Journal of International Development

J. Int. Dev. 15, 1099–1114 (2003)

Published online in Wiley InterScience (www.interscience.wiley.com). DOI: 10.1002/jid.1053

THE PRIVATE SECTOR IN RURAL WATER AND SANITATION SERVICES IN UGANDA: UNDERSTANDING THE CONTEXT AND DEVELOPING SUPPORT STRATEGIES

KERSTIN DANERT,¹ RICHARD C. CARTER,²* RONNIE RWAMWANJA,¹ JAMIL SSEBALU,³ GRAHAM CARR⁴ and DAVID KANE⁵

¹Consultant, Kampala, Uganda
²Cranfield University, Institute of Water and Environment, Bedford, UK
³Namasuba College of Commerce, Kampala, Uganda
⁴Aclaim Africa Ltd., Kampala, Uganda
⁵Consultant, Oxford, UK

Abstract: This article analyses private sector delivery of water and sanitation services in Uganda. Uganda's policies of decentralization and privatization, combined with enhanced sector funding through debt relief, provide the context for the work described. After a brief description of the attributes of small water sector enterprises, the findings of extensive interviews with all the major stakeholders in eight of Uganda's 56 districts are set out under eight thematic headings (corruption; community participation; role of NGOs; private sector support services; networks and associations; local Government procurement procedures; construction quality; business viability) and two sets of root causes. The paper concludes that a sector strategy requires a limited number of focus areas in order to avoid overwhelming the institutions and local ownership. The strategy should lie between the extremes of prescriptive and process oriented approaches. Monitoring mechanisms should balance quantitative with qualitative data. Finally, a balance is needed between the drive for short-term impact through physical outputs and the long-term sustainability of water and sanitation services so delivered. Copyright © 2003 John Wiley & Sons, Ltd.

1 INTRODUCTION

The efficiency and impact of private sector participation in water and sanitation services are yet to be fully tested. In the rural sector of developing countries, where contracting out of services is increasingly common, privatization has been inadequately studied. This

Copyright © 2003 John Wiley & Sons, Ltd.

^{*}Correspondence to: Richard C. Carter, Cranfield University, Institute of Water and Environment, Silsoe, Bedford, MK45 4DT, UK. E-mail: r.c.carter@cranfield.ac.uk

country case study synthesises a number of works which have shed light on this aspect of rural water and sanitation policy. Given the relative novelty of the privatization policy in Uganda, it is too early to draw firm conclusions as to its wisdom, when applied to the rural water sector. Nevertheless, insights can be drawn, which can contribute to improving the efficiency and impact of the policy. The paper presents an analysis of the functioning of private sector participation in the rural water and sanitation sector, and some reflections on the possible shape and content of a strategy to increase private sector effectiveness.

2 NATIONAL AND POLICY CONTEXT

2.1 Background

Uganda has been subject to immense suffering over the last 30 or more years. Most of the southern part of the country is now at peace, but there is still considerable insecurity in the north and north-east of the country. An estimated 8.3 per cent of Uganda's adults are infected with HIV and it is said that no family in Uganda has been spared the effects of HIV/AIDS, including caring for an estimated 1.8 m orphaned children. An estimated 21 per cent of the population is undernourished and the under-five mortality rate is estimated to be 124 per 1000 live births). Despite a high rate of GDP growth in the 1990s (exceeding 5 per cent per annum) current (2001) GDP is estimated to be only \$5.7 bn or \$249 per person (UNDP, 2003).

2.2 Poverty Reduction and Debt Relief

The country is still heavily burdened with external debt, has a very low tax base and is thus heavily reliant on external funding. As the first country to benefit from debt relief under the Highly Indebted Poor Countries (HIPC) initiative, the country had a total of \$1.00 bn of its \$3.25 bn total external debt forgiven under the original (1998) and enhanced HIPC frameworks (IMF/IDA, 2002).

The development of the Poverty Eradication Action Plan or PEAP, and qualification for the (HIPC) initiative significantly reduced foreign debt repayments. The Poverty Action Fund (PAF) was created by GoU in 1998/99. It channels HIPC, other debt relief funds, donor budget support and the Government's own resources into the key sectors identified in the PEAP (Craig and Porter, 2003). One of these key sectors is rural water supply. The PAF funds are being utilised to accelerate the decentralization process (outlined below), with about 75 per cent of the PAF budget transferred to local Government. The PAF transfers are in the form of conditional grants which can only be used for pre-defined investments in activities which support the PEAP. Releases to the Districts are conditional on the submission of work plans, budgets and expenditure reports (Craig and Porter, 2002; DWD, 2002).

2.3 Overview of Rural Water and Sanitation Status and Policy

Improving water service coverage is an integral aspect of Uganda's poverty alleviation programme (DWD, 2002a). Rural safe water coverage in Uganda is quoted as 55 per cent although the combination of non-functioning sources, long walks and climbs to fetch water, low consumption rates, and poor quality of consumed water probably mean that

only 20-30 per cent of the rural people actually have access to an internationally accepted minimum basic service. Moreover, the failure of water point committees appears to be almost ubiquitous, and the emphasis on construction of new sources at the expense of maintenance of existing ones is problematic. 'Uganda is fast moving towards a rapidly deteriorating quality status of the water sources' (Baumann et al., 2002, p. 9).

Responsibilities for planning rural sanitation have been divided up between three Ministries (Health-MoH; Education-MoE; and Water Lands and Environment-MoWLE), with local Government responsible for implementation. Consequently the integral link between water supply, sanitation and hygiene promotion has been broken. Household sanitation explicitly falls outside the responsibilities of the agency responsible for rural water supply (the Directorate of Water Development within MoWLE).

DWD's key strategic concepts and policy principles in rural water and sanitation are shown in Table 1. These principles have been gradually developed through the processes of donor co-ordination, decentralization and privatization. From 2002-03 the main sector donors (Danish International Development Agency—DANIDA, Swedish International Development Agency—SIDA, (UK) Department for International Development—DFID) moved from project support to coordinated budget support or 'basket-funding'.

Uganda's policies of decentralization and privatization, and recent experience of substantially increased funding through coordinated donor support (sector wide approach to planning, or SWAP) and the HIPC process, provide the specific context for the work described in this paper.

2.4 **Decentralization**

The 1997 Local Government Act paved the way for full devolution of political, administrative and financial powers to the popularly elected local Government. In the rural water and sanitation sector, District Water Officers and their staff have the key

Table 1. Strategic concepts and principles for rural water service provision in Uganda (DWD, 2002a)

Strategic Area	Explanation
A demand-responsive approach	with bottom-up planning based on community demands
A decentralized approach	with implementation taking place at district level
An overall sector-wide approach to planning	a united/coordinated approach by national institutions, local Government, donors, NGOs and communities
An integrated approach	integrating water resources, wastes, health and environment, integrating hardware and software, and coordinating across ministries of health, education and water
Sustainability	'the prime objective', based on a community based maintenance system
Financial viability	including user contributions to capital costs, and full user responsibility for O&M
Coordination and collaboration of the major	inclusive of national institutions, local Government, donors,
actors	NGOs and communities
Institutional reform	strengthening of all institutions from community to district level
Private sector participation	" especially by using consultants and contractors in the design, construction and management of facilities."
Monitoring and reporting	to provide sector planners with reliable information
Information and awareness-raising	focusing on communication to and with water users

responsibility for planning and contracting out of new works to be paid for by PAF funds. The planning process is supposed to reflect a bottom-up expression of demand for new water sources, from communities through their elected representation to the third level of local Government (the sub-counties), and ultimately to the fifth level of local Government, the Districts. District plans are submitted annually through the Directorate of Water Development to the central line Ministry (MoWLE) and to the Ministry of Finance. On approval, funds flow back down to the district water offices in twice-quarterly releases.

2.5 Privatization

The Civil Service Reform Programme, endorsed in August 1993, and launched in November 1997 has included the streamlining of the civil service as well as privatizing functions considered to be better provided for by the private sector. Thus the GoU's role has been shifting from the role of service provider to that of facilitator/enabler. In the rural water context, donor and Government funds are channelled through local Government and used to contract out a number of activities primarily to local private companies.

Private sector involvement in rural water services mainly focuses on construction of water sources, supply of parts and materials, capacity building, and consultancy services (e.g. siting and supervision of borehole construction and design of gravity schemes). Software services such as community mobilisation are currently undertaken by local Government staff, as is the supervision of spring, shallow well, latrine and rainwater harvesting construction.

3 OBJECTIVES AND METHODS OF RECENT STUDIES OF RURAL WATER AND SANITATION

A number of recent rural water sector studies have been undertaken in Uganda, to develop improved understanding and strategies in specific areas. The objectives and methods in these studies are set out here in Table 2.

At the time of writing this paper 'the Private Sector Study' (DWD, 2003) is under way, by the authors of this paper. This study arises from a perception at Government and donor level that the private sector is under-performing. 'What is known is that the existing private sector has limited capacity, the context within which it operates is not always conducive to high levels of performance, and there is no coherent strategy in place to support the private rural water sector in Uganda.' (from the Private Sector Study terms of reference).

Taken as a whole, the ten studies listed in Table 2 have used a wide mixture of qualitative and quantitative approaches. The methodology adopted in our own work (Carter, 2001; Danert, 2003; DWD, 2003) used an entirely qualitative approach based on Rubin and Rubin (1995). In these studies we explicitly rejected the use of questionnaires with pre-determined categories of enquiry in favour of the use of general areas of conversational enquiry, and attempted to build up a high level of trust with our interviewees. In this way we tried to elicit the perceptions, experiences and views of the stakeholders. In analysing the data so generated we have borne in mind the principles of content analysis through coding and theme identification, but have been severely constrained by time in carrying out this process.

¹Ugandan local Government is based on a hierarchy of local councils (LCs), numbering as follows: LC1 village, LC2 parish, LC3 sub-county, LC4 county, LC5 district. Uganda is composed of 56 districts.

Table 2. Objectives and methods of recent rural water and sanitation studies in Uganda

	table 2: Objectives and incurous o	radic 2. Odjecuves and incurous of fecent that water and samitation studies in Oganda	es in Oganda
Study	Objectives	Location	Methods
Barungi (2001)	Barungi (2001) Examination of the impact of privatization on the poor	Kabarole, Mpigi, Wakiso, Mukono districts	Kabarole, Mpigi, Wakiso, Mukono districts Focus groups, interviews, informal discussions,
WaterAid (2002) Carter (2001)	WaterAid (2002) Identification of local private sector capacity-building needs Wakiso district Carter (2001) Technology (low cost well drilling equipment) transfer into Mpigi, Mukonc the private sector	Wakiso district Mpigi, Mukono and Jinja districts	Observations and workshops. Qualitative interviews and structured questionnaires Action research
Danert (2003)	Understanding low cost well drilling technology transfer and dis contribution to rural development	Mpigi, Mukono and Jinja districts	Action research and semi-structured interviews
Reed et al. (2002)		National	Interviews, consultations, facilitated self- assessments national workshon
Anon (2003)	Analyse the flow of water sector conditional grant funds, compliance with and efficiency of procurement systems	Kamuli, Arua, Kumi, Kasese, Rakai, Apac Mukono, Rukungiri, Nakasongola, Sironko, and 7 urhan centres.	Desk study, site inspections, focus groups, questionnaires
Socio-Economic Data Centre Ltd (2001)	Socio-Economic Evaluation of effectiveness of community-based Data Centre Ltd maintenance of rural water and sanitation facilities; (2001) recommendations for improvements	Bushenyi, Rukungiri, Iganga, Kamuli, Pallisa, Tororo, Nebbi, Mbale, Katakwi, Lira Luwero, Mubende, Masindi, and	Inspection, structured group and individual interviews
Baumann <i>et al.</i> (2002)	Review status of supply chains for spare parts for rural water supply handpumps; propose improved strategy for parts supply	Moroto National	Not stated
Value for Money Study (Anon, 2002)	Value for Money Assess/evaluate the private sector capability to provide Study Water and sanitation services; assess ability of the districts (Anon, 2002) to effectively supervise and monitor implementation	National—all districts	Interviews and questionnaires undertaken by 8 contractors
Private Sector Study (DWD, 2003)	Analysis of private sector performance and operating environment; develop strategy for improving private sector effectiveness	Kasese, Kisoro, Arua, Hoima, Rakai, Iganga, Katakwi, Mukono, and national	Semi-structured interviews; focus groups; national workshop

4 THE PRIVATE SECTOR AND RURAL WATER AND SANITATION IN UGANDA: AN ANALYSIS OF FINDINGS

4.1 Attributes of Private Sector Organizations

Businesses involved in Uganda's rural water and sanitation sector fall into four categories (Table 3). These are based primarily on geographical coverage which correlates well with level of financial capital and other assets, and access to work. The 'large' category, with their strong foreign links and international culture, are of limited interest in this paper. It is the remainder, the local businesses, often referred to as the potential 'engine of growth', which are the subject of the following discussion.

The main focus of Danert's (2003) work and the subsequent private sector study (DWD, 2003) was the 'medium' (Kampala-based) and 'small' (District based) businesses. The WaterAid (2002) investigation on the other hand focused on artisans. Together these provide a useful overview of the attributes of, and challenges facing, the domestic private rural water sector in Uganda.

(DWD, 2003) found a number of variations within the 'small' category in Table 3. Some of these companies are run by businessmen such as traders with few or no technical skills but access to capital, while others are run by individuals who are technically competent. Educational levels range from illiteracy to degree level. The non-water sector activities undertaken by the private sector include building construction, hardware supplies and commodity trading (Danert, 2003; DWD, 2003). Most companies have personal links to their local Government clients through to politicians, civil servants or tender board members.

Although there are encouraging reports in some districts that private sector performance is improving, there are also comments about the large number of contractors competing for a limited pool of work, and the large number of new contractors which appear regularly in the expectation of making quick profits.

Carter (2001) and Danert (2003) highlight the poor financial planning and business management skills of small enterprises; their willingness to undertake work without formal contracts; their shortage of liquid capital; their poor marketing skills; the pressures on money earners to support needy family members; and their necessity to spread risks widely.

4.2 Private Sector Experiences in Rural Water and Sanitation

Interviews with key stakeholders found that eight key factors had a significant impact on the effectiveness of the private sector and on the likelihood of infrastructure sustainability.

4.2.1 Corruption and abuse of office

Few informants are secretive about the existence of corruption, whether it is referred to directly, or euphemistically as 'brown envelopes' or 'kitu kidogo' (literally something small). Nearly all transactions involve a cash transfer. Corruption extends from top to bottom, with almost everyone hoping for a 'cut' of whatever money is around. There is a grey area between the need for income supplementation for survival, and what most would perceive as excessive greed. Salaries being low, and the costs of supporting extended family being high, the first of these is readily understandable. It is when need slides into

Table 3. Private sector categories (modified from Danert, 2003)

Categor	Category Geographical coverage	Skills & Experience	Equipment	Contracts	Support	Liquid Capital
Large	National, and with capacity to operate beyond national borders	Typically deep drilling or civil construction	Own equipment such as Have capacity to obtain conventional drilling rigs and fulfil large contracts	Own equipment such as Have capacity to obtain conventional drilling rigs and fulfil large contracts for central Government and INGOs	Often have foreign support	High
Medium	Medium National	Wide range of relevant technical and project	May own site survey equipment or light	Have their sights set on penetrating the market of the	Tend to be well connected to central	Medium
Small	District-based. Operating in one or a few districts only	managementabilities May have small construction experience, including springs, rainwater tanks. gravity	drilling equipment Very limited: perhaps survey equipment. Limited transport Other	large category Bidding for contracts at district May be level is an uncertain process Government	Government May be connected to District	Low
Artisan	Artisan Sub-county or single district only	schemes, shallow wells, latrines Same as 'small' and 'medium' categories. These are the skilled labour for the larger businesses	equipment is hired Hand tools or none	Provide labour for the medium and small categories. Are paid subsistence wages	Include retrenched GoU labour and thus have contacts. Rarely well organized	J None ganized

Table 4. NGO weaknesses (Reed et al., 2002)

- NGOs need systems and procedures to be accountable and transparent. Misappropriation of funds is an issue.
- The leadership of NGOs need to ensure that their missions and activities do reflect a common purpose.
 Management structures need to develop to respond to the demands.
- Communication and understanding of mission statements to all staff needs improving.
- Internal communication is sometimes poor between management and programme staff.
- Communication and accountability to stakeholders needs improvement. Target communities may suffer 'fatigue' and be suspicious. Ownership of activities needs to be transferred to the communities.
- Issues surrounding funding, equipment and staffing are common. Funds are often inadequate, inconsistent and conditional. Donor dependency and conditional funding set priorities.
- Employing and retaining suitable staff is a problem. Job security is a concern.
- NGOs are busy but are not necessarily adapting (or willing) to change, with sometimes a mismatch between the
 culture and the sector trends. Mission statements need to develop to clarify aims and ensure that advocacy and
 commercial activities are clearly defined.
- A more professional approach is required to ensure outputs are delivered in accordance with client requirements and funding constraints.
- Proposal preparation and presentation is often poor.
- Documentation of NGO and water sector activities, achievements and best practice is limited.
- Certain areas, such as sanitation and social marketing need further development.
- Knowledge of capacity development providers is insufficient.
- NGOs have a poor understanding of the overall national institutional environment.
- NGOs need to improve relationships with local government, the private sector and other NGOs, although some
 areas have good local NGO networks. NGOs can improve the way they are perceived by the sector.
- · NGOs sometimes duplicate activities.
- NGOs need to improve their advocacy capabilities and engage in the local policy and planning process.
- Some issues, such as the environment or gender, are donor driven.

greed, or when the scale of petty corruption gets out of hand, that the situation becomes intolerable to the public, public authorities and the media.

Many stakeholders and informants mention abuse of power by politicians. As the elected representatives of the people, politicians, at all levels from village upwards, to MPs and Government Ministers, are in the business of winning votes and popular approval. As everywhere, they make promises, confer patronage, and use their positions, legitimately or illegitimately, to achieve these ends.

It is lawful for politicians to be involved in decisions about spending priorities, local Government planning, award of contract work, and deployment of resources. However, when legitimate political intervention becomes dominated by vested interests, the situation deteriorates. Many politicians and influential individuals (e.g. members of district tender boards) are alleged to use their positions to their own advantage. They can nepotistically influence the award of contracts and the approval of payments for work done (regardless of quality); they can undermine centrally determined Government policies, for example by telling communities that they do not need to make contributions to capital or recurrent costs of water sources; and they can 'hijack' local Government vehicles intended for use by district water offices. All these practices are well known in Uganda's rural water sector.

It is encouraging that, in some cases, district officials and private companies suspected of corrupt activities are being called to account. Public intolerance of such practices is reflected in regular arrests and blacklisting.

Community participation and sustainability of water services

It is a common experience for enterprises working under contract to local Government to arrive on site before any introductory community mobilisation work has been done with the relevant communities.

Community mobilization includes communication and explanation of roles, joint choices in aspects of siting and design, marshalling of materials and labour, organization of committees, specific training and education (e.g. in hygiene, maintenance, bookkeeping), and post-construction follow-up and support. Most recent studies of Uganda's water sector have found that community mobilization is generally given inadequate emphasis (Anon, 2003; DWD, 2003); Baumann et al., 2002; Socio-Economic Data Centre Ltd, 2001). There is also criticism of the emphasis on physical outputs in the conditional grant framework for being 'a numbers game'.

DWD (2003) found that in those districts where community mobilization was poor, this was either due to shortages of trained staff, insufficient transport, or a tendency to devolve responsibility to individuals at lower levels who have little training or resources to carry out this critically important function. In some cases politicians effectively undo mobilization work, either through ignorance of the roles which are expected of communities, or to win public support.

Lack of community mobilization in combination with privatization has confused community roles. The expectation on communities to provide up-front cash contributions, as well as materials and labour, is not always clear in conversations with Government staff (DWD, 2003). There are mixed messages. Privatization has led to situations in which communities refuse to contribute—because the contractor is being paid—or worse still, to demand payments for work which, with good mobilization and in the absence of the private sector, they would have provided as their own contribution (DWD, 2003). In communities where access is particularly difficult, the need for the contractor to pay community members for labour and materials can render construction unprofitable.

In contrast, there are districts which have introduced imaginative and constructive mechanisms for funding maintenance. In one district for instance, the community capital cost contribution is put into an account in the community's name, earmarked for source maintenance.

In general, the combination of privatization with inadequate community mobilization has started to undo the work of decades, during which community participation was seen as essential, and was encouraged through policy and practice.

The permanence of rural water and sanitation services depends on the maintenance of services provided. Operation and maintenance are explicitly the responsibility of the community, which is, among other things, expected to develop an 8-year maintenance plan for its water source (DWD, 2002a). Putting aside the unrealism of such a requirement, the inadequacy of community mobilization means that communities neither understand nor take on board the role which is expected of them. Maintenance is placed beyond the effective influence of the district water office, and the likelihood of rural water services being sustained after construction is very low.

4.2.3 Role of non Government Organisations (NGOs)

There are many local NGOs with highly relevant experience and skills in the rural water and sanitation sector. NGOs are marginalized within current (private sector) rural water and sanitation policy. NGOs are ineligible to tender for contracts in competition with commercial organizations. The requirement for tendering entities to be registered as

commercial companies, and to be VAT registered, prevents NGOs in their present form from bidding for work under the PAF funding. Some NGOs are responding to this by setting up commercial arms. It remains to be seen whether the need to bribe will inhibit NGO participation, or whether the commercialization of NGOs will extend corruption into yet another aspect of Ugandan life (DWD, 2003).

The key skills of community mobilization which are the particular strength of NGOs and Community Based Organizations (CBOs) would appear to be ripe for contracting out by districts. Both the Supply Chains study (Baumann *et al.*, 2002) and the NGO Capacity Development Framework (Reed *et al.*, 2002) make reference to the possibility of contracting NGOs to carry out mobilization work. The former is positive about this option, while the latter warns about the risk of inadequate coordination with the private sector. At the time of writing this paper a pilot study in which District Government would contract NGOs for community mobilization was in preparation.

4.2.4 Support services and the private sector

There is an extensive network of organizations in Uganda which provide support to private enterprises. These include those providing training, credit, and advisory services.

In the 'Private Sector Study' (DWD, 2003) three lines of enquiry were pursued in relation to support services:

- (i) asking water sector enterprises about the use they make of formal support services;
- (ii) asking support service providers about their links to the water sector;
- (iii) surveying the support services which, in principle, are available to private enterprises in the water sector.

In general, although the third of these yields a rich resource, the answers to the first two are almost invariably nil. The private enterprise support mechanisms exist, but they hardly touch the water sector.

Looking at the problem from the point of view of need, three general findings should be highlighted:

- (i) many small water sector enterprises have real weaknesses, particularly in relation to business management skills (probably more so than technical skill shortages);
- (ii) many water sector companies lack working capital, but resort to informal credit mechanisms rather than banks or microfinance agencies;
- (iii) most water sector companies both benefit from, and appreciate, training in good business practice; they are hungry for this service, although incapable of meeting its full financial and time cost.

There is clearly a real need to link water sector enterprises to business development and credit services, to the benefit of private sector performance.

4.2.5 Networks and associations of water sector contractors

Interviews with water sector contractors reveal a number of issues on which they have shared experiences and views, but for which they have no formal voice. These include:

- (i) 'reserve prices' used by districts as price ceilings for specific types of work; some of these prices are out-of-date, and they generally fail to take account of local variations in unit costs and accessibility;
- (ii) weaknesses in local Government planning, tendering and payment procedures, which affect the viability of water sector businesses;

- (iii) poor community mobilization, which cannot be corrected by the contractor;
- (iv) weaknesses in technical specifications, which are most visible to those directly involved in construction;
- (v) comments from handpump spare parts suppliers and handpump mechanics regarding the sustainability of handpump sources.

There is an absence of effective mechanisms through which the industry can feed back such issues of common concern to the appropriate authorities. This requires not only dynamic associations, but also effective linkages between such associations and local and central Government.

4.2.6 Local Government procurement

A range of statutory instruments and widely accepted practices determines the ways in which goods and services are procured by districts. Supposedly competitive tendering leads to the award of contracts for rural water source construction. The usual practice is that contractors are invited to register or pre-qualify at the beginning of the financial year. When funds are released, pre-qualified contractors are invited to submit priced tenders for particular bundles of work. Tenders are checked by the Technical Evaluation Committee, which makes recommendations to the District Tender Board (DTB). The tender board makes the final decisions on appointment of contractors.

A number of key observations of the actual practices involved is as follows:

- (i) frequently the contracts put out to tender are only specified in the most general manner; for instance the location of the works involved is often not specified;
- (ii) the criteria used by the technical evaluation committees sometimes include aspects which should be part of pre-qualification (e.g. company registration, VAT registration), and consequently put insufficient emphasis on technical competence;
- (iii) It is widely alleged that district tender boards over-rule the recommendations of technical evaluation committees for reasons of nepotism or patronage. While the award of contracts is fully within their mandate, it is the basis for, and lack of transparency of, such actions which is criticised. 'DTB records were some of the poorest in the study' (Anon, 2003);
- (iv) tender price is rarely a significant feature. Districts tend to use 'reserve prices' as guidelines, and they pay at this rate. In some cases they exclude bidders who tender at more than 15 per cent below the reserve price, and in the case of those tenders which are greater than the reserve, they only pay the reserve price. Price does not form a competitive aspect of the procurement process;
- (v) some companies lack the expertise to accurately cost works for which they will tender. Even those which can produce accurate cost estimates sometimes take on unprofitable work in the hope that they will indeed be paid properly for it, or knowingly as a loss-leader;
- (vi) the reserve prices were frequently estimated (a) some years ago, and (b) for use only as budget figures. Their misuse has led to a distorted market;
- (vii) in the absence of price-based competition, contractors compete on the basis of bribery and political influence;
- (viii) there is a tendency to spread the available work among the many competing contractors, despite the explicit guidance in the Conditional Grant Guidelines (DWD, 2002) not to do so.

4.2.7 Quality of construction

Construction quality depends not only on the competence of contractors, but also on the quality of supervision by consultant or client. In the rural water and sanitation sector it is unusual to use consultants in this role because of the small scale of the works involved. Supervision is therefore primarily the duty of the client, usually the district. In some districts it appears that at present levels of construction activity, and with present numbers and skills of district technical staff, there is the capacity to supervise contractors reasonably well. However, there are serious pressures on supervising engineers to pass works which may not be up to standard (DWD, 2003). This can be due to political intervention, corruption, patronage, lack of supervisory skills and the belief among supervisory staff that the payment to the contractors is insufficient for them to make a profit.

Nevertheless, in some districts, there appears to be a determination among district water office staff to maintain standards to the best of their abilities. The fact that a number of companies have been blacklisted, and others warned, suggests that there is a serious attempt to maintain standards. In addition, the less 'fly-by-night' private contractors appear to be learning on the job and improving their own standards.

In the absence of adequate supervision, construction quality is dependent in large part on those whose hands actually build the physical works. Most small contractors employ skilled artisans or *fundis* (masons, plumbers, roofers and so on), on a temporary basis, to carry out small construction works. It appears that in many cases their remuneration is very poor, and their security of work is at least as bad as any of the players in the sector. It is most likely need, rather than greed, which drives such *fundis* to steal cement and then build with concrete or mortar of inadequate strength.

4.2.8 Viability of businesses

Despite the increased funding through HIPC, there are still very limited financial resources available to the sector. The Medium Term Budget Framework (MTBF) has set a total ceiling of US\$82.71 m or USh140.61 bn for the district water and sanitation conditional grant for the five-year period 2002/03–2006/07. When this sum is divided by 56 districts and five years, it reduces to just under \$300 000 or USh500 m per year per district. Assuming about 80 per cent of this is spent on private sector construction contracts, this amounts to \$240 000 or USh400 m of private sector business per year per district. On a per capita basis this reduces to about \$0.70 or USh 900 per year.

This is only sufficient to keep a small number of private companies afloat in each district (perhaps three which are dedicated to water and sanitation, or twice that number of multipurpose companies), not the large number (commonly 40–50) which are ready and available for contract work. In this climate it is essential that the best companies are nurtured, while the 'brief-case' and 'fly-by-night' companies are allowed to rapidly fade away.

4.3. Analysis: Root Causes

Two sets of root causes in Uganda's socio-economic, cultural and policy environment give rise to the sector experiences which have been described above. The first set is a collection of socio-economic and cultural factors, while the second is a group of policy and strategy choices. The combination of these two sets provides a simple but informative means of understanding why things are as they are.

The socio-economic and cultural factors include:

- (i) high levels of household poverty (much of it exacerbated by past and present conflicts, and HIV/AIDS);
- (ii) the importance of patronage within Ugandan society—if one has the means of providing for less privileged members of the extended family or group, one must;
- (iii) need and greed—high levels of poverty and obligation (even for those in professional jobs) explain the need individuals have to supplement their incomes; the dividing line between need and greed is indistinct;
- (iv) low levels of trust—few members of society are not on the lookout for some means of income supplementation, whether for the best or worst of reasons. For every winner, there are losers, and so all are wary of being cheated. In the absence of trust, rigid rules and procedures introduce bureaucracy, and the complexity of bureaucratic procedures allows corrupt practices to remain hidden;
- (v) high levels of unemployment and under-employment and generally low levels of education—for every perceived opportunity there is a surplus of willing but poorly skilled 'contractors';
- (vi) limited Government funds—despite the massive increases under the HIPC process, the absolute amounts available for water and sanitation development are very small; this is partly due to low incomes and the **non-tax paying** culture which prevails in Uganda;
- (vii) the dominance of donors, with their addiction to change and innovation, constrains the development of home-grown policies, and paralyses through constant reform and re-organization.

The chosen policies and strategies include:

- (i) policy principles in rural water and sanitation, decentralization, privatization and politics (Table 1);
- (ii) spending choices at donor level as well as at central and local Government levels (the Medium Term Budget Framework, and District Development Plans) including the choice to focus on increasing coverage rather than on maintenance partly driven by the politics of providing simple, quantifiable results;
- (iii) rules, regulations, guidelines and procedures (e.g. standard designs, procurement procedures, conditional grant and other planning guidelines);
- (iv) chosen roles for public, private sector, and civil society players within a decentralized and privatized system;
- (v) degrees of participation in policy choices, especially the relative strength of donors and GoU;
- (vi) technology preferences,
- (vii) work packages at local Government level, which tend to be small;
- (viii) staffing and resourcing choices—particularly in relation to the split between engineering and community development staff at district level, and staffing and transport facilities at sub-county level;
- (ix) obstacles imposed through bureaucratic procedures.

4.4 Impact of Privatization on the Rural Poor

A far greater rate of physical outputs has been achieved since privatization (Barungi, 2001)—although this probably has more to do with enhanced funding under PAF than the institutional arrangements for service delivery. Despite the increase in physical outputs, the likelihood of schemes which are being constructed now providing sustained services to the rural poor is low. Many stakeholders express deep reservations about the sustainability of rural water services delivered through the private sector. DWD (2003) found that this is largely because of poor community mobilization, insufficient follow-up, or in some cases because of poor quality construction.

The studies undertaken suggest that private sector participation in rural water does not provide a panacea for improved sustainability. In fact it seems to threaten that goal, at least in the short term. There has been a rapid disappearance of private sector (artisanal) hand pump mechanics as well as insufficient stock, of questionable quality, of handpump parts held by spare parts distributors. Furthermore, the private sector has not found the distribution of spare parts for handpumps to be a sufficiently profitable business (Socio-Economic Data Centre Ltd, 2001; Baumann *et al.*, 2002).

5 STRATEGY DEVELOPMENT

In moving from situation analysis to strategy, four issues should be borne in mind.

5.1 Shape of Strategy

A structured plan, with clear aims, outputs, and costed activities is needed. The logical framework approach is a convenient means of achieving this. If some or all of the eight issues described in Section 4.2 were to be included in the strategy, then each of the themes or issues would give rise to a single *purpose*, with corresponding *outputs* and *activities*. The set of logical frameworks so constructed would share the common goal of increasing rural water supply coverage in a sustainable manner.

5.2 Content of Strategy

Two sets of underlying causes were identified above (Section 4.3). The socio-economic and cultural causes are inevitably more intractable than the existing policy and strategy choices. This suggests that in strategy development the socio-economic and cultural factors should be taken as largely unchangeable (or only gradually so). The focus in strategy development should be on the second set, with strategic choices made in such a way as to take account of the influence of the first group.

The sector findings described above have highlighted weaknesses in each institution, as well as in almost every linkage between institutions. When every link in the chain is rusty, which one(s) should be strengthened first? And how much reinforcement should be applied before a law of diminishing returns applies?

Two principles should apply in the development of strategy:

- first, only a handful of action areas should be addressed, to avoid overwhelming the institutions involved; it is impossible to tackle all problems at once;
- second, it is essential that the content of strategy be a matter for agreement through stakeholder participation, rather than imposition by researchers, consultants or donors. Consensus and ownership are crucial.

The contents of strategy need not all be pre-defined. Two recent studies in Uganda exemplify the extremes of a very prescriptive approach to strategy (Baumann et al., 2002), and a very process-oriented approach (Reed et al., 2002). After analysing the status of the main private sector actors (consultants, drillers, handpump suppliers, spare parts distributors, handpump mechanics, and NGOs), the Supply Chains study (Baumann et al., 2002) sets out its recommendations, defining the institutional framework, pointing out the importance of social mobilisation, making recommendations for procurement procedures, giving views on standardization of handpump specifications, proposals for pre-qualification of suppliers, options for quality control, and advice on operation and maintenance. The strategy put forward is very prescriptive. By contrast, in the NGO Study (Reed et al., 2002) the outcome of the work was a framework, a procedure for defining specific capacity-building activities. This is justified on the grounds that the needs of different NGOs are very varied and that they change with time. The capacity development framework consists of an annual cycle of evaluations and activity planning; regional level coordination; and NGO self-assessment and objective setting. It is anticipated that the private sector strategy will lie between the two extremes described here.

5.3 Monitoring of Strategy

Envisaging that a strategy will be implemented over an initial period of 3-5 years, a procedure and indicators for monitoring of progress will be necessary. Given the predominantly qualitative nature of the relevant baseline studies, the latter will present challenges.

Where appropriate, it would be useful to identify and adopt quantitative indicators of progress. Nevertheless, we believe that the temptation to seek only quantitative indicators should be resisted. When this is done, it is usually the case that they are too simplistic to be of real meaning. The most pertinent example in the present context is the almost complete dependence on numbers of physical outputs (water points) in Uganda's operational plan for rural water and sanitation.

5.4 **Implementation Mechanism**

A strategy without an implementation mechanism is impotent. Five factors need to be considered:

- (i) the source and amount of funding needed;
- (ii) the identity of the fund holder;
- (iii) the identity of the managing agent for strategy implementation, if different from (ii);
- (iv) the modus operandi of strategy implementation;
- (v) lines of accountability for the fund holder and managing agent.

6 CONCLUSIONS

Uganda's recently privatised rural water sector faces a number of significant challenges in the years to come. An immature domestic private sector, operating in an environment of very limited public spending, in partnership with a local Government which is inexperienced in contract management and lacking capacity to carry out effective community mobilisation, would not appear to offer great hope for the future. And yet the system is

functioning, and probably significantly more effectively than even two or three years ago. There are real grounds for optimism.

However, even if Uganda's privatization policy can be encouraged to deliver benefits ever more efficiently, the key for the future is to maximise the long-term impacts of those gains. Perhaps the greatest challenge is to resist the politically easy, donor-driven, goal of rapid service coverage, and focus more strongly on sustainable capacity building and service permanence. A balance is needed between the drive for short-term impact through physical outputs and the long-term sustainability of water and sanitation services so delivered.

REFERENCES

- Anon. 2003. A tracking study of the water sector conditional grants. Draft Final Report. Unnamed Consultant.
- Barungi A. 2001. The Impact of Private Sector Participation in Water Services on the Rural Poor in Uganda. WaterAid/Tearfund, 2001.
- Baumann E, Okuni P, Wandera S. 2002. Supply chains for rural water supply in Uganda. HTN/SKAT/DWD, October 2002.
- Carter RC. 2001. Private sector participation in low cost water well drilling. *Knowledge and Research Project* R7126. Final Report. Cranfield University, DFID, Government of Uganda, DANIDA.
- Craig D, Porter D. 2003. Poverty reduction strategy papers: a new convergence. *World Development* **31**(1): 53–69.
- Danert K. 2003. Technology transfer for development: insights from the introduction of low cost water well drilling technology to Uganda. *PhD Thesis*. Cranfield University, UK.
- DWD. 1999. National water policy. Directorate of Water Development.
- DWD. 2002. Guidelines for the planning and operation of district water and sanitation development grant. Directorate of Water Development [Dec 2002].
- DWD. 2002a. Rural water and sanitation operational plan: 2002–2007 (OP5). Directorate of Water Development. Version 1 September 1 2002.
- DWD. 2002b. Summary report on analysis of the findings of the value for money/technical audits of the district rural water supply and sanitation programs. Directorate of Water Development.
- DWD. 2003. Development of a strategy for support to private sector organizations participating in rural water and sanitation programmes in Uganda. Directorate of Water Development/DFID.
- IMF/IDA. 2001. Uganda: Poverty Reduction Strategy Paper Progress Report. March 9, 2001.
- MoFPED. 2000. Uganda's poverty eradication action plan. Summary and main objectives. Ministry of Finance, Planning and Economic Development, March 24, 2000.
- Reed B, Male V, Gomme J. 2002. Capacity development framework—for NGOs and CBOs in the Ugandan water sector. WELL Task 2099. November 2002.
- Rubin H, Rubin IS. 1995. Qualitative Interviewing. The Art of Hearing Data. Sage Publications.
- Ruwasa. 1995. Appraisal of rural and sanitation project East Uganda. Ministry of Foreign Affairs, Danida, DANIDA Ref. No. 104.Uganda. 24 (Unpublished Report).
- Socio-Economic Data Centre Ltd. 2001. Study of the operation and maintenance of rural water facilities in Uganda. Ministry of Water Lands and Environment, Contract no. 2000/O&M/01.
- UNDP. 2003. Human Development Report 2003. United Nations Development Programme.
- WaterAid. 2002. Private sector assessment in the WES Sector. Final Report. WaterAid Uganda, March 2002.