Review of Irish Aid involvement in the WSS sector in sub-Saharan Africa

Volume III:

Annex III

Report on the field visits to Irish Aid supported WSS projects in sub-Saharan Africa

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L1Drary
IRC Internal (Water and Pointage Control of Tel. 21 70 10 10 60 Few: +31 70 10 10 64



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LIBRARY IRC
PO Box 93190, 2509 AD THE HAGUE
Tel.: +31 70 30 689 80
Fax: +31 70 35 899 64
BARCODE: 16464
LO:

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Introduction

In this annex 3, 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 1 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:

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
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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 MoHtrained 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 coordination 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

Design title	Kihania District Davidance at December
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.

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:

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 Committee	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:

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

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.

Pre-construc	tion phase C	Construction phase	Operation and maintenance
meeting 2. Sub-count developm (technolog 3. Survey wa 4. Mobilization • Resources (material, financial) • Committee • Caretaker 5. Training or committee	ent committee 3 3 3 4 2 2 3 3 3 3 3 3 4 3 3 3 4 3 3 4 3 5 5 6 6 7 6 6 7 6 7 6 7 6 7 7 7 7 7 7 7	 Site clearance Collection of materials Construction or rehabilitation On-the-job-training (masons) Health and hygiene education Environmental improvement around source (fencing, planting) Commissioning and certification 	 Functioning and use Proper utilisation Regular maintenance Establish regular monitoring system and water quality control Regular WSC meeting Establishment of financial management system

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:

ls	sues	Solutions
•	Men are expected to do heavier work Poor understanding of gender: men do not want to talk about gender	 Men and women share responsibilities in WSS activities Gender sensitization at all levels
•	Women take sole responsibility for hygiene education for children Lack of empowerment of women on	 Include men in training in hygiene promotion Post primary education for girls

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

- 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

105\$=±37.7 Zimbabwe dollar	
Project title	 Participatory Hygiene Education and Sanitation project Community Based Management of Water Supplies Bubi Integrated Rural Water Supply and Sanitation Project
Duration	 1. 1995-1998 (initially 3 years) 2. 1997-2000(initially 2 years) 3. 1996-1998
Area	Initially Matabeleland Region ¹
Implementing Agencies	 Ministry of Health and Child Welfare with funds channelled through UNICEF 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 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	1. £ 521,800 2. £ 361,590 3. £ 300,000
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

¹ Initially Irish Aid was targeted to Matabeleland Region but the support for PHE has trickled to other provinces as well since some f the materials developed under Irish Aid have been used in training of Water and Sanitation sub - committees in other areas.

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.

 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

	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/	use of participatory hygiene education for promotion of
Implementation	behaviour change
standard	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
reamology	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-
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ì	done by Ministry of National Affairs, Employment
	Creation and Co-operatives, Hygiene education by
	Ministry of Health and Child Welfare
	I willistry of Ficaltif and Office Wellare
· · · · · · · · · · · · · · · · · · ·	 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

	 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 subcommittees 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:

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	Project appraisal, monitoring and evaluation and
Commission	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-Committees
- 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 runoff, 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 visit²

1US\$=± 2400 Kwacha

1035-1 2400 Kwacha	
Project Title:	Irish Aid Northern Province Development Programme (NPDP)
	2. UNICEF WASHE programme in Southern Province
	3. Urban Upgrading programme (now Promotion of
	Community Managed Urban Services project -
	POCMUS)
Duration:	1. 1983 –2000
	2. 1997 – 1999 (?)
	3. 1991- 2001
Area:	1. Northern Province, Zambia: Kasama, Mungwi,
	Kaputa, Mpika (Nabwalya), Mbala, Mpulungu,
	Isoka and Nakonde
	2. Southern Province: Choma, Monze, Mazabuka
	3. Kamanga, Ndeke, Chiba and Maround Compounds
	(old) and some new compounds
Implementing agencies:	1. districts, since 1998 D-WASHE
	2. D-WASHE (Choma)
	District with assistance from POCMUS Team
Other institutions involved:	Ministry of Health, Ministry of Energy and Water
	Development, Ministry of Local Government, Ministry
	of Education
	2. UNICEF, N-WASHE, Ministry of Health, Ministry of
	Energy and Water Development, Ministry of Local
	Government
	3. CBOs, Local Government Departments, NGOs
Irish Aid Contribution (1998)	1. £ 924,271
, ,	2. £ 68,874
	3. £ 252,000
Contributions from others:	Community contribution (unskilled labour for
	construction and rehabilitation, maintenance funds in
	cash or kind)
	2. UNICEF, communities
	3. 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.

² This report is based on the contribution of the Irish Aid deputy co-ordinator, presented during the Irish Aid policy development workshop, held in Lusaka in april 1999, as well as on the field visit and exisitng documentation.

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

Coverage and level of service objectives:	 universal access to safe, adequate and reliable water improvement of access to appropriate, acceptable and affordable 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:	 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 standard:	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, NG0s 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

Purthermore, 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.