 1,184 have been supported directly by Ireland Aid.

At community level, an estimated 1,788 persons have been trained in construction of latrines and upgrading family wells; all were supported by Ireland Aid, almost 20% was female. Over 4,000 community sessions on PHE have been organised (no cost involved). Ireland Aid has supported the construction of 2,460 latrines (programme total 4,628), the production of 10,000 copies of manuals on latrine construction and well upgrading, and the upgrading of 1.074 wells (programme total 5,373). Strengthened communities and particularly women in terms of cohesion and being the decision makers of their own development. Key behaviour changes (not specified). Mass coverage of the vision of PHE has been achieved, people can articulate vision to some degree. HE has a higher profile. Women are taking up a more active role in WSS, and attitudes of particularly field staff (Environmental Health Technicians) is changing.

The PHAST approach has been accepted at the various levels, and is being implemented with good results. The traditional approach to HE is being challenged.
The project uses a low profile gender approach which seems to work well.
The UNICEF Project Officer being a woman has proved to be very important in raising the gender issue. The participatory tools have facilitated the involvement and a more active role for women.

The approach is often not fully understood and reduced to 'a set of tools' which has led to a failure to facilitate the process in a pro-active, strategic manner.
No guidelines or quality control (monitoring, reporting) to ensure quality of training at the three levels. Capacity of trainers/facilitators not always up to standard, which undermines the approach. Number of people trained by far outnumbers the number of distributed kits; some 90% of the trained people have limited or no access to these materials. No follow-up or refresher training given up to date.

Poor management of training and other activities at district and lower levels. It does not follow the project cycle and depends heavily on the capacities of the district staff. The project did not manage to train women as builders; the absence of follow up and monitoring means that little is known about the productivity patterns of the 20% female builders that has been trained.

The value of the PHE experience and actual learning process is contributing enormously to development work. The idea is excellent, but there have been some problems in implementation due to both lack of adequate resources and organisation. The project should facilitate a process within the Ministry of Health that focuses on consolidation at all levels of the project's sphere of influence and operation.

Integrated approach
The project is being implemented within the District Integrated Rural Water Supply and Sanitation Programme. Although the focus is on sanitation and hygiene, an effect on the improvement of water sources is expected. Materials for upgrading family wells will be provided. Integration of PHE and CBM receives inadequate attention (1997 evaluation).

Project design and evolution

UNICEF and the Ministry of Health and Child Welfare have been involved in similar hygiene education and sanitation projects in other districts with support from other donors since 1993. A lack of financial resources has led to the formulation of this project. UNICEF has designed the project proposal upon request of the MoH&CW.

The participatory approach is intended to be gender sensitive, and much of the activities will be particularly aimed at women (e.g.. latrine construction). It is expected that the role of women in workshops as well as the resulting behavioural changes and health improvements will enhance the empowerment of women and improve gender imbalances. It is expected that the project will increase women's responsibilities and workload in the beginning, but that it will reduce burdens in the medium to longer term.

Regular reporting, field visits from the embassy and annual accounting have been included in project design. Day to day monitoring was planned to be carried out by Environmental Health Technicians. A formal evaluation is planned for the end of the first year.

By facilitating the disposal of human waste the project is expected to have a significant positive effect on the environment. Furthermore, care for the use of wood and other environmental concerns as soil erosion is planned to be taken into account. A study is planned to determine how environmentally sound practices can be incorporated in the overall programme. Sustainability is addressed in institutional terms, stressing the fact that the project will operate within existing governmental structures. At community level, self-help is being promoted that will further strengthen sustainability. There is no mentioning of the needs of potential beneficiaries, nor of any alternative solutions. Risks and assumptions are mentioned but not properly addressed.

Generally the project seems very well designed, especially because it is based on an internationally developed and tested approach and it builds on the success of the pilot project

2. Institutional setting

Institutional roles and responsibilities

Implementing agencies are UNICEF and the Ministry of Health and Child Welfare.
Other organisations involved are the National Action Committee, National Coordination Unit, Provincial Water and Sanitation Sub-Committee, Ministry of Local Government, District Water and Sanitation Sub-Committee, and the Ward Development Committee.

The District Water and Sanitation Sub-Committee coordinates an Integrated Rural Water Supply and Sanitation Project IRSSWP). The project will function under the Environmental Health Department of the Ministry of Health. No new structures will be created. No evidence of existence of the private sector.

Impressive degree of support and coordination amongst the various Zimbabwean ministries involved (according to Irish Embassy staff).

Decentralisation

The Prime Ministers Directive of 1984 encourages decentralised planning in the form of a demand driven approach starting with the community, through to the ward, district, province and national level. The Provincial Act of 1985 and the Rural District Council Act of 1988 promote decentralised planning and management of development activities within their spheres of influence.

Human resources

Training forms a large part of the programme. There is no monitoring/reporting or quality guideline for the training given (3 layer ToT system). Training strategy should be improved.

3. Effectiveness and impact at the field level

Demand driven approach

No evidence yet of a demand driven environment. It is likely to be too early to draw conclusions on this. In the areas where AFRICARE and Mvaramanzi Trust are operating, there is a demand for hygiene enabling facilities, in particular latrines. It is not clear whether this is because of the PHE or the subsidy. However, there are some isolated cases where PHE is considered to be having an impact and creating a demand for hygiene enabling facilities. These instances are thought to be more associated with individuals running the PHE than the presence of PHE activities per se.

The construction of hand washing facilities, which is included in latrine construction, seems to be more supply than demand driven. Most of the facilities constructed are not being used. Communities contribute with labour.

2.22 Zimbabwe: Bubi Integrated Rural Water and Sanitation Project

Project title:	**Bubi Integrated Rural Water and Sanitation Project**
Duration:	1996 - 1998 (initially two years)
Area:	Bubi District, Matabeleland North, Zimbabwe Implementing agency: National Coordination Unit in the Ministry of Local Government, Rural & Urban Development, Bubi Rural District Council, Ireland Aid
Others involved:	
Local communities	
Ireland Aid contribution:	£300,000
Contribution from others:	Local communities contribute labour, pay for the improved latrines

Synthesis paper on Ireland Aid involvement in Zimbabwe, 1998.

1. Project setting

Relevance

In 1987 the GOZ formulated a clear national approach to rural water supply and sanitation sector development. A national programme was embarked upon to implement WSS projects in the 55 districts of the country. The programme includes the provision of safe water through a primary supply to all people in rural areas (WSS coverage in urban areas is 100%), all primary water supplies are fully functioning, health and hygiene is included, and 50% of the households should have at least a Blair latrine.

Bubi district has experienced increasing drought and poor rainfall seasons, and does not have major donor assistance to the WSS sector since independence in 1980. Five of the 10 major diseases in Zimbabwe are WSS related and are on the increase in Bubi District. Coverage of water supply and sanitation in Bubi District are 66% and 11% (national averages are 74% and 21% in 1990).

The project is in line with the agreed development cooperation focus between the two governments on the Matabeleland region.

Poverty alleviation is addressed: the project is expected to contribute to improved health and basic needs of the poorest section of the population. Subsidies on water supply are provided, and water will support livestock farming which is the major source of income in the area. Community participation and capacity building will help communities to identify problems and find solutions to overcome poverty.

Results and lessons learned

Project proposal has been submitted to Dublin in 1996. Current status unknown.
The proposal looks very good!! (integrated approach, capacity building at community and district level, community participation corner stone, implementation through GO structure, no TA, proposal identified by GOZ).

Integrated approach

The project addresses both water supply and sanitation, and includes the PHAST approach to achieve its objectives.

Project design and evolution

The project emanated from the Zimbabwean authorities. In 1995 the Zimbabwean Ministry of Finance requested Ireland Aid to consider funding for a 5 year WSS proposal in the district. This is part of the national water plan. Bubi District initially prepared its integrated water and sanitation proposal in 1988/89 with revisions in 1991/2 when it received approval from the National Action Committee. The proposal was again updated in 1995 using a village based consultative inventory. The project has a very clear linkage with the UNICEF executed PHE project.

Environmental issues are discussed, particularly drainage, safe disposal of excreta, and the approval of forestry and agriculture departments. Women will be particularly targeted by the project. This may indirectly improve the status and empowerment of women. Water supply and sanitation facilities are expected to be directly beneficial to women in terms of reduced walking distance and privacy respectively. Participatory training methodologies used are gender sensitive and gender specific and are aimed to increase gender awareness. It is aimed that at least 50% of the latrine builders trained to be woman. Initially project activities may have the effect of adding to women's responsibilities and workload.

Sustainability is discussed in terms of community ownership which is envisaged to be established through community based planning and implementation. Training and the use of participatory methodologies will build the capacities of communities. Furthermore the project will focus on building the capacity of the district. Monitoring and evaluation is being discussed, particularly being regular meetings, auditing of IA funds, regular reporting to IA, field visits from IA Lusaka, a mid-term review, and a KAP survey.

Project/programme management

The proposal mentions linkages with other donor assisted projects

2. Institutional setting

Institutional roles and responsibilities

Implementing agencies are the National Coordination Unit in the Ministry of Local Government, Rural & Urban Development, Bubi Rural District Council, Ireland Aid.

GOZ and Bubi Rural District Council have the responsibility of project management and monitoring as part of the national plan, staff, training & follow up, preparation of implementation plans, administration and office facilities, vehicle maintenance, disbursement and financial issues. Local communities pay for the improved latrines physical infrastructure, contribute labour, collection of money for maintenance, community planning, management and training. IA principle inputs are vehicles, equipment, construction materials, logistical support costs, training, monitoring and evaluation.

Roles and responsibilities of the National Action Committee Sector Ministries are identified under the national WSS policy.

3. Effectiveness and impact at the field level

Community involvement

A community participation and community capacity building approach are at the basis of the project.

2.23 Zimbabwe: Community Based Management of water supplies

	Project title:	**Community Based Management of water supplies in three Districts in Matebeleland, Zimbabwe**
	Duration:	1997 - 2000 (3 years)
	Area:	Tsholotsho, Bulilimamangwe and Umguza Districts
	Implementing Agencies:	Ministry of Finance (coordination); District Development Fund, Ministry of Local Government, Rural and Urban Development, National Coordination Unit, Ministry of National Affairs, Employment Creation and Cooperatives, and Rural District Councils of Tsholotsho, Bulilimamangwe and Umguza.
	Others involved:	UNICEF, National Action Committee, District Water and Sanitation Sub-committee, Ward Development Committee, Village Development Committee.
	Total Ireland Aid contribution:	£361,590
	Contribution from others:	Not clear

Synthesis paper on IA involvement in Zimbabwe, 1998.

1. Project setting

Relevance

Although as a country Zimbabwe is not as poor as other countries, 61% of the population live in poverty. Matabeleland's vulnerability to chronic drought and late exposure to development assistance determine its relative underdeveloped situation compared to the rest of the country. It is the driest region in the country. Water supply and sanitation coverage in Matabeleland are 25% and 10% compared to national averages of 74% and 21%. Problems with the old O&M system seem to justify a new approach that is more community based. Pilot project showed good results (evaluation pilot project was carried out by UNICEF). World-wide there are many problems with O&M of water supplies; more community based management systems seem to offer a good alternative.

Concerning Ireland Aid policy: the project is envisaged to contribute to poverty reduction, women will be addressed specifically (WID), the mentioned care for the environment is merely lip service.

Results and lessons learned

The project includes both hardware and software inputs. Although not specified, it seems that there is a strong focus on hardware (maybe also because for many that is easier to specify). Budget specifications difficult to make, and questionable.

Integrated approach

The overall objective of the project focuses on increasing water supply coverage through community management. Immediate objectives include the improvement of hygiene behaviour. No sanitation component. However, the IA funded HE and sanitation project is conducted in the same area, and enhancement of the integrated approach is envisaged.

Improved hygiene behaviour is expected to be a spin off from the project (community involvement leading to ownership resulting in behaviour change). Clean water points surroundings and containers are mentioned. Seems to be a large amount of wishful thinking.

Project design and evolution

The project is the result of a Chivi District pilot project that began in 1992 with technical and financial assistance from UNICEF. UNICEF probably has designed both the pilot and follow up project.

The project design looks realistic and coherent, although some of the objectives and expected outputs are merely mentioned as lip service (environmental care, change in hygiene behaviour). It is not clear why a choice is made for a focus on water supply only, no indication of the needs of the beneficiaries, no mentioning of investigating alternative solutions. The proposal mentions the special targeting of women, which may raise their work load. The focus is more WID than gender. The project aims at overall management of the water environment, but this is not worked properly (it mentions only a clean water point surroundings and clean container). A number of risks and assumptions has been identified related to the commitment of the GoZ, the change from hand pumps to piped water schemes, the possibility of drought, the continuing political support for decentralisation. A logframe is also included. No M&E procedures in proposal, only OVIs in logframe.

2. Institutional setting

Institutional roles and responsibilities

In line with the decentralisation process, the Rural District Councils have become active members of the district Water and Sanitation Sub-committee, playing a key role in programme coordination, community mobilisation and financial accountability. They have now taken up the full responsibility of coordinating and managing water and sanitation programmes, whilst the sector ministries act as their technical advisors. At provincial level, coordination is done by the RDCs' parent Ministry of Local Government, Rural and Urban Development. In pilot project role of districts has grown, sometimes resulting in friction with provincial level (which did not always want to decentralise responsibilities).

Decentralisation

Proposed project seems to fit into decentralisation policy.

3. Effectiveness and impact at field level

Community involvement

Community management is explicit objective. Strategy/steps to realise community involvement and management are minimal: basically a PRA problem identification and a technical training of a caretaker. Communities are asked to contribute with food (during training) and labour during rehabilitation. Afterwards they are expected to organise and pay for O&M.

Functioning and use of WS facilities

In terms of functioning and O&M (reduced break down time) the pilot project has shown a considerable improvement (85% of hand pumps functioning; downtime reduced from 6 months to 48 hours).

Final remarks

The project focuses strongly on technical inputs (water source rehabilitation) and training of various stakeholders. Institutional strengthening to realise and ensure community management is minimal. One training of government staff is envisaged to change their attitude and management style.

Other water project in Zimbabwe:

Hydro fracturing of boreholes

Executed by the Ministry of Local Government, the Department of Water Development and UNICEF, in response to the drought of 1994/95. It was approved for a period of 12 months in which it would rehabilitate 250 boreholes.

Strengths

The project has been well planned, implemented and monitored.

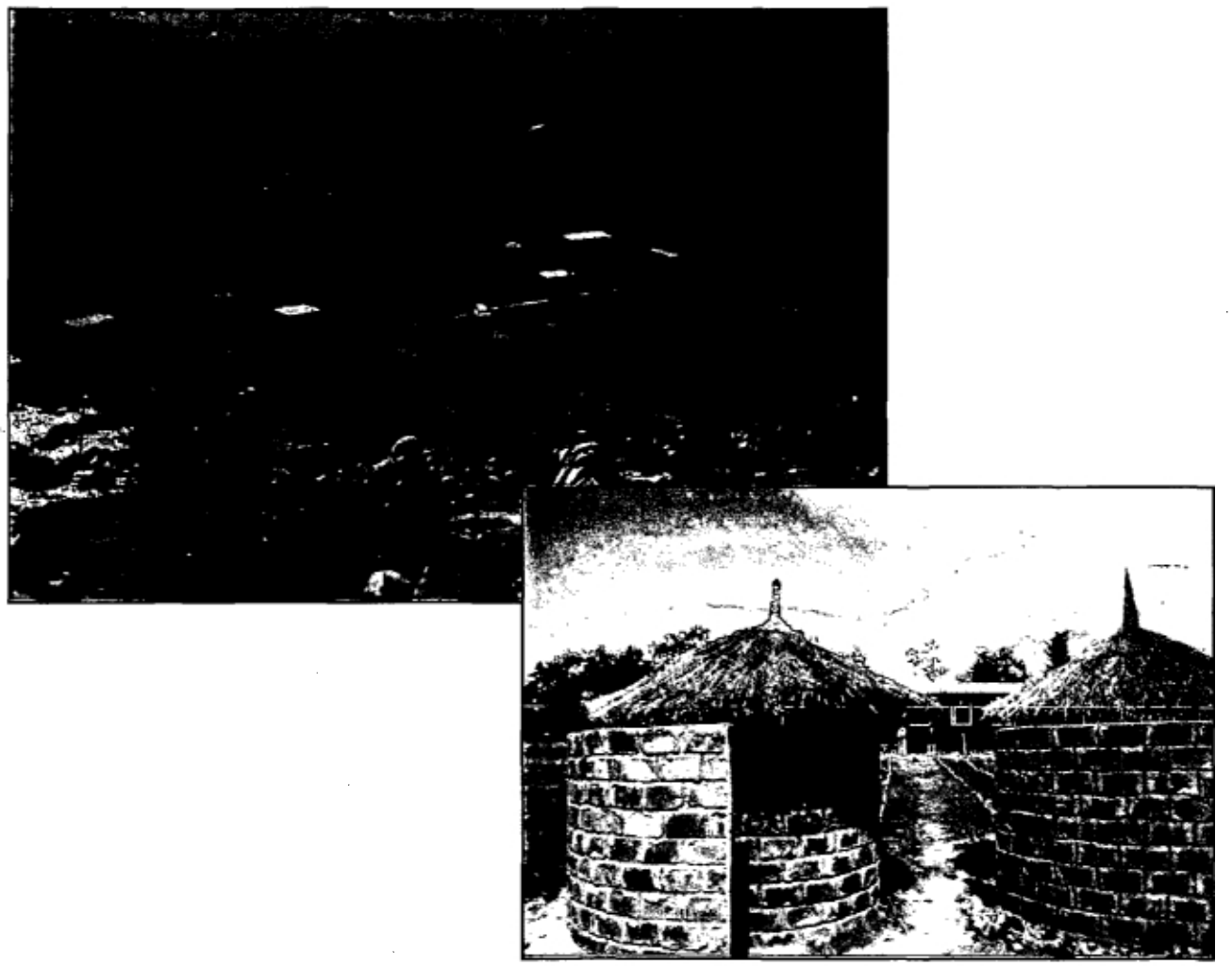
Weaknesses:

The number of successful Hydro fracturing interventions has been less than expected, with 17,000 people benefitting as opposed to the expected 78,000. Therefore the intervention was relatively high cost per capita.

Community involvement could have been improved.

Annex C -

Field Visits



Annex C - Field Visits

Introduction

In annex C, the results are being given on the countries visited in the field study which formed the second phase of the review of Irish Aid involvement in the WSS sector in four countries: Lesotho, Uganda, Zimbabwe and Zambia. The views, experiences and ideas of different key actors in Irish Aid supported WSS projects were sought. Discussions on policy and approaches being applied were held with government officials at the various levels as well as with NGOs, community based organisations and other partners in the country, such as donors and international organisations.

During field visits, the functioning of the Irish Aid supported programmes and the systems were assessed and the opinions of the users of WSS systems were sought with respect to community involvement at the different stages of planning and implementation and the arrangements for operation and maintenance of the systems.

In Lesotho and Uganda local workshops were held to review developments in the sector at national and local level and to ensure inputs into the policy formulation. A workshop was also held in Zambia where staff from Irish Aid projects in all priority countries was present to discuss elements of the draft policy. During the workshop, presentations on Irish Aid approaches in all countries were given and discussions were held on selected topics where experiences were exchanged and compared.

The checklist which was used for the screening of Irish Aid supported projects during the first phase which is given as Annex B in volume 2, was also used for the documenting of the field visits. The reports focus on a description of the policy environment, and an assessment of the on-going projects in this light. They are not evaluations as these have been carried out regularly in all programmes and did not need repeating at this stage.

Lesotho: Support to the Village Water Supply Programme

Field visit
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	Project title:	Village water Supply Programme
	Duration:	1990-1999
	Area:	Qacha's Nek, Mokhotlong and Thaba Tseka districts
	Implementing agencies:	Department of Rural Water Supplies (DRWS); NGOs (St. James Hospital, GROW, Tebellong Hospital)
	Other institutions involved:	District DRWS staff; Village water Committees; private contractors; private sector; Village Water Committees
	Irish Aid contribution (1998):	£ 881,000 (17.5% of country budget) covering capital costs, maintenance of vehicles and wages and allowances for field staff
	Contributions from others:	Community (payment for water); labour in NGO projects, local government (technical equipment and maintenance assistance); GOL (wages and allowances for office staff, subsistance allowances, fuel, and office overheads).

1. Field visit

The field visit to Lesotho was carried out in the first week of March '99. The team consisted of the IRC consultant, the local consultant (Sechaba), a programme officer from Irish Aid (E&A Unit, Dublin) and the programme engineer of the Irish Consulate in charge of coordinating the visit. Field visits were carried out in two of the three mountain districts where Irish Aid is working (Mokhotlong and Thaba Tseka) and involved both DRWS and NGOs. Descriptions and remarks made in this report on the basis of the short field visits should be taken as indicative and should also be seen as a moment in time in a rapidly changing strategy environment. The field visits were followed by a 1.5 day workshop attended by staff from DRWS headquarters and their technical advisor; three district engineers; project managers from three NGOs; the country director of Helvetas; and staff from the Irish Consulate.

2. Policy environment

The Department of Rural Water Supply (DRWS) has been involved in the development of new policies and strategies for the past four years. While policy formulation is at an advanced stage, implementation strategies are still being developed. The different strategies are being tried out in different districts and will be adapted on the basis of the pilot experiences. The present policy, as far as applicable to the mountain districts and Irish Aid supported activities, is presently as follows: the prime purpose of DRWS is "the provision of sustainable and adequate potable water to the rural communities of Lesotho". It aims to do this, in accordance with the revised flexible standards, in the shortest possible time, within

the financial constraints placed upon the Department. The target is to provide full coverage (25l/cap/day) of the uncovered population by 2010, providing at least the minimum service level (spring protection) in inaccessible areas. At the same time DRWS aims to recover the underserved population by the same year and to provide a higher level of service, including household connections, where technically feasible and where there is demand and ability to pay full costs. "Underserved" communities are those where the population exceeds 120 people per collection point and/or there is less than 25l/c/d available. The table below provides an overview of the project setting as it applies to mountain districts:

Table 1: Project Setting

Coverage and level of service objectives:	• Full coverage of rural population by 2010 • 25l/c/d at a maximum distance of 150 metres and a population between 80 – 120 people per collection point (according to National Service Standard, currently being replaced by new, flexible guidelines)
Technology:	• Spring protection and gravity systems with public standpipes; solar systems where pumping is necessary to achieve required level of service
Construction standard:	• Stone or brick water tanks • Stone or brick siltboxes • Galvanized iron pipes (minimum 20mm) • Earth filled dry walls to protect pipes, if trenching not possible
Design:	• private sector (at this time still much done by district staff)
Construction:	• Performance based contracts, managed primarily by ex-DRWS masons who hire village labour
Approach:	• Area-based planning • Village Liaison Officer (VLO) from district DRWS encourages all communities within area to apply and explains conditions and responsibilities; • Community applies for a system (demand responsive) • Village Water Committee receives one week training • DRWS supervises design and construction • Elected water minders trained during construction • Completed system handed over to community for O&M

Community contribution:	• Establishment of Village water Committee, opening bank account • Election of water minders who provide free labour • Contribution of 'seabo' of M10 ($1.5) per household to village maintenance fund • Previously, the community had to provide free labour for the construction, which could amount to months of work. At present the national policy is to pay for village labour the amount of M23 per cap/day.
Maintenance:	• Regular O&M carried out by water minder • Major repairs carried out by DRWS, paid by community up to certain level • DRWS is developing a maintenance strategy for area based private maintenance

Relevance

Irish Aid is supporting the work of DRWS and three NGOs in the mountain districts with the lowest water supply coverage in the country, Mokhotlong (31.7%), Thaba Tseka (29.3%) and Qacha's Nek (44.8%). Because of inaccessibility and the sparse populations, DRWS has not been able serve many of the remote villages in these districts. Historically priority has been given to the larger, more accessible villages. The present approach is to concentrate on particular areas (an area based approach), until all villages in that area are served. The NGOs supported by Irish Aid are basically covering the most remote areas that DRWS would be unlikely to reach in the next 5 to 10 years.

The districts as a whole have the poorest population in the country and the improvements in water supply are an effective way of poverty reduction, both through temporary job creation (where payment is made for labour) as well as through disease prevention.

Villagers in the remote mountains covered by the St James project, may have a monetary income as low as M40 per year. All work is voluntary and the improvement of water supply is regarded as a high priority, partly because of the high cost of treating water and sanitation related diseases (health centres require cash payments, which are out of reach of many).

Integrated approach

Sanitation is not included in the projects. DRWS does not consider it its task and it is not covered in the policy. Basically the same applies to hygiene education. Although the VLOs are supposed to give some hygiene education at the time of construction, there is no separate approach established for hygiene education (no budget, no special activities, no training, no follow-up) nor is there a sense of responsibility to ensure that at least 'somebody' is doing it.

In Mokhotlong District, under the former USAID-funded Rural Water and Sanitation Project, sanitation, hygiene education and water were integrated. Sanitation staff were housed in DRWS offices and the DRWS and the MoH coordinated their activities in such a way that hygiene education, given by the health assistant, strengthened water supply intervention. Over the last eight years, no formal collaboration between the departments at district level has occurred.

The approach to sanitation used by the MoH at present is to train local latrine builders in VIP latrine construction with the aim to provide them an income generating activity and at the same time increase latrine coverage. This approach has failed, as the latrines are far too expensive (M2800) for the vast majority of the villagers. This has resulted in very frustrated and demotivated sanitation staff and local builders.

MoH is involved in primary health education through its area-based health assistants, but they do not select the villages on the basis of water supply improvements and therefore if there is an overlap between the DRWS and the MoH 'villages', this is purely by chance.

The villages visited by the mission had very low latrine numbers. Previous studies conducted in remote mountain villages suggest that one reason for not having a latrine is the cost, but the findings also indicate that the need for latrines is not felt, either by men or women. The communal defecation grounds are deemed to be sufficient. These grounds are located in such a way that with rain the faeces is not washed into the protected spring area or the (unprotected river), the benefits of latrines are indeed debatable considering the cost of the promoted VIP system. It could be argued that the much simpler and cheaper improved traditional latrines (san plat system) may be more appropriate. However, in many cases, villages are built or rock and households do not have adequate soil depth for even this technology.

It is much more important in these villages that high-risk habits (such as not covering children's faeces) should be identified and that appropriate hygiene behaviour to counteract these practices should be discussed and promoted . As there are MoH-trained Village Health Workers in most villages, this would seem an advisable level for co-ordination to take place, at least by ensuring that the Village Water Committee does include the VHW and that the VHW is trained to identify high-risk habits and propose alternatives. However, it has to be kept in mind that VHWs, being ordinary members of the village and usually women, often do not command adequate respect among their neighbours and families for health messages to have an impact. Innovative methods, such as school and community drama have been explored but not fully developed. There is potential for existing NGOs that specialise in theatre to be contracted to play a more active role here.

Project design

Irish Aid support to the village water supply programme is completely based on the current policy and strategy of the GOL. Irish Aid facilitates the activities of the district DRWS within the three districts without any conditions on approach, methodology or area selection. The programme is therefore completely integrated in the DRWS structure.

3. Institutional setting

Institutional roles and responsibilities

Apart from the DRWS, NGOs are involved in the implementation of the programme. In theory the projects of the NGOs have to be approved by the DRWS at district level, to ensure that the standards set (but now flexible) are followed. After construction, the NGO implemented schemes are meant to be handed over for maintenance care to the DRWS. Whereas previously, the collaboration between the district DRWS and NGOs was far from easy, the area based approach that is now used by both NGOs and DRWS has facilitated a division of focus areas and an easier cooperation. The main problem is the lack of capacity with the DRWS to approve the design and later approve construction and handing over. This threatens to hinder the pace of construction by the NGOs working in remote areas, although in practice most proceed with their work plans regardless.

Currently the main difference in the NGO approach to water supply is that they do not pay the villagers for labour. There is also evidence indicating that they pay greater attention to hygiene education. Although it was assumed that DRWS payment to village labour would become a major obstacle for the NGOs, it turns out not to be a problem. The reason is that the villagers know that it may take a long time before the DRWS could implement the water scheme for which they have applied due to lack of funds, lack of capacity or because their area has not been included in the planning in the near future. They prefer to proceed with voluntary labour, rather than wait indefinitely for a water system.

Privatization

A major change in the current policy and strategy is the growing involvement of the private sector, which is also supported by a favourable political context which favours the role of government as "that of a facilitator rather than an implementor". Because of the relative inefficiency and inflexibility of the government in delivering water supply to the population in the rural areas, DRWS decided to privatize many aspects of their service delivery to cut out inherent weaknesses. Already much earlier, drilling, handpump provision and repair had become privatized activities, and in '96 this was followed by privatization of design and construction activities. Some of the positive aspects of this privatization which were mentioned in the workshop are:

- Employment and job creation
- Production and efficiency increase
- Reduction of cost (market competition)
- Remote areas are being served
- Improved performance delivery
- Shortened construction time
- Local contractors can be held accountable by the community for their performance
- Clear regulating and supervisory role for government
- Efficient supervision of construction by government and community
- Increased community involvement in design phase
- Increased responsibility of community

Of course there are also constraints to privatization at present:

- Insufficient quality in the private sector
- Insufficient capacity in the private sector
- Privatization requires (non existing) capacity to supervise with the government
- Private sector is not interested in service delivery in remote areas
- Private sector is more expensive than government
- Private sector is not interested in promoting involvement of local communities
- Reduced sense of ownership with the community
- There is no incentive in the private sector to provide 'aftercare'

The fact that workshop participants produced conflicting views (e.g. privatization is seen as both reducing and increasing costs) is an indication of how recent this approach is.

The discussions in the field revealed that for the remote districts, it is very difficult to find private sector entrepreneurs with sufficient technical capacity and sufficient manpower. Few (ex)government staff of the level of Senior Technical Officer are inclined to move to the private sector because of bankruptcy risks. While working for government may be less lucrative it offers stability as well as possibilities for further study, a pension and other benefits. The lack of quality has resulted in the district DRWS redoing much of the work done by the private sector, especially in the design.

The majority of the masons who are constructing water systems at present are ex-DRWS employees who have been given performance-related contracts to completed particular projects. It is in their interest to finish as fast as possible and to do so they require as capable (community) labour as possible. This is in direct contradiction with the interest of the majority of the community who would prefer to see the paid construction period extended as far as possible (see below under community involvement).

The DRWS is also aiming to privatize maintenance activities by facilitating a private sector area maintenance scheme, to be run by private contractors who will be selected from the area and trained by DRWS. The objective of this new strategy is to "decentralise and privatise maintenance, to emphasise prevention and to become more proactive." The area maintenance contractors would be contracted by the government to do regular inspections and to carry out preventive maintenance. At the request (and payment) of the communities they would repair reported failures that occur in between inspections. However, such a scheme still needs to be piloted to see if it is viable. It may well be attractive for the private sector in the lowland districts, but not in the mountain districts.

Decentralisation

The Government of Lesotho is committed to decentralisation, and DRWS is one the government departments most advanced in this respect. However, it is anticipated that it will take time before decentralisation is firmly in place and the expectation is that change in all sectors will be slow. Therefore the DRWS has assumed that its situation will remain

unchanged for a considerable period of time to come. At present, yearly budgets are given to each of the districts and it is up to them to decide in which areas water supply improvements will be carried out. However, the selection has to be approved by the DRWS HQ in Maseru.

The districts supported by Irish Aid receive the funds from Irish Aid directly. The decision on which area to target is made by the district DRWS and based on demand, coverage data, populations in the area and accessibility. DRWS at national level concerns itself with policy and strategy development while at the same time supporting and supervising the districts in the implementation of their water supply programme.

Human resources and capacity building

Irish Aid has committed itself to supporting institutional capacity building this year and is awaiting a proposal from DRWS. Fellowships and staff training are encouraged using project funds. On-going capacity building activities at DRWS national level are carried out primarily with Swiss Development Cooperation support through technical assistance supplied by Helvetas and short-term consultants. In DRWS there is also a budget for training which has made it possible not only for engineers to be trained but also the head of the Village Affairs Unit.

DRWS recognizes that for the new policies and strategies to be implemented an improvement in human capacity will be required. Plans have been made for on-the-job training to provide "extensive managerial technique and skills training" to senior management at DRWS HQs. Year Three of the Implementation Plan has been designated as the "Year of Human Resources", focusing and shifting the organisation to being far more goal oriented than it is at present.

During the workshop, the need for training of the private sector was discussed, but it was felt that the DRWS should focus more on capacity building of their own staff in taking up the new roles and responsibilities as facilitators and supervisors of the private sector. However, DRWS was felt to lack manpower and expertise among their staff to build up capacity at the district level.

Although the VLOs have received training from the Village Affairs Unit the need for further training is still felt, especially as all VLOs are currently ex-masons and therefore all male. As the number of VLOs per district is increased to two or more there will be an opportunity to attract social development-oriented staff. Hopefully this will also mean that more women will be attracted to become VLOs. However, as many of the VLOs will remain ex-masons there is a need for them to receive further training in community motivation, guidance and problem solving skills and need to learn more about participatory methodologies to assist the communities to make decisions. In addition, they will have to learn the basic elements of participatory hygiene education as long as there is no solution to the issue of responsibility for hygiene education before, during and after water supply improvements.

Monitoring and evaluation

Historically DRWS has been very production focused with limited attention being paid to O&M or M&E. At district level, DRWS staff monitor construction and inspect the completed systems, which then receive a guarantee for a year. However, follow-up visits and monitoring of proper use and maintenance is very limited as the focus has been on serving new areas. The water minders receive limited supervision by the VWCs, who are only rarely visited by the VLOs to check on how they are performing. External monitoring of the collection of maintenance funds by the village water committee is not carried out. Water quality monitoring is not done on a regular basis by anyone. Basically, communities are left on their own after the water supply improvements have been implemented. The communities themselves will (at best) contact the district DRWS when the system is failing and needs to be repaired beyond what they can do by themselves.

With the support of Helvetas and SDC, DRWS have carried out national inspections of all the water systems in the country, including those of the NGOs. Data generated in the course of the inspection have been used by the M&E Unit of DRWS to develop a sophisticated management information system. Private contractors are playing an import role in repairing broken systems that have been identified. The information has also been used extensively to help develop new policies and strategies.

4. Effectiveness and impact at field level

Demand driven approach

The Village Affairs strategy for DRWS emphasises a demand driven approach. Thus, villages have to send a request for water supply improvements to district DRWS. By and large the services of DRWS are well know throughout the country and the number of requests has always exceeded DRWS's capacity to supply. Historically larger, more accessible and influential villages have always been at an advantage. The new area-based planning method tries to ensure that all villages – large and small – receive a service. Those who have not already applied are encouraged to do so by the VLO who visits all villages in a given area.

Demand for water supply improvements was usually based on reasons of:

- convenience (the efforts to get water from springs located either uphill or downhill can be considerable, even if the distance may not be very far);
- reliability (often springs do not yield water all year around)
- health awareness (the cost for medical treatment and drugs is considerable because of the distances that need to be covered to get treatment).

However, at present, demand for water supply is also based on the fact that under a new national policy all community efforts in construction are to be paid for. Thus, not only community labour on roads is being paid, but also community labour for water supply. Indeed applications for improved water supply have greatly increased, to the dismay of district DRWS because they know it will be impossible to grant all requests even in the distant future, nor do they know if demand is for water or for 'work'. In the long run, it is doubtful if the GOL will be able to keep paying community labour, while 'demand' filed under 'payment' conditions may not remain when payments cannot be made.

Under the new strategy, individuals will be able to apply for a higher service level than the (flexible) standard has previous offered, i.e. for yard or house connections, provided it is technically feasible and they pay the full costs. Willingness and ability to pay studies indicate that in the larger, more prosperous lowland villages there is likely to be a relatively high demand for private connections. The biggest constraint in these villages is that existing springs and groundwater are often inadequate to meet present demand. In the mountains, where levels of poverty are significantly higher than any other part of the country, demand for private connections at full cost is likely to be low. While many may express an interest once the full costs become known the number applying will probably be relatively small. Already many households have difficulty raising the cash to pay the M10 "seabo" required for the maintenance fund.

Historically collection for the maintenance fund has been problematic. However, one reason for this has been the long wait between the time when a VWC starts collection and when DRWS begins construction (a decade, in some cases). Many households prefer to wait to see if Government is actually going to respond to their request before contributing. This in itself can lead to distortions in contributions, as was mentioned in one of the villages visited. The 'seabo' of M10 was much more valuable 5 years ago than now and within the community this leads to arguments.

Community involvement

Community involvement (through VWC) in DRWS schemes at present is taking place in:

- request for WS improvement
- formation of Village Water Committee (VWC)
- election of water minders (unpaid)
- collection of M10 per household and opening bank account
- confirm agreement to location of standpipes as proposed by the DRWS
- contribution of (paid) labour to assist the mason
- using the water
- help ensure area around taps is kept clean and that people adhere to VWC rules (many villages elect tap minders for each tap)

The VWC are supposed to:

- act as a source of information on the system to the community
- organising the (paid) labour
- be trained for a week on all aspects of operation and management of the system
- ensure that the water points are kept clean and operational
- establish bye laws
- ensure that the water minder is regularly maintaining the system
- contact the DRWS for repairs if the trained minder is not able to do so

During the field visits, it seemed doubtful that all these tasks are being carried out by the committees, especially with only one VLO to contact the village committees (but even with two VLOs it would be difficult to follow-up on all community level operations). The

training for the committees has not been taking place for some time and has been reduced from two weeks to one week (which the mission does not consider to be sufficient) while follow-up visits are very limited. But very few villages were actually seen which gives insufficient grounds for judgement on the level of community involvement.

In the evaluations carried out in the Lesobeng WS project and DRWS Qacha's Nek district, communities were found to have been involved in the construction and had paid their initial M10 and were generally satisfied with the system. However, the organisation of the (unpaid) labour by the VWC and the collection of the 'seabo' had been very difficult. The evaluations stressed that the capacity building of the community water committee was found to be insufficient. Since Irish Aid began supporting the Lesobeng (St James) Project in its second phase great attention has been paid to community issues, with project manager spending considerable time in the field dealing with a wide range of concerns.

DRWS is aiming for communities taking full ownership of their water supply systems and is taking specific action to ensure that this done. Currently this involves examining the legal status of water committees and the legal implications of community ownership of systems. A complex local political environment, with considerable uncertainty surrounding the future of traditional leaders as well as other forms of local government, is likely to complicate the process.

These aspects therefore require further thought in the development of the DRWS strategy, especially with regard to the viability of a limited number of VLOs to really assist the committees in management and follow-up training and to involve them meaningfully from the planning stage onwards.

With regard to labour contribution, it is officially left to the mason to hire community labour. The mason is responsible to construct a good system, he gets paid per system and is allowed to bring four people of his own choice to help him. For the rest he is dependent on village labour: When the labour is not paid construction time can be as much as four times longer than that of mason contracts. With the labour being paid, this is no longer a problem, there are sufficient people who want to work. Ideally, the VWC organises the labour and divides the manpower needs over all households, so that each can get a share from the payments. It is up to the households to decide who will do the work. Where before it was the women who did the majority of the work (as it was unpaid), this has now evened out. The money earned is reportedly spent on family expenses such as schooling. However, it is in the interest of the mason to get young strong men to help as this will ensure that work is done fast. This may eventually lead to a situation where women and old people (who are often the poorest) do not benefit from the possibility to earn extra money. But so far this has not yet taken place and there are reportedly enough not so heavy tasks that women and older people can do

There is a gross underrepresentation of women in DRWS. All VLOs are men and this may well have an effect on the involvement of women in the planning and management of the water system. In all the VWCs visited there was a fair representation of women and there are indications that women are as equally influential as men in decision making at this level.

Functioning and use of water schemes

Almost all systems in the mountain districts are gravity fed water schemes, water points or simple spring protection schemes. The percentages of systems functioning was assessed in 1995 during a nationwide inspection which found 95% functioning in Qacha's Nek, 90% in Mokhotlong and 68% in Thaba Tseka districts. The technical quality of construction is quite high and incidence of total disrepair is low, also as a result of the relative simplicity of the schemes. To what extent the systems are consistently used and by whom is not mentioned in the evaluations, but is reported to be quite high.

Sustainability of WS facilities

Sustainability depends to a large extent on the maintenance capacity of the community. Currently the communities are expected to pay for the minor repairs carried out by the water minders while the district DRWS pays for major repairs. Officially, the communities have to pay DRWS for doing the repairs up to a certain ceiling. But it was not clear what this ceiling is and where communities do not pay for the repair, it is still carried out.

The above percentages showing the high percentage of functioning systems indicate that apparently the systems are either being maintained or are so maintenance free that they keep functioning with limited intervention. As the vast majority of the systems are either water points or very simple gravity systems the maintenance needs are very basic and do not require lengthy training. However, as a visit to one project illustrated, due to the very erodable soils the systems do get blocked without regular cleaning. Enough training and back up support to VWCs is necessary to ensure periodic maintenance. More important, systems of community based M&E (with possible prizes or other incentives for the 'best maintained' system) need to be explored as DRWS has very limited capacity to follow-up and to carry out (and fund) repairs of systems.

Financial issues

Minimum down payment for opening bank and minimum deposits for maintaining them prevents many village accounts being operational. Villages are also too far away from banks for opening a bank account. The funds collected from 'seabo' are lying idle in accounts and with inflation lose their value. These issues were brought up during the workshop and in discussion with villagers. There is concern with DRWS and NGOs that where communities are now being paid for labour, it may be very hard to return to unpaid labour contribution when it becomes impossible to keep funding the system of paid labour.

It is seen as a problem that the 'seabo' system is deeply entrenched as a one-pay-off system which basically prevents the collection of regular maintenance funds. The possibility of the maintenance fund to be not in money, but in reserve spare parts (as these are common) does merit attention. It was not possible to assess the capacity of the communities to fund major repairs if there is not a maintenance fund, or to collect funds when the system is in need of repair.

It is important to note that overall the long term success of the new DRWS strategy is heavily dependent upon donors and access to Highlands Water royalties, none of which can be guaranteed.

Environmental issues

A proposed new Water Resource Policy and Strategy is under review. In this policy a restructuring of the whole water sector is envisaged and roles and responsibilities with regard to Water Development (dams), control and protection, bulk water supply and distribution in rural and urban areas will be defined. At present there is no co-ordination taking place with regard to protection and depletion of water resources, watershed management and pollution control.

Uganda: Kibaale District Development Programme

Field visit
1US$=±1400 Uganda Shilling

Project title:	**Kibaale District Development Programme -KDDP**
Duration:	1995 11995-1999
Area:	Kibaale District, Uganda
Implementing agencies:	District Administration
Other institutions involved:	Project Coordination Unit (consisting of two expatriate advisers); Project Steering Committee; District Water Officer (coordinating all donor support to the sector as well as the implementation of activities financed by IA).
Irish Aid contribution (1998):	£ 239,520 (4.2% of country budget)
Contributions from others:	Community (payment for water); local government (technical equipment and maintenance assistance); GOL (wages and allowances for office staff, subsistence allowances, fuel, and office overheads).

1. Field visit

The field visit to Uganda was carried out in the second week of March '99. The team consisted of the IRC consultant, the local consultant (NETWAS, Uganda) and a programme officer from Irish Aid (E&A unit, Dublin) for two days. The field visits were carried out for two days together with the District Water Officer and the Irish Engineer Advisor. This was followed by a 2 day workshop attended by staff from Kibaale district administration and a number of councilors. In addition, staff and Irish Aid Technical Advisors from Kumi and Kiboga districts, where Irish Aid has very recently started operating, were present, as well as the programme officer from the Irish Embassy in charge of the water programme. The remaining day was spent in Kampala to discuss the policy and strategy with Danida, Unicef and DWD and a consultant who has been involved in the Irish Aid activities in Kibaale.

2. Policy environment

The enactment of the Local Governments Act of 1997 has defined roles for the different levels of government in the provision and management of water related services and activities. The provision of water services and maintenance of facilities is the responsibility of local councils in districts and urban centres with the support and guidance of central government agencies. The act aims at providing for a continuous process of decentralisation, whereby functions, powers and services are devolved and transferred from central government to local governments in order to increase local democratic control and participation in decision making and to mobilise support for a development relevant to local needs.

Kibaale district was established in 1991 and since 1995 the district itself has been in charge of the administration and planning. The Kibaale district has made a comprehensive and

integrated development plan (District Development Plan – DDP) for the period 1999-2001, incorporating plans of lower level local government. The District Planning Unit did the co-ordination of the DDP and sub-county consultative workshops were organised in order to establish the priority areas and identification of available resources of the sub-counties in the implementation of DDP. The district has a population of 274,915 people and generally low population densities with 98.9% living in rural areas.

Table 2 – Uganda Project Setting

Coverage and level of service objectives:	• 75% coverage of rural population and 100% coverage of urban population by the year 2000 with an 80%-90% effective use and functionality of facilities • 20-25l/c/d preferably within 1500 metres of all households and a population not more than 300 people per collection point (rural). The difference in elevation between a household and the waterpoint should not exceed 200 metres. Regular O&M carried out by water minder
Technology:	• Preference to point sources such as protected springs, handpump equipped shallow wells or boreholes and gravity fed piped schemes • Improved traditional latrines
Technology standard:	• Standardization of equipment will be applied as a means of safeguarding the community based maintenance system through easy access to spare parts, repairs etc. on the open (private) market. The U2/U3 is standard for boreholes deeper than 20 m, for shallower wells, technologies still need to be field tested for selection as standard.
Design:	• district staff
Construction:	• private sector, with assistance of village labour
Approach:	• The district council decides on priority areas for water improvement and makes a development plan, based on outcome of sub-county development meeting • Existing water sources are surveyed and the to-be-improved source is selected by district staff and community

	• District staff with LC2 and LC3 mobilizes community and explains conditions and responsibilities; gives hygiene education and mobilizes for sanitation improvements (sometimes conditional to water improvements) • Water Source Committee receives training and establishes by-laws • Construction by private sector, with assistance of community, supervision by district
Community contribution:	• Establishment of Water Source Committee • Contribution in form of funds, food, labour and local materials • Operation and maintenance
Maintenance:	• repairs carried out by private sector to be paid by community (not yet applicable)

Relevance

In '94 access to safe water supply in Kibaale was among the lowest in the country with only 8%. At present this stands at 32% and sanitation coverage at 42%. Similar low coverage levels apply for the other selected districts Kumi and Kiboga. Because Kibaale was only established as a district in 1991 and did not have a big town, it was not considered attractive and hence did not receive any attention from government or donors. The district programme is greatly assisted by the presence of Irish Aid technical assistance and funds and is highly relevant in respect to poverty alleviation. According to a survey carried out in 1995, there are serious water quality problems in the district due to poor management of water sources and a low level of hygiene among the communities. Contamination is high in unprotected springs and open wells. Therefore the project is also relevant from the perspective of improved health. The District Programme comprises of five major areas, which represent the needs in the district at all levels: capacity building, education, health, feeder roads, and water and sanitation. These also reflect Irish Aid policy.

Integrated approach

The district development plan is integrating economic activities, education, health services, engineering works, water and sanitation and community development services.

In addition, the district applies an area-based approach, which further enhances integration of different development activities. The health staff is responsible for hygiene education activities and mobilization for improved sanitation and this is done in complete coordination with the water supply improvements. The same applies for the Community Development Assistant who is responsible for mobilization of the communities and trains the WSCs. The aim is to have PRA activities preceding all water and sanitation interventions and become part of the area based approach.

The hygiene education activities are reportedly inducing people to construct or improve latrines, and in some places this improvement is a condition for improving the water supply. The latrine technology that is promoted is the San Plat system. However, sanitation is not a priority activity in the district development plan. As was mentioned during the workshop, there is insufficient manpower to follow-up and monitor the effect of hygiene education activities.

School sanitation however, is explicitly mentioned in the plan, as well as the improvement of hygiene practices at school so that it is transmitted to household level. However, the funding of construction of latrines is dependent on other funding and approval for this has been pending in government. Because of the new universal primary education policy of the government, there is a marked increase in school population without a proportionate increase in sanitation (and water) facilities. During the workshop was mentioned that apart from the lack of facilities, there is no practical training in sanitation/hygiene practices, a shortage of teaching aids for hygiene education and lack of training of the teachers. Generally, the issue of handwashing and facilities for this, is not taken up at all. This applies to both school sanitation and sanitation at household level.

The National Water Policy (draft, 1997) has as policy objective for water resources management:
"To manage and develop the water resources in Uganda in an integrated and sustainable manner, so as to secure and provide water of adequate quantity and quality for all social and economic needs of the present and future generations with the full participation of all stakeholders". Among the strategies of importance to mention are:

- domestic demands have first priority
- allocation to other uses including water for production (agriculture, industry, hydropower) to be based on economic, social and environmental values of the water (most beneficial use)
- sustainable use to be key element in planning and
- holistic approach to water resources management and use.

Thus, the policies support integration at district level.

Project design

The KDDP is based on Irish Aid experience in district programmes, particularly in Tanzania. It emphasizes integration and capacity building in the District Administration, a long-term commitment, and a strong emphasis on community participation. The project and Irish Aid technical assistance are fully incorporated in the district level activities and Irish Aid is seen to 'buy' into the district programme. In other words, like all other donors, it s requested to follow the existing policies and priorities expressed in the district plan. There are two external Technical Advisers, one as overall Coordinator, the second as engineer to support any infrastructure development within the District Department of Works. In Phase 1, a Programme Coordination Unit - PCU was established. This will be fully integrated into the district structures in Phase 2. Gradually both posts will be fully integrated and phased out at a mutually agreed date when sufficient capacity has been developed. Actually, TA is already gradually move its attention to the two other districts that receive Irish Aid. In the SWOT analysis on Irish Aid involvement in the district was mentioned as strength:

- Good integration of Irish Aid staff into the district system
- Mutual trust between donor and government
- Flexibility of Irish Aid on activities to support
- Irish Aid uses a demand driven approach
- Irish Aid has qualified technical assistants

3. Institutional setting

Institutional roles and responsibilities

Implementing agency is the District Administration assisted by the Project Coordination Unit and the District Technical Planning Committee. The District Water Officer has responsibility for coordinating all donor support (such as Unicef) to the sector as well as the implementation of activities financed by Irish Aid. The district staff receives support from the line ministries and the ministry of local government; the private sector plays a role in the implementation of construction activities.

The institutions involved in the implementation of district development activities are:

Table 3 – District Information

District level	Sub-county level	Village /parish level
LC 5 Council (political)	LC3 Council (political)	LC2 council (political)
Water and Sanitation Committee (political and administrative)	Sub-county management	Parish development committee
Departments	Sub-county Health committee	Parish chief
NGOs	Water committee	LC1 committee (political)
Private sector	Sub-county chief (administrative)	Water Source committee
	NGOs	Users
	Private sector	

Decentralisation

Kibaale District has been fully decentralised in 1995. It receives a block grant and constitutional grants from the Central Government, and a part from the revenues that are collected at sub-county level. In all of Uganda, the sub-county has become the main focus of implementation (as from July 1997) and revenue collection. This level retains 65% of all revenue collected locally and remits 35% to the district level, and further shares the balance

of 65% as follows: 65% remains at the sub-county, 25% to LC1, 5% to LC2 and 5% to LC 4 level. Since in Kibaale little revenue is collected, all local government levels mentioned a shortage of funds. The Public Service Reform, which accompanied decentralisation, has seen the retrenchment of many sub-county staff thus reducing staff levels for the water supply and sanitation implementation. Where the health assistant or community development advisor has to cover more than one sub-county there is limited capacity for the WSS sector and therefore, most WSS related activities are done by district staff.
Although their electorate will hold District Councils accountable, decentralisation is still in a transitional stage. At national level, the mission was told that it was felt better to decentralise and learn–on-the-job than to spend years of preparation and capacity building before actual decentralisation. Of course, this has resulted in a situation where the capacity in the districts is still limited and even more so at sub-county level.

Privatisation

The Government of Uganda is very determined in its direction towards privatisation and the use of the private sector, so where possible, the water and sanitation sector is starting to utilise the private sector. However, there are no guidelines on how to implement privatisation and how to support private sector involvement. Private sector in this context mainly relates to drilling companies, organisations providing advisory services and training, small entrepreneurs in the field of slab casting, handpump sales, spare parts production and sales and local people such as fundi and possibly caretakers. Issues with regard to private sector (Private sector includes NGO, consultants, any non-government entrepreneur or group of entrepreneurs) involvement brought forward in the workshop are:

Table 4 – Involving the private sector

Issues (positive and negative)	Suggestions for improvement
• Insufficient private sector (numbers) • Insufficient private sector capacity (skills) • No supervision, no guidelines • Poor quality • Tender boards not independaent in their operations (political and financial meddling) • Monopoly formation due to lack of market competition • Lack of start capital • High interest rates • Availability of spare parts • Privatisation drive by government • Increased accessibility of services	• Guidelines in place for standards, standard control and selection of private sector actor • Increase transparency of tender boards • Training of tender board members on procedures • Orientation of new p.s. members • Increase human resource capacity for supervision and guidance at district level • Increase skills for supervision in district • Increase supervision to (banks) finding (through guarantee funds) • Regulatory framework to prevent monopolies

Human resources and capacity building

As mentioned before, the decentralisation requires much more and different capacities at the district level. Although the district staff in Kibaale seem to be quite qualified for their tasks, they are understaffed and are also required to train the staff (also insufficient) at sub-county level. It is not clear if the district staff is able enough to carry out training of trainers and thus build capacity at sub-county level. Yet human capacity is the foundation for the sustainability of the water and sanitation programme at all levels. For instance, the District Technical Planning Committee has recently been trained in PRA and was very enthusiastic about it. An outside expert trained them and is also required to train a core team of trainers, who would train other department staff and sub-county level staff. It is not clear if and how many funds there are in the district for training of staff. Yet, training exposure of district staff was brought forward as a great need and as an incentive for (comparatively low paid) district staff to remain working for the government. The same applied for exchange visits between the different districts (already happening), and also between different Irish Aid supported programmes in Africa.

Monitoring and evaluation

Monitoring for effectiveness has not been institutionalized at any level in the district. The district staff supervises and monitors the performance of the implementation of construction, but has no capacity to monitor effective use or maintenance. Also no monitoring of effectiveness and activities of the WSCs or caretakers seem to take place. The District Water Officer has followed a course on monitoring for effectiveness, but he does not have the time to set up a proper monitoring system at sub-county level.
Monitoring of water quality at the protected springs needs to be done and can very well be done by the WSC, it would strengthen the understanding of the need to keep the surroundings clean and the importance of keeping animals away from the springs.

At one of the newly constructed springs a woman asked us if she now could stop boiling her drinking water as the water was reported to be clean. The DWO told her to keep on boiling because the water gets polluted in between the spring and drinking it at home. In other words, hygiene education was not deemed to be sufficiently effective. Moreover, the DWO felt he needed to give messages consistent with the messages from the MoH who on radio tell everyone to boil drinking water. What then, is the advantage for having the spring protected is the question. What motivates people to maintain the spring if there is no positive change in what is required from them in terms of behaviour?

3. Effectiveness and impact at the field level

Demand driven approach

Through the decentralised system and the fact that the district development plans are based on the plans made at sub-county level, which are based on consultations with the LCs, there is at least bottom-up priority setting. The need assessment is done at the sub-county level and also the selection of the priority areas for the area based approach. This can be in contrast with the demand for improvements at community level, especially

where the technology to be used is spring protection i.e. this does not augment the existing quantity of supply, only the quality. If people at community level are not sufficiently aware of the advantages of a clean water supply, they may not be motivated to contribute to the spring protection nor will they be motivated to maintain it well. Demand for sanitation is low, but in the district it is put as a condition to get water improvements. Even more, in one place the chief had actually told people he would take them to jail in case they had no latrine. Social pressure and bye-laws are used to make sure people construct latrines – this however, does not say anything about their use.

An evaluation of Unicef supported WES interventions revealed that the only level where the demand driven approach is taking place is in those communities where people face serious water quantity problems. They request district officials to support in water supply improvements. In addition, it was found that demand for sanitation is increasing, but still generally low to virtually non-existent in exceptional cases. The increased attention for sanitation is mainly due to cholera outbreaks. This has initiated intensive campaigns of MoH on sanitation facilities and hygiene practices and has resulted in by-laws on the construction of latrines.

During the workshop, the need for effective sensitization and mobilization of men and women for community managed water and sanitation improvements was brought up as a key issue, requiring capacity at sub-county level both in terms of training and manpower. The above shows that within the district different opportunities and requirements for a 'demand driven approach' are present and that in terms of mobilization and sensitization also different approaches will need to be used.

Community involvement

During the workshop, the following activities in which the community is involved were mentioned. It is a pity that these tasks have not been separated out for men and women as this would give more insight in the gender balance of the tasks and responsibilities. Not all activities do actually take place (as yet) and the communities are also not responsible for all activities.

Table 5 – Community Involvement

Pre-construction phase	Construction phase	Operation and maintenance
I. Sub-county development committee meeting	II. Collection of materials	I. Functioning and use
II. Sub-county development plan (technology decided)	III. Construction or rehabilitation	II. Proper utilisation
III. Survey water sources	IV. On-the-job-training (masons)	III. Regular maintenance
IV. Mobilization	V. Health and hygiene education	IV. Establish regular monitoring system and water quality control
V. • Sensitization (hygiene education)	VI. Environmental improvement around source (fencing, planting)	V. egular WSC meeting
VI. • Resources assessment (material, human, financial)	VII. Commissioning and certification	VI. Establishment of financial management system
VII. • Committee formation		
VIII. • Caretaker selection		
IX. Training of WSC committee		
X. Establishing of by-laws		
XI. I. Site clearance		

In general, communities contribute to the construction of new or improved water sources in the form of funds, food, labour and local materials such as stones, sand and clay. This has the advantage that local resources are used, which is important in view of the limited funds available from central level. Where these materials are far away, the district vehicles help to transport them from the place were they are found to the site. This way, also materials found in one place can be exchanged for useful materials found in another – the area-based approach facilitates such exchanges. In all sites visited, the feeling of ownership by the community is quite clearly expressed.

The Unicef evaluation showed that in the case of spring protection this is usual, but it is not always the case with boreholes and even less with gravity fed systems. When such systems break down, the chance of the community actually repairing it or paying for the repair is not very high.

In Kibaale district, involvement of women in water and sanitation management and decision making is very low. At district level, few staff are female and the same applies to sub-county level. Male staff often lacks the awareness and skills to make the demand based approach gender responsive, women do better but there are very few. In the workshop, one of the topics discussed was on 'how to ensure gender mainstreaming into programmes. The following issues and solutions were indicated:

Table 6 – Gender Expectations

Issues	Solutions
• Men are expected to do heavier work • Poor understanding of gender: men do not want to talk about gender • Women take sole responsibility for hygiene education for children • Lack of empowerment of women on WSC • Women are overloaded with work in water and sanitation activities • Traditional role definition of water and hygiene • Men decide on site for water sources • Women not involved in decision making – they do not participate in the actual decision • Men do not feel responsible for sanitation and hygiene at home • Men have control of family resources • User unfriendly technology (design) especially for women	• Men and women share responsibilities in WSS activities • Gender sensitization at all levels • Include men in training in hygiene promotion • Post primary education for girls • Women should also participate in site selection • Training the water source committee in participatory planning • Women should participate in technology choice • Women should be economically empowered • Gender desegregated data

Functioning, use and sustainability of WS facilities

The district is well endowed with natural water sources like shallow wells and springs and according to the District development plan, only 14 out of the 218 boreholes are reported to be not functioning. Of the 448 shallow wells, 54 are lined/improved and of the 710 springs, 401 are protected. Generally the protected springs and wells require very little maintenance and do not really break down. It is difficult to say anything about consistent use of the protected wells, as the short field visits are not sufficient to even get an indication.

On technology choice, decisions generally seem to be taken by technical staff, based on hydrological conditions, and the options known to them. The preferences of men and women may not always be sufficiently taken into account (where applicable). It is questioned if the technical staff explain the communities the implications of different technical options in terms of maintenance cost (if applicable). The mission did not get much information on the willingness and capacity of the users (men and women) to pay for maintenance, but there were some indications that this may not be very easy – but this basically applies mainly to boreholes and only one was visited.

Rainwater harvesting is suggested as alternative technology for schools, which is expected to also have a direct impact on hygiene behaviour and improved sanitation. Some of the masons were already trained in rainwater harvesting technology and a local NGO is promoting household water jars. But in view of the poverty of the majority of the population it is highly unlikely that this technology will be applied at household level in the near future other than on an adhoc basis.

Environmental issues

Although in the present activities not much attention seems to be devoted to environmental management and in the current district plan water resources management is not mentioned, the Acting Chief Administration Officer brought the issue up in discussions. He felt that more attention needs to be paid to environmental protection of the catchment area, community involvement in spring protection and mitigation of the effects of water and sanitation interventions on the environment. In the workshop, suggested actions for improvement of environment included:

- Environmental education
- Set up and enforce bye laws and make regulation and permits for abstraction
- Educate local councils and include environment as topic in sub-county development planning
- Encourage alternatives for water supply (rainwater harvesting)
- Train water and health staff on proper construction of springs
- Include environmental indicators in M&E
- Encourage environmentally friendly re-use of run-off water
- Encourage proper drainage of run-off
- Reforestation

During discussions was reiterated that with regard to water, attention should be shifted from water source protection to watershed protection.

Zimbabwe: Participatory Hygiene Education (PHE) and Sanitation Project

Community Based Management of Water Supplies (CBM)

Bubi Integrated Rural Water Supply and Sanitation Project

Field Visit

1US$=±37.7 Zimbabwe dollar

Project title	I. Participatory Hygiene Education and Sanitation project II. Community Based Management of Water Supplies III. Bubi Integrated Rural Water Supply and Sanitation Project
Duration	I. 1995-1998 (initially 3 years) II. 1997-2000(initially 2 years) III. 1996-1998
Area	Initially Matabeleland Region
Implementing Agencies	I. Ministry of Health and Child Welfare with funds channelled through UNICEF II. Ministry of Finance (coordination); District Development Fund, Ministry of Local Government, Rural and Urban Development, National Coordination Unit, Ministry of National Affairs, Employment Creation and Cooperatives, and Rural District Councils of Tsholotsho, Bulilimamangwe and Umguza III. National Coordination Unit in the Ministry of Local Government, Rural & Urban Development, Bubi Rural District Council
Other Institutions involved	National Action Committee, Provincial Water and Sanitation Sub – Committee, District Water and Sanitation Sub-Committee ,Ward and Village Water and Sanitation Sub – Committees
Irish Aid Contribution	I. £ 521,800 II. £ 361,590 III. £ 300,000
II. Contribution from others	Other major donors in the sector include,NORAD, UNICEF, SIDA, EU, Netherlands, ODA, Belgian Government, Australian Aid, Government of Zimbabwe and NGOs such as Save the Children UK, Plan International, Christian Care, CADEC.

1. Field Visit

The field visit in Zimbabwe was carried out in March 1999. The team, consisting of the IRC consultant and the local consultant (IWSD, Zimbabwe) was accompanied by UNICEF- WES staff. Before conducting field visits, the team had discussions with different agencies involved in the water and sanitation sector at the policy making level. These discussions involved government ministries, donor agencies and NGOs In order to get a broad based view of the projects, field visits were conducted in Matabeleland North Province (Bubi district) where Irish Aid is supporting an Integrated Water and Sanitation project, Matabeleland South Province (Bulilimangwe district), where Irish Aid is supporting participatory hygiene education(PHE) and community based maintenance(CBM). Another field visit was undertaken to Mashonaland East Province (Goromonzi district) where Irish Aid supported with PHE.

2. Policy Environment

A number of policy initiatives have influenced the implementation of Integrated Rural water supply and Sanitation in Zimbabwe. Some of the landmarks and milestones in respect of the sector have been:

- The Prime Ministers Directive which encourages decentralisation and sets up development structures from the village, ward, district, provincial to the national level
- The development of the Rural National Water Master plan provides the integrated and inter-sectoral policy approach to water, sanitation and hygiene. Water, sanitation and hygiene is currently implemented through inter-sectoral committees at the national level (National Action Committee, NAC) and Provincial level (Provincial Water and Sanitation Sub-Committee) and at a district level (District water and Sanitation Sub-Committee)
- The enactment of the Rural District Councils Act that gives local authorities greater autonomy and authority in the implementation of development projects.
- Sector Review in 1992 which agreed to pilot the implementation of water and sanitation through the Rural District Councils.

Presently the IRWSSP is implemented through local authorities with the inter-sectoral committee acting as technical advisor and provider of services. The NAC remains as a policy making body, developing strategies and monitoring the programme at national level. The NAC has a secretariat, the National Co -ordination Unit whose terms of reference include the operationalisation of NAC policies and strategies. The NCU is staffed by consultants. In order to achieve uniformity, the NAC has standardised various components of the programme (planning implementation, management, technology and service level)
The main goal of the programme is to improve the health and quality of life of the underserved through the provision of adequate, safe protected water supplies, safe excreta disposal facilities, hygiene education and promotion of community based management.

Table 1 – Zimbabwe Project – Setting

Coverage and level of service objectives	Phase 1 • Provision of safe protected water to all the people in rural and resettlement areas at a distance of no more than 500 metres • Provision of safe sanitary excreta disposal facilities to 50% of the households in rural and resettlement areas. • Rehabilitation of existing water points to national standard • Construction of headwork's in all water points
	Phase two • Provision of safe protected water supplies to all at a distance of less than 500 metres • Safe excreta disposal facilities to all households • Community management of facilities
Technology	• Basic primary water supplies for drinking and domestic purposes at communal level (1Shallow well = 50 people; 1 deep well =150 people; 1 borehole = 250 people) • Ventilated Improved Pit (VIP) latrine at household level
Construction/ Implementation standard	• use of participatory hygiene education for promotion of behaviour change • VIP latrines **Boreholes:** • casings • galvanised pipes • bush pump **Wells:** • pipes • push pump **Headwork's (apron, soak away, washing slab and cattle trough)**: • bricks • cement • stones and sand
Technology	• Boreholes and wells fitted with bush pump model B • limited spring protection • piped water schemes in areas where there is no other alternative • family wells fitted with a bucket pump • Blair Ventilated Improved Pit Latrine (VIP)
Design	• sector agencies

Construction	• RDCs contract sector agencies to do the construction • limited local private sector is utilised in latrine construction, headwork building
Approach	• RDC is tasked with management and co-ordination of water and sanitation programme at district level. • An inter-sectoral committee assists council in the co-ordination and implementation of the programme • Water and Sanitation sub-committees exist at ward and village level. • Mobilisation is done at the community level, followed by the Village consultative inventory which feeds into the ward plan and then the district plan. • Sector agencies are expected to take a lead in the different specialised activities e.g. mobilisation will be done by Ministry of National Affairs, Employment Creation and Co-operatives, Hygiene education by Ministry of Health and Child Welfare • RDC is expected to contract the services of the different ministries • Monitoring is expected to be done by the District water and Sanitation sub-committee
Community contribution	• Digging of first three metres of a well • Provision of locally available materials for the construction of headworks • Households dig the pit for the latrine, provide bricks and pay the builder.
Maintenance	• Three tier maintenance system (water point committee, pump minder and the district maintenance team) • If community based maintenance is institutionalised, pump mechanics will be paid by the community. • The district will provide back up for major repairs • Maintenance for latrines is done by individual household

Relevance

Irish Aid support has been directed to Matabeleland Region, which is characterised by low rainfall and is prone to drought. The Bubi district has not had any major donor assistance since independence and the integrated water and sanitation project will alleviate problems faced with water shortages and contributes to improved health and hygiene and standard of living.

Community Based Maintenance initiatives are being supported in Tsolotosho, Umuguza and Bulilimangwe districts. There are problems in operation and maintenance of existing water facilities and this justifies the piloting of new approaches. Effective community based maintenance is expected to reduce down time periods thereby alleviating the burden faced by women and children when the water points break down.

Support for Participatory Hygiene Education (PHE) has directly benefited Matabeleland Region where health problems are related to poor sanitation coverage of only 21%. Other hygiene related problems relate to poor water collection and storage practices, poor hand washing practices and lack of use of latrine by children under five. Due to the relevance of the methodology, Irish Aid has indirectly benefited other provinces and districts in the country through training and sharing of toolkits.

Integrated Approach

The water and sanitation programme in Zimbabwe is implemented through an integrated approach known as the "Intergrated Rural Water Supply and Sanitation Programme" The programme components include the development of water facilities, household latrines, promotion of improved hygiene, community based maintenance and decentralised planning, implementation and management. Initially, focus was on the development of water facilities but various sector reviews questioned the lack of outputs in hygiene and the low sanitation coverage. It was against this background that Zimbabwe participated in the piloting of the use of participatory methods for hygiene and sanitation (1994). Since then hygiene and sanitation are regarded as integral part of a water programme and improved hygiene behaviour is now the overall goal with water and sanitation structures becoming hygiene enabling facilities that ensure sustained behaviour change.

Although the Ministry of Health and Child Welfare is the lead agency in hygiene and sanitation promotion, responsibility for water and sanitation is given to the different sector agencies. Although provincial and district Water and Sanitation sub-committees have been trained or exposed to participatory hygiene education, this has not really led to the expected change in approach to water and sanitation provision at all levels in the sector agencies. For instance, the concept of PHE is that the community is encouraged to change from present conditions to something better, regardless of the technology. This is in contradiction with the regulation on standards to which sector agencies adhere in which improved sanitation is limited to one standard technology – the VIP. Similarly, the promotion of Community Based Maintenance, as a logical sequence to PHE, is not understood in the sector agencies, as the DDF keeps providing repair services for free.

Project Design

Support in all three programmes is done through the stipulated government policy and strategy and is integrated within the overall government structures. Support to Bubi district is channelled directly to the district, the PHE support is through the Ministry of Health and Child Welfare with funding coming through UNICEF. CBM support also goes to the district through UNICEF.

3. Institutional Setting

Institutional roles and responsibilities

At the district level, water and sanitation projects are being implemented through the Rural District Council with support from the District Water and Sanitation Sub-Committee. The same inter-sectoral committee exist at the provincial (PWSSC) and national levels (NAC) The main institutions within the water and sanitation sector and their responsibilities are as follows:

Table 2 – Institutions and Responsiblilities

Rural District Council	Overall management of water and sanitation programme, including planning, co-ordination, implementation, monitoring, evaluation, operation and maintenance.
District Development Fund	Borehole drilling, well sinking, head work construction, siting, training in community based maintenance, maintenance
Ministry of Health and Child Welfare	family wells, protection of springs, participatory hygiene education, training of latrine builders, supervision of latrine construction
Ministry of National Affairs, Employment Creation and Co-operatives	Community mobilisation, training in Community Based Maintenance
Agricultural Extension Services	Land Use Planning
National Economic Planning Commission	Project appraisal, monitoring and evaluation and donor co-ordination
Ministry of Finance	Disbursement of project funds
Department of Water Affairs	Borehole drilling, siting, hydro-geological surveys

Other institutions involved in the programme include NGOs who compliment the efforts of RDCs and sector agencies. It is government policy that activities of NGOs are part of the district development plans.

Privatisation

Although in principle, government would like to see private sector involvement, in practice most of the work is done through sector agencies. There is some private sector involvement at the local level in latrine construction, well sinking, head work construction and also in provision of supplies such as pipes, cement and other consumables. However, real development of the private sector is hindered by the fact that government is basically also providing the same services and either not charging or charging subsidised prices for these services. Of course, the private sector charges full cost and is therefore more expensive. Because the private sector that exists is limited, healthy competition to bring prices down is non-existent.

In addition, at the moment sector agencies contracted to do drilling activities are also responsible for quality monitoring. The RDCs do not have the technical capacity to monitor performance, either of the sectoral agencies or of the private sector. The conclusion is, that government is involved in too many different aspects of water and sanitation provision, including regulation, control, supervision and implementation. The location of these different roles within the government leads to confusion and unclarity with the result that government is not only limiting private sector involvement but also limiting community based maintenance.

Decentralisation

The government of Zimbabwe has, in principle, committed itself to decentralisation and this has been regulated through various acts and strategies (Prime Ministers Directive of 1984, Provincial Councils Act of 1985,and RDC Act of 1988). The 1992 Decade review has a key resolution stating that 'the future responsibility and authority for rural water supply must increasingly be borne by local authorities'. Thus, all new water and sanitation projects are being implemented through RDCs. Funds are supposed to be channelled directly to the Rural District Council which in turn is free to contract services from either the private sector or sector agencies. However, this is not always the case and where funds have not been decentralised, the RDCs have few resources at their disposal. As one district stated it: 'the central government keeps the money and power and we get the responsibility'. Planning for water and sanitation projects is based on village level consultative inventories that are then incorporated into the ward development plan leading to the district water and sanitation plan. The water and sanitation plan is seen as a sub-section of the overall district development plan. Districts can see that they will face problems in future with the operation and maintenance of too many systems, as they will not be able to fund major repairs and rehabilitation of these systems (that communities cannot bear), if they do not get sufficient funds from the central government.

Although the water and sanitation sector has moved rapidly in the implementation of decentralisation, there are few RDCs that have adequate capacity to manage the various programmes being decentralised. In addition, approval of the Ministry is still needed for the District Development Plans, thus limiting real decentralisation. The Provincial WSSC is supposed to assist the DWSSCs in the planning and implementation of the water and sanitation programmes, but even at provincial level, capacity is limited. Especially in

monitoring and supervision of the construction works, the lack of capacity has major implications for the sustainability of the CBM programmes. If the construction standard is low, operation and maintenance by the communities is more difficult.

Another problem in the decentralisation process relates to differences in sector agency priorities and RDC priorities. As primary allegiance of sector staff is to a large extent with the ministries rather than with the RDCs, the implementation of the district plans may suffer from neglect if the sector ministries want to concentrate on other issues. This applies specifically to staff of MoH and Ministry of National Affairs, Employment creation and Co-operatives, who are respectively responsible for hygiene education and social mobilisation.

Human resources and capacity building

There is a nation wide capacity building programme that seeks to facilitate capacity building within RDCs in the areas of Institutional, Capital and Human Resource Development. Since this programme more or less starts at the top, actual effects at district level are not yet visible. Within the overall water and sanitation programme, human resource development is a responsibility of the NAC sub-committee which identifies training needs, funds training programmes and solicits for resources. The human resource development is undertaken in two different ways. Individual sector personnel can apply for training courses and once accepted can then apply to the Human Resources Sub-Committee for funding. For this, sector personnel is expected to take the initiative. The other approach is that the Human Resources Sub-committee identifies gaps in capacity and knowledge and subsequently identifies appropriate courses for the different target groups. Such training courses can either be done by the NAC or sub-contracted to national institutions .

Irish Aid is involved in capacity building and human resource development through the Participatory Hygiene and Sanitation project and through the Community Based Management Project. Each of these involve a considerable amount of training and skills development for operations an maintenance (CBM) and skills for the application of Participatory Hygiene and Sanitation (PHE). Some of the structures that have been trained in PHE are:

- Provincial Water and Sanitation Sub-Committees
- District Water and Sanitation Sub-Commitees
- Environmental Health Technicians
- Health Orderlies
- Councillors
- Village Health workers
- School Health Committees
- Non -Governmental Organisations

The training is designed to create understanding, change attitudes, develop skills and furnish cadres with knowledge to facilitate participatory hygiene and sanitation at community level.

Under the CBM programme training has been given to water point committees and pump caretakers. However, during the field visits became clear that even if caretakers have been trained, they are not operational as communities still prefer to use the government pump minders who not only are perceived to have more experience but more important for whom the community does not have to pay. And thus is the government preventing both privatisation and community based maintenance. The need for follow up training was emphasised by the sector personnel. The Participatory Hygiene Education training cannot be a one-off activity as conceptualisation is in some instances a problem especially at the extension level where the link between demand responsive approach, community based maintenance and the use of participatory methods is not well understood.

The implementation of water and sanitation through RDCs is in itself a capacity building process, as it forces the district authority to acquire skills in planning, implementation and management of water programmes. However, the provincial authorities do not function well in their role of on-the-job trainers and advisors to carry out these responsibilities.

Monitoring and Evaluation

Monitoring is done at local level by extension workers. They feed the information to the district level Water and Sanitation sub-committee who is responsible for monitoring community level functioning. Project monitoring is done through a set of monitoring instruments on a monthly, quarterly ,half yearly and annual basis. In addition, at provincial, NAC and national level monitoring is carried out on a regular basis. Other monitoring mechanisms include the annual co-ordinators meeting and the sector reviews which brings policy makers and donors together. The sector reviews not only focus on programme progress but also on policy ad strategy direction.

A major problem with monitoring is that the focus lies on inputs (finance and material resources) and outputs (physical targets) rather than on qualitative aspects (process approaches, use, functioning). These are not reported on and the chance to obtain insight in what is happening on the ground is lost. Monitoring indicators especially for PHE and CBM have not yet been developed in a way that they are consistent at the different levels and can be triangulated.

4. Effectiveness and impact at field level

Demand Driven Approaches

In principle the implementation strategies that have been adopted in Zimbabwe are geared towards facilitating and promoting demand responsive approaches. Plans are expected to be generated at the lowest community level (village) filtering upwards to the district, provincial and national level. PHE is developed to assist and facilitate a process in which communities assess their own hygiene behaviour and conditions. They then identify interventions for change with the full knowledge of the economic and social implications of the proposed interventions. These are consequently implemented with government, local authorities and NGOs facilitating and assisting when called on to do so. However, given the fact that the DRA (and PHE) is being promoted within an already pre-determined sector, communities are limited to demand assistance within that sector.

Another issue is related to standardisation versus DRA. Zimbabwe has limited sanitation technologies to the VIP latrine and water technology to boreholes and wells. This is seen to limit the scope of user choice, especially with regard to sanitation as the selected technology is quite expensive and beyond the paying capacity of many of the poor. On the other hand, standardisation facilitates back up support for maintenance and repair by institutions and/or the private sector.

Sanitation is often least demanded by the communities and it is in this aspect that PHE is playing a vital role. Demand for sanitation services is usually based on reasons of:

- privacy and convenience
- health awareness
- existence of a subsidy (the programme provides cement subsidy, though household contribution remains higher)

.

Reasons for demand for water facilities are:

- Reliability of water sources
- lack of any other alternative source
- Convenience with reduced distances
- Health awareness
- Existence of subsidy (there is a greater subsidy for water facilities as compared to latrines)

Community Involvement

The Village development committee (VIDCO), the Ward Development Committee (WADCO) and the Rural District Development Committee (RDDC) are development structures which have been put in place to ensure community involvement in planning and implementation of water and sanitation programmes. Other community level structures include health committees and village water and sanitation committees. These committees evolve differently in each area and participatory approaches are being used to promote community involvement. The Ministry of National affairs, Employment Creation and Co-operatives has the responsibility for community mobilisation. However, the capacity of its staff at district level is low, not only in terms of training but also in terms of numbers and wages and in terms of mobility. They are usually dependent on other staff, especially MoH, to get around. While in principle this would facilitate integration of the different activities, it also has repercussions in terms of time spent in the field and thus on effective community mobilisation through participatory approaches.

Community involvement is seen to take place in:

Planning

- needs identification and requests for improved water and sanitation facilities
- village based consultative inventories
- identification of risk behaviours for PHE

Implementation

- land use planning
- siting of sites for water points
- Digging of the first three meters for a well
- Provision of labour, local materials and bricks for headwork construction
- Digging , provision of bricks, sand , stones and payment of the builder in a family well
- Selection of latrine builders
- Construction of other hygiene enabling facilities such as rubbish pits, and pot racks and implementation of hygiene interventions like proper water storage.

Monitoring

- monitoring materials during construction of water an sanitation facilities

Operation and Maintenance

- identification and selection of pump mechanics for training
- selection of water point committee
- primary maintenance
- assisting the pump mechanic with major repairs
- where CBM is being practised, payment for repairs

During the field visit, it was evident that communities regard the water points as their property and responsibility. But, it was also clear that they still view that the government is responsible for major repairs and their cost.

Functioning and Use of water Schemes

Most of the water points for communal use are either boreholes or wells fitted with a bush pump. At the household level, there are family wells fitted with a bucket pump. The team visited only very few water points, and though most were functioning, none was functioning well. The bush pump is very heavy to handle and need more than one person to get water; the headworks are standard and not adapted to what the users wanted. This puts a question on the application of DRA principles. Similarly, where water systems had been rehabilitated under the CBM programme, it was clear that the rehabilitation had been done without the involvement of the users, other than helping to dig and provision of materials, and without the communities having gone through participatory training for CBM. Similarly, the hygiene education activities also did not seem to be in line with the construction works and the impression was that the communities are basically left on their own after construction has taken place.

Sustainability of WS facilities

There is a lot of discussion about sustainability in the country and a strategy document has been produced on sustainability. The general thrust for sustainability is seen to lie with community management and RDCs. The current operation and maintenance system has been through a three-tier maintenance approach. At the lowest level there is a water point committee whose main task is primary preventive care. The second tier has the pump -

minder who is a paid employee of a government department but accountable to the community. The approach is in itself not very sustainable as the community cannot control this cadre whom they are not paying. At the district level there is the District Maintenance Team which is supposed to give back-up support for major repairs to the pump-minder. Over the past years problems have been related to long down-time periods, declining budgets, over-stretched personnel with no transport support. This has led to piloting of community based management in selected districts, but so far impact has been minimal and even in the districts where CBM is being piloted, it has proved to be problematic. Political commitment to the CBM is still lacking and there has been no clearly defined policy. While strategies exist, these are not backed by policy.

Financial issues

Presently communities are not collecting funds for repair and maintenance of their water points. In some communities funds have been collected for buying items like grease, rubbers etc, but this is on an ad-hoc basis. If regular fund collection is taking place, there is a problem with inflation and the difficulty of having bank accounts. As long as at political level is not clear who has to responsibility to pay for what, communities will never be able to establish proper maintenance funds.

At district level, most of the funding for WSS services comes from donor funding.

Environmental Issues

Water resource management has come into the limelight and there is a project working on water resources strategy document within the country. A new water act has been drafted and in some cases catchment authorities are being formed. Increasingly there is a move to focus on environmental issues and the seeing water supply projects as part of a wider water catchment system. At system level, DWSSC needs to be trained to supervise proper siting of bore-holes taking into account run-off, erosion, cattle watering and its effects on the surroundings, as well as proper construction of soak-aways.

Zambia : Irish Aid Northern Province Development Programme (NPDP)

UNICEF WASHE programme in Southern Province
Urban Upgrading programme (now POCMUS)

Field visit
1US$=± 2400 Kwacha

Project Title:	I.	Irish Aid Northern Province Development Programme (NPDP)
	II.	UNICEF WASHE programme in Southern Province
	III.	Urban Upgrading programme (now Promotion of Community Managed Urban Services project -POCMUS)
Duration:	I.	1983 –2000
	II.	1997 – 1999 (?)
	III.	1991- 2001
Area:	I.	Northern Province, Zambia: Kasama, Mungwi, Kaputa, Mpika (Nabwalya), Mbala, Mpulungu, Isoka and Nakonde
	II.	Southern Province: Choma, Monze, Mazabuka
	III.	Kamanga, Ndeke, Chiba and Maround Compounds (old) and some new compounds
Implementing agencies:	I.	districts, since 1998 D-WASHE
	II.	D-WASHE (Choma)
	III.	District with assistance from POCMUS Team
Other institutions involved:	I.	Ministry of Health, Ministry of Energy and Water Development, Ministry of Local Government, Ministry of Education
	II.	UNICEF, N-WASHE, Ministry of Health, Ministry of Energy and Water Development, Ministry of Local Government
	III.	CBOs, Local Government Departments, NGOs
Irish Aid Contribution (1998)	I.	£924,271
	II.	£68,874
	III.	£252,000
I. Contributions from others:	I.	Community contribution (unskilled labour for construction and rehabilitation, maintenance funds in cash or kind)
	II.	UNICEF, communities
	III.	Communities

1. Field Visit

The field Visit in Zambia was carried out in April 1999. The team consisted of the IRC consultant and a local consultant (IWSD, Zimbabwe). In Northern Province the team was accompanied by Irish Aid staff (deputy coordinator and technical advisor) and in Southern Province, Embassy staff and UNICEF staff participated in the visits. All visits were guided by D-WASHE or other district staff. In Northern province, the districts Mungwi and Mbala were visited. In Southern province, visits were made to Choma and Monze districts.
Discussions were also held with the Provincial WASHE in Northern district and at national level with N-WASHE, POCMUS staff, the Reform Support Unit (RSU) and UNICEF.
For the POCMUS programme, field visits were carried out to the following compounds: Kamanga (Lusaka), Ndeke and Kaleja (Mazabuka district) and Chiba (Kasama district). In addition, discussions were held with the CBO/POCMUS team people of Chiba, Chitamba and Chipula compounds.

2. Policy environment

In an attempt to alleviate the major problems identified in the rural water supply and sanitation sector, the Government of the Republic of Zambia initiated the Water Sector Reform Policy in 1993. A National Water Policy was developed in 1994 with universal access to safe adequate and reliable water supply and sanitation as the main goal. The National Water Policy is the enabling and guiding policy for provision of support to the rural water and sanitation sector and the following WSS strategies are outlined for the rural areas:

- Ensuring that RWSS programmes are community based
- Developing a well-defined investment programme for sustainable RWSS
- Promoting appropriate technology and research activities
- Developing an emergency and contingency plan to mitigate impacts of droughts and floods in rural areas
- Developing a cost recovery approach as an integral part of RWSS which will ensure sustainability
- Developing and implementing a well articulated training programme

The policy stresses that the starting point for the implementation of the reforms and the provision of support to the sector is the promotion of community based management and integration into the government structure of water supply, sanitation, and hygiene education (WASHE). The WASHE concept is an intersectoral approach to planning, implementation, operation and maintenance of rural water supply and sanitation strengthens the concept of partnership between communities and support agencies.

The Water and Sanitation Act was effectuated in 1997, but does not make any reference to rural water and sanitation. It is primarily concerned with the setting up of viable commercial utilities to supply water in urban areas and to rehabilitate urban water systems. Where these commercial utilities cannot be set up, as in the Northern province, the responsibility for urban water supply has been handed over to District Councils.

Personnel from the Department of Water Affairs (DWA) have been seconded to municipal and district councils to assist in the operation and maintenance of water supply systems. For the time being until the end of year 2000, the responsibility for rural water supply and sanitation lies with the DWA until an official hand over will be made to the Ministry of Local Government and Housing (MLGH). At district level, the councils depend on the advice of water engineers. There is currently no provision in the MLGH to establish positions for rural water and sanitation staff at provincial or district level.

The decentralisation policy in Zambia has not been legally effectuated. However, some elements of it are being encouraged such as emphasis on district and community decision making.

In addition to the reforms in the water sector, almost all other sectors are also undergoing reforms. This has an adverse effect on their productivity in the short term. Civil servants are poorly paid and their departments are inadequately funded which frustrates and demoralises them. Most district councils do not have district planners, thus planning capacity at district level has been weak, including D-WASHE planning capacity.

It needs to be emphasised that the success of the water and sanitation reforms depends to a large extent on

- Clear roles and responsibilities of the different levels of government
- adequate capacity in the D-WASHE to stimulate and support activities at community level
- adequate capacity at community level for decision making and management,
- a sense of ownership of the water and sanitation systems among the local communities
- generation of adequate finances for provision and operation of services to the communities

Table 1 – Project Setting

Coverage and level of: service objectives affordable	• universal access to safe, adequate and reliable water • improvement of access to appropriate, acceptable and excreta and domestic waste disposal facilities through sustainable approaches that are demand driven and promote hygiene behavioural changes that bring about health and well-being of the people
Technology: Technology standard:	• hand dug wells with bucket and windlass (improved traditional well) • cylinder wells with bucket pumps or handpumps • boreholes with bucket pumps or handpumps • self dug family wells • Improved traditional latrines (households) • VIP latrines (schools, rural health centres and households). • Technology options are being explored for selection as standard
Design:	• DWA
Construction:	• private contractors
Approach:	• The different ministries, Education, Health, Community development, Agriculture and Water Affairs formulate their plans • These plans are consolidated to form one D-WASHE plan. • The D-WASHE prioritises the activities and areas of coverage. • The D-WASHE submit plans for funding • All activities are co-ordinated by D-WASHE, but implemented by the different ministries • D-WASHE identifies training needs and trains Sub- D-WASHE (community mobilisation and hygiene education to be conducted by sub-district and district staff) • Area community organisers (ACO) carry out health education (in southern province) and community mobilisation • Establishment and training of Village (V)-WASHE committee • Construction by private sector, with assistance of community, supervision by district or DWA
Community contribution:	• Establishment of V-WASHE • Contribution in form of funds, food, labour , local materials and livestock • Operation and maintenance
Maintenance:	• No policy

Relevance

Access to safe drinking water in Northern province stands at 17% and sanitation coverage ranges from 11 % in some districts and 50% in others. The province, which is predominantly rural, is the poorest in the country. The high rate of water borne diseases provides a need for interventions that will ultimately lead to improved health. Irish Aid interventions are expected to contribute to improved health of the rural populace and support to district level is in line with the decentralisation policy.

In Southern province, coverage levels are around 50% for water supply and the districts are prone to drought. Conditions in this province are quite different from the northern province and UNICEF is testing out a different institutional approach to WASHE. In itself it is relevant to experiment with these approaches.

POCMUS activities are highly innovative, as the approach used is new in the country. The living conditions in the compounds are bad, with cholera being a yearly plague due to the unhygienic environment and low awareness with the population. Government activities in these compounds are minimal and therefore the programme is highly relevant. In addition, it is in line with the new government policy on service provision in compounds and works within the government structures.

Integrated approach

The WASHE concept has been developed to promote sustainable WSS supported by health and hygiene education. It is based on the formation of committees at community, sub-district and district levels, whose members are those people with active interest in the improvement of health and well-being of rural communities. The concept:

- promotes co-ordinated planning of WSS programmes using participatory techniques
- involves and develops integrated capacities and resources of all sectors
- improves decision making by encouraging WASHE committee members to regard themselves as a team (not as representatives of their respective ministries)
- guides the executive authorities in the implementation of the programme by devolving management responsibilities to the lowest level
- develops long-term support in which communities take responsibility for operation and maintenance

The D-WASHE is responsible for the management and co-ordination of health education, behavioural change and environmental sanitation programmes. However, this activity is severely affected by lack of funds and IEC materials. Sanitation is not seen as a priority by communities or by district staff and focus is therefore more on the construction of new water points.

No mention has been made of any integration with a water resources management policy. This is a severe drawback as in the Northern province seasonality of supply is a major problem and the groundwater levels seem to be falling gradually. This means that a significant proportion of the sources are not usable year round. The Southern province is drought prone and a more holistic approach would also be beneficial in the districts.

Project Design

Since 1983 Irish Aid has actively supported the rural water and sanitation sector activities by directly constructing and rehabilitating water points and sanitation facilities in some districts of Northern province. Originally, the rural water programme was based in Kasama district and was built around the concept of community participation. Under this Programme many village wells and wells at rural health centres and schools were constructed or rehabilitated. By 1995 coverage, by wells in use, had reached 43% in Kasama District, while the provincial coverage was only 5%. In 1993 the Programme was extended, to cover Mbala were coverage reached 11 % by 1995. Further extensions have now taken place, to cover other districts, namely Isoka, Nakonde, Mpika, Kaputa, Mpulungu and Mungwi.

The Irish Aid Rural water supply and sanitation (RWSS) in Northern Province is run under the Northern Province Development Programme. Until 1997 the project operated as an autonomous and separate structure with the project directly implementing all activities. Irish Aid in consultation with various stakeholders, has since reviewed its policy in the implementation of projects. In the reviewed structure support will be channelled to the district through the Provincial WASHE. Although Irish Aid will continue to be actively involved in RWSS, it will have a different role as a facilitator and using an integrated approach, rather than as implementor. To reflect these new changes, a RWSS plan is currently been developed with a three year timeframe (1999-2001).

Currently the Irish Aid RWSS project is supported by two expatriate technical advisors and one local technical advisor. The transfer of responsibilities to the district administration (D-WASHE) has meant transfer from a full time management structure with generous resources in terms of transport, salaries, allowances, equipment to a part time committee each of whose members have several other functions to fulfil, little resources and poor salaries. Despite this heavy responsibility, D-WASHE have been reasonably successful.

In southern province, the UNICEF approach is followed, in which planning is carried out by D-WASHE and implementation to a large extent through NGOs. At community level, area community organisers (ACOs) and pump minders, that are meant to be paid by the communities, are active.

Under the POCMUS programme, national, provincial and district level committees for POCMUS have been formed and committed. The programme is thus integrated into the local administrative structure to ensure sustainability. Focus is to a large extent on capacity building at all levels while also advocacy to change attitudes is considered important. The approach used starts with participatory hygiene education and community mobilisation and the design of an integrated plan to improve basic services with the involvement of all stakeholders. Where major construction works need to be carried out to implement basic services at community level and insufficient funding is available at municipal level, use can be made of the Irish Aid Capital and Training project funds to support the community contributions.

3. Institutional setting

Institutional roles and responsibilities

The decentralisation policy in Zambia has not been legally effectuated and no institution has been designated to 'harbour' rural WSS and WASHE. There is a lack of ministerial support to the WASHE concept and this reduces its effectiveness. If the ministries do not acknowledge WASHE activities in budgets, district implementation will remain donor dependent, intersectoral development will not be given priority and legislation will continue to make WASHE operations difficult to undertake under government regulations.

Until 1998, NPDP was the implementing agency with district offices implementing projects. This has since changed and at a district level, the D-WASHE co-ordinates all WASHE activities. In 1998, the process of developing a Northern Province Rural Water Supply and Sanitation Programme was started. This process involved consultation with rural communities, relevant district, and provincial and central government departments, NGOs acting in RWSS, and other relevant stakeholders at district, provincial and national level. The programme provides a general guideline of priority areas over a period of five years and has been divided into four components, namely water supply, water resource management and hygiene education. A provincial core team has been put in place to ensure that the process takes place as envisaged and the Ministry of Local Government and Housing has been elected as the lead agency.

In Northern Province, the P-WASHE has been given a distinct role and responsibility in:

- support in co-ordination to D-WASHE
- logistical support
- review of D-WASHE action plans in view of available funding
- assist in securing donor funding
- technical support

Furthermore, the P-WASHE will be getting a training secretariat to train D-WASHE.

D-WASHE has the responsibility to co-ordinate, plan and promote the development of an integrated approach to water supply and sanitation and to translate the main points of the National water policy into a D-WASHE development plan. At district level the line ministries involved in WASHE comprise members of the committee.

In many districts, WASHE committees do not function well for several reasons. First of all, not all members have an equal status and decision making power within the committee. Secondly, not all staff at district level is paid wages at a similar level, or receives allowances in a similar way, resulting in a difference in motivation. Thirdly, the line ministries may have their own activities to be carried out at district level and water and sanitation may not be a priority. In such cases, the (line) district staff may not have the capacity (manpower, time or budget) to get involved in water and sanitation activities to the extent needed, nor will they be able to change the priorities at central level.

In the past year, Irish Aid has actively supported D-WASHE through funding district water, sanitation and health education plans through government structures. These are in place but inadequately funded by the Government. Similar support is taking place in Southern district through UNICEF.

Apart from the above mentioned responsibilities, the D-WASHE are expected to source for funds, prioritise activities, train the sub-D-WASHE and provide funds for the sub-D-WASHE to implement the activities mentioned in the D-WASHE plans

Decentralisation

The decentralisation policy has not yet been passed by parliament but government has continued to emphasise on many of its elements such as district decision-making and district level capacity building. Both national and district level institutions have been strengthened, and provincial powers have been reduced. A decision has been made on some of the key positions in the districts and district structures are being put in place such as hospital and school boards. At the same time, some ministries such as Health, Education and Agriculture have been restructured and are in the process of decentralisation, but this is still at an experimental stage and is not fully developed. Most ministries receive grants from the central government to fund various activities, but this funding is not sufficient to support the changes that decentralisation requires. Through the Public Service Reform Programme (PSRP) staffing levels have been greatly reduced at district and sub-district level through retrenchment and voluntary separation. This has forced district staff to undertake activities that would normally not be done at a district level. The incompleteness of the PSRP and the delay in passing the decentralisation policy has caused anxiety, uncertainty and unclear responsibilities and roles.

The intersectoral planning and co-ordination bodies (Provincial and District Development Co-ordination Committees) which form part of the decentralisation policy are only just beginning to develop and have not been supported by MLGH. They have been constrained by having no legal status, no funds and in many cases little real support from associated councils.

Privatisation

The Government of the Republic of Zambia is committed to privatisation. In view of this commitment, the Water and Sanitation Act has encouraged the setting up of commercial utilities for urban service provision. While it is already questionable if this privatisation drive is viable for urban centres, it is even more difficult in rural areas. The sector has access to the private sector through the use of private drilling companies and private well diggers, and large programmes make use of these. But for sustainability aspects as spare parts distribution, maintenance and repair services, demand and capacity to pay is too small in the rural areas to be attractive for the private sector. Moreover, spare parts distribution at present is carried out through DWA at a highly subsidised rate and therefore private sector is always more expensive, reducing demand.

In Northern province, an aspect which will be encouraged, is the production of spares by local manufacturers. The main concern to be addressed in using local products will be the need to set up a monitoring system for monitoring the quality of products.

Human resources and capacity building

Human resources in the water and sanitation sector in Northern Province in particular is very limited. At provincial level, over the years, a considerable amount of capacity was built under the project structure by involving DWA officers in charge in planning and overall project management, while also other operational staff from the in the district (either staff seconded from the government or staff directly hired by the project) received on the job training and well construction and community mobilisation teams were trained. Capacity building concentrated more on individuals than on institutions, which was necessary due to the flux in the sector. However due to the restructuring of the ministry, a considerable number of staff have been retrenched, including many who were trained. A second issue is that because of poor conditions in the Government, few qualified people are attracted to work in the civil service, while no use is being made of training that staff may have received at an earlier stage.

National (N-)WASHE is to a large extent funded by Irish Aid and has been set up with a view to establish and train district WASHE committees throughout Zambia. The development of D-WASHE committees involves several stages:

- introduction of the integrated and intersectoral approach
- formation of D-WASHE committee
- training in aspects of water supply and sanitation
- development of a situation analysis for the district
- training of trainers in participatory methods such as PRA, to be used in training sub-district staff
- identification of objectives and making of plans

Although N-WASHE has been very active in the field of capacity building at district level, its own capacity is limited by staff constraints. N-WASHE staff is severely overburdened and this has the effect that no follow-up visits, and monitoring of the training is carried out, which reduces the effectiveness of the training.

Basically, the same applies for the D-WASHE who are expected to train staff at sub-district level. It is questionable if after only a 'schoolroom' training, the D-WASHE staff will be able to effectively train the sub-district, who then have to apply this training at community level. Yet, at most water points visited, the communities were trained in operation and maintenance of their system.

Another constraint in human resources at district level, is the limited number and limited transport possibilities of the Environmental Health Technicians, who are supposed to carry out hygiene education at the community level. Restricting is also the fact that they can only spend a small proportion of their time on WSS.

Experiments are being carried out with offering the motorcycles in a kind of purchase scheme where the staff pays for the motorcycle in installments from their salary and at the end of a number of years owns the motorcycle. This has had the very positive effect that this staff is extremely careful on the cycle and misuse for non-project purposes in project time has diminished because it is no longer necessary to do this in project time.

In the POCMUS programme in Northern Province in Zambia, in the compounds which have been included more recently, attention so far has been given mainly to community mobilisation, training and information. This has been done so well, that the community committee, even after a period of two years and no construction of a system (due to a variety of reasons), has been able to keep the people interested to participate in activities. Moreover, through the effectiveness of the information, the committee understands exactly why the system has not been built and through effective training of the committee, it is able to also convey this message to the community at large. Community leaders even said that in case funding would not be obtained, at least they had the benefit of training which helped them to establish development goals and priorities for the community.

Monitoring and evaluation

In both northern and southern provinces, monitoring has mostly been restricted to monitoring project implementation. Quarterly and audit reports from districts are produced. Monitoring on sustained use and on hygiene behaviour is not being carried out at all, in either province. Since water levels have been dropping, more structured monitoring of these levels is being attempted.

At community level monitoring does not seem to be done, except in places in southern province where an active ACO was present. But as communities are now supposed to start paying the ACO for his services, it is unlikely to continue.

In the newer POCMUS compounds visited, monitoring is being carried out by the community representatives at the time when also community contributions are being collected.

4. Effectiveness and impact at field level

Demand responsive approach

The structure of the D-WASHE is designed to take into account the needs from a demand basis. The plans are supposed to reflect the response to the needs at a community level. In areas where water is a problem and there are no other sources, the demand for water facilities is much higher than in other areas. Also, people are more prepared to pay for operation and maintenance in these areas, thereby confirming the advantages of a truly demand responsive programme. It was not really clear to the mission whether the D-WASHE are doing their prioritising of activities on the basis of demand from the communities or whether they go to the communities who they first identified as being 'in need'. It may well take a number of years, more funding and more logistic support to the D-WASHE before a truly demand responsive approach can be operational.

Sanitation is now receiving more attention especially as an overall strategy to promote environmental sanitation, addressing faecal and solid waste disposal, hygiene behaviour and safe use and storage of water. Overall demand for sanitation facilities has been low. In the POCMUS project, involvement therefore starts with hygiene education.

Community involvement

The National Water policy calls for increased community involvement in the planning, maintenance and management of water supply facilities to ensure long term sustainability. Thus, officially communities are involved during the different phases of the programme implementation in different degrees. However, actual involvement is dependent on the D-WASHE and on the degree of demand for the programme and this varies from place to place. Community members (men and women) are everywhere asked to contribute labour, river sand, stones and a minimum contribution towards the maintenance of the facilities. Also, all communities are establishing a V-WASHE which is being trained by the D-WASHE. However, this kind of community participation in itself does not lead to ownership and sustainability of water and sanitation facilities. For this to happen, the communities need to be involved in other aspects such as technology choice and planning. While in some districts (such as Mbala), this is indeed happening, non-involvement in technology selection, site selection and management was also encountered.

Drilling of bore holes is a lot less time consuming than the promotion of spring protection or hand-dug or hand-drilled wells, while the cost of bore holes vary from US2,200-US$5,000 and the other technologies are below US$2,400, not including the cost of mobilization. In one district visited the D-WASHE was only concerned with boreholes because they found it a lot less work themselves in terms of community motivation. The drilling of a borehole takes about three days, and the community is expected to contribute materials and food for the drilling crew. If the community has to dig a hand-dug or hand-drilled well, this may take from 5 weeks (hand-drilled) up to 8 weeks (hand-dug) and a lot of organisation within the community. Thus it requires much more effort from both the community and the WASHE team.

The role of men and women is being emphasised in the D-WASHE and the communities. This has led to the adoption of women in key roles in V-WASHE committees – this is a positive step towards changing the perception of women's capacity in management without simply burdening them with more physical tasks. In the D-WASHE committees in Northern province, efforts are directed to increase the number of women on the D-WASHE by including female teachers and community health workers. This is better than to depend on the district level officers who are predominantly male and who do not provide a role model for women at community level. Generally only staff from Community Development is female and that ministry is characterised by very limited resources (human and other).

In Southern province, caretakers are trained in regular maintenance while pump minders are trained in installation, maintenance and repair, to be paid by the communities for their service.

Community involvement in the POCMUS programme, especially in the newly added compounds is very high in all phases of the programme cycle. Here it is the communities who seem to decide on the priorities for development and who also contribute in implementation, as well as towards maintenance of the facilities, including paying monthly fees.

Functioning, use and sustainability of WS facilities

In Northern province, it appears that 25 to 30% of communities with protected sources use more than two sources. Except for Kaputa there is a variety of alternatives available and distances to water sources are short. A variable proportion of wells in each district are out of use or go dry seasonally, and so do not provide a reliable supply at the most critical time of year. Overall it appears that some 72% of the wells are fully functioning, this is around 60% for the districts where well construction has been going on for longest. Despite continued well-deepening, 30% went dry in Kasama District in 1997 at a time when alternative sources were most difficult to find.

In surveys carried out in 1998, over half of the buckets were found to be leaking badly or missing, one third of chains missing or in very bad state. In Mbala, of the 126 wells handed over, 37% of problems of non-use related to weak community management and 63% to technical difficulties, mainly wells drying out. The reform in 1997/98 (less field back-up activities) and low water levels in late 1997 seem to accelerate the number of wells going out. In Kaputa the situation was found to be very different because of the higher demand for water, and apparently the higher willingness to pay for and maintain supply facilities. Some wells have gone out of operation because water quality has declined in the dry season. In general water quality is good, with some 80% of improved traditional and rehabilitated wells with less than 10 FC/100ml, and water from boreholes and cylinder wells of the highest quality.

The main advantage of Irish Aid funded wells other than cylinder wells and boreholes appears to be proximity, convenience and the potential for using more water. Little work has been done on preferences for water sources and perceived benefits as well as on hygiene education leading to increased motivation for the use of improved wells. Also hygienic use of the water systems can be questioned, as hardly any effort seems to have gone into these aspects of the water supply systems. The few water supply systems the mission saw in the districts (except Mbala) and the discussions with the people present at the pumps, did not reveal much attention to behaviour and hygienic use. Similarly, in Northern province, hardly any attention had been paid to sanitation provision.

Irish Aid is promoting the bucket pump on cylinder wells and bore holes. The pump and bucket need to be imported from Zimbabwe. A (replacement) bucket is sold by the DWA at a price of 25,000 kwacha, but the real cost is over 60,000 kwacha. Although the technology is quite well received in the province, the quality control of the imported buckets is lacking and a local unit to manufacture the bucket is needed. However, the bucket is quite bad from the point of hygiene, as people tend to hold the bucket in their hands when emptying it and thus contaminating the well itself.

This is different in Southern province where UNICEF does promote san-plats at household level and promotes hygiene education and behavioural change through the use of the ACOs (area community organiser) . Only, a problem there is the unstable soil, seasonal floods and waterlogged areas which make many of these latrines collapse.

A woman had built a very nice latrine, with support from the district WASHE. However, already after half a year, the latrine collapsed during the rainy season because the sandy soils were not firm enough. The suggestion to build a shallow pit and move the superstructure when it was full was culturally not acceptable. It was unlikely that the woman would rebuild her latrine without lining, but at the same time she had no funds to pay for a lining, nor the technical know-how.

Little attention has so far been paid to building up the maintenance systems needed to keep existing wells in operation and often spares are not locally available. If they are available, this is at highly subsidised prices which affects sustainability just as well. Communities are generally not seen to contribute to maintenance funds and D-WASHE also do not give much attention to these aspects. It is mainly DWA that is expected to assist communities with repairs, but this will change under the reforms.

Environmental issues

The issue of falling water tables has already been mentioned, as well as the droughts in southern province. What has not yet been mentioned is the traditional wells in relation to water resources management. This is becoming a point of attention as D-WASHEs are coming to realise that tampering with traditional sources may badly affect overall availability of water. Irish Aid is therefore supporting research into use and sustainability of traditional water sources.

In the POCMUS programme, environmental issues form a very large part of the hygiene education and mobilisation activities. Solid waste collection and non-availability of sanitation systems do have much more impact on the environment in densely populated areas and therefore are a major focus of the programme. However, the evacuation of the wastes from the compounds fitting in with municipal level collection is a point of concern.

Annex D

People consulted / Literature used

Annex D - People consulted / Literature used

Names	Position
Margaret Hennessy	Assistant Secretary
Martin Greene	Counsellor for Priority Countries
Ronan Corvin	Desk Officer for Priority Countries
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Liz Higgins	Education Advisor
Brian Wall	Head of Evaluation & Audit Unit
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POCMUS (PAC) Committee	Kasama
Staff of D-WASHE	Mbala
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Final Policy development workshop, Zambia

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