Ghana

Where poor urban water utility performance leaves 75% of the capital's residents without 24 hour access to water and 10% of people with no access at all





WaterAid - calls to action

- The Government and donors should close the annual water finance gap of \$68m
- The Government and donors should establish an effective mechanism for sector coordination
- The Government and civil society should respectively ensure and monitor that the management contract to improve the performance of the Ghana Water Company Ltd equally benefits the poorest people

Introduction

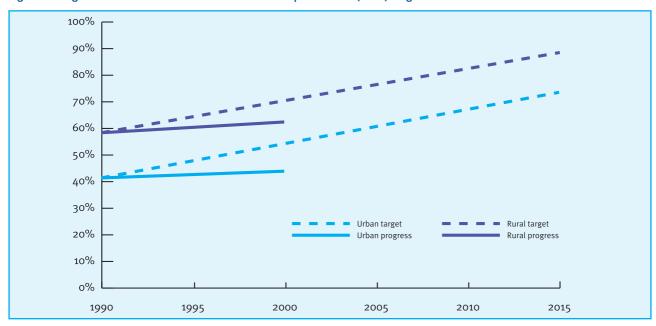
Ghana has a land area of 238,540 km². Its population is estimated at 20 million, with 58% living in rural areas and 42% in urban areas. While the urban population grows at a rate of 3.5% per annum the rural population grows at 1.5%. Life expectancy is around 56 years. Per capita income is estimated at about US\$400 which places Ghana among the poorest nations in the world. Ghana has an external debt of US\$6.7 billion which is about 110% of GDP.

With more than half of the rural population dependent on unsafe water sources, water-related diseases are predominant in Ghana. In 2000, there were 3678 reported cases of guinea worm which the Government is committed to eradicate by 2005. Diarrhoeal diseases are the third most commonly reported cases in health centres across the

country. A combination of all these factors contributes to the high infant mortality rate in Ghana – 110/1000 in the year 2000. The Ghana Poverty Reduction Strategy (GPRS) target is to reduce this to 95/1000 by 2005.

Water supply and sanitation are key priorities in the GPRS. The GPRS, completed in March 2003, maps out the medium-term strategy to "achieve sustainable equitable growth, accelerated poverty reduction, and the protection of the vulnerable and excluded within a decentralised democratic environment". The government set its poverty reduction goals in alignment with the MDGs, and articulated its poverty reduction strategy around five pillars: (i) maintaining macroeconomic stability; (ii) increasing production and employment; (iii) promoting human resource development; (iv) implementing special programmes for the vulnerable and excluded; and (v) ensuring good governance through accountability and transparency.

Figure 1: Progress towards the water Millennium Development Goal (MDG) targets in Ghana



Fact box	
Population 2003 – total (rural/urban)	20.2 (11.8/8.4) million
Population projection for 2015 – total (rural/urban)	26.6 (14/12.6) million
Population growth rate (rural/urban)	1.5%/3.5%
Present access to safe water – (rural/urban)	44%/61%
Present access to basic sanitation – (rural/urban)	11%/40%
Productive days which would be gained with 100% access to water and sanitation	1.6m
School days lost to diarrhoea by five to 14 year olds	3.4m
Monthly number of households requiring access to reach water MDG	5700
– increase required (on performance since 1990)	100%
Monthly number of households requiring access to reach sanitation MDG	6900
– increase required (on performance since 1990)	500%
Current annual water spend¹	\$17m
Water/sanitation sector annual finance need for MDGs	\$85m
Water sector annual MDG spending gap	\$68m
Annual national debt service payment ²	\$670m

Key events

- 1928 First development of public water supply systems, operated by the Hydraulic Division of the Public Works Department
- 1965 Ghana Water and Sewerage Corporation (GWSC) established to be responsible for urban and rural water supply
- 1986 Removal of operational subsidy on water supply
- 1991 GWSC efficiency increased by cutting 1400 jobs and recruiting more qualified personnel
- The operation of rural and small town water supplies moved from GWSC to be community managed.

 Semi-autonomous Community Water and Sanitation Division established to be responsible for facilitating the community water supply management

- 595 Stakeholder meeting selects the 'lease option' for restructuring the urban water sector
- 1996 Water Resources Commission established
- 1997 Public Utility Regulatory Commission established
- 1999 GWSC replaced with the publicly owned Ghana Water Company Ltd (GWCL) in urban areas and the Community Water and Sanitation Agency (CWSA) in rural areas. Responsibility for urban sanitation transferred to ministries of local government
- 2003 Modification of water sector restructuring project so that management contract option is also available to urban water project
- 2004 Preparation of a National Water Policy

Water sector characteristics

Water

Ghana faces serious constraints to meeting the challenge of providing adequate water for all rural and urban residents. These include the dire and worsening financial condition of the urban utility – the Ghana Water Company Limited (GWCL), insufficient sector investment over the last ten years, weak implementation capacity caused by staffing problems and low salary levels.

Approximately 10.3 million people (51%) have access to improved water supplies in Ghana. For the 8.4 million residents in the country's urban areas this increases slightly to 61% with two thirds of these or 40% of the total urban population covered by GWCL's networks. With GWCL's unaccounted-for water (UFW) at about 50% of total output, the volume of water that is effectively sold (280,000 m³/day) is less than half of the daily demand (763,300 m³). It is conceivable that a fair percentage of UFW (the portion considered to be administrative leakage), is also used by urban residents. But, as demonstrated by widespread rationing, there remains an acute shortage. In Accra, for example, it has been estimated that only approximately 25% of residents enjoy a 24-hour water supply. About 30% have an average of 12 hours service every day for five days a week. Another 35% have service for two days each week while the remaining residents on the outskirts of Accra are completely without access to piped water supplies. This pattern is more acute in other urban centres.

The estimated rural water supply coverage is much lower, currently at 44% and comprising around 14,000 drilled boreholes with handpumps, 12,000 hand-dug wells with handpumps and 800 small piped systems.

The Government's decision to restructure the sector and include the private sector in water delivery started in 1994. This restructuring has led to the establishment of various

institutions in the water sector including the Community Water and Sanitation Agency (CWSA), the Water Resources Commission and the Public Utilities Regulatory Commission. A process has also started to establish a Water Directorate at the Ministry of Works and Housing to coordinate water sector activities. It is expected that this and the coordination will greatly assist any future investment in the sector so that, unlike previous failures to achieve sector targets, the water MDGs could be met.

Sanitation

The Government has prepared a sanitation sector policy, but implementation is proving difficult⁴. Sanitation coverage for both the urban and rural population is less than 40%. Latrines which are not connected to sewerage systems account for all improved access to sanitation in rural areas and small towns and are the most common sanitation facility used in large towns and urban centres.

Regarding wastewater, the Government's strategy and emphasis is even less advanced. The country has serious operational capacity constraints in wastewater treatment and there is a perceived inability to pay for this service among urban residents.

Water resource management

Central to the provision of water are the issues of water quality, sufficiency and continuity of supply. In the past, the Government did not have a clearly articulated policy for the water sector as a whole. However, with the establishment of a Water Resources Commission in 1996 and ongoing donor support for the development of a water resources strategy, the wider water issues, including those relating to rivers, allocation of scarce supplies and pollution should receive necessary attention. This is an essential step for management of water resources as an increased number of independent water supply systems become established.

Table 1: Ghana water sector performance increases required to meet water and sanitation MDGs

Sector	Location	Performance (Households per month)		Increases required for MDGs (additional performance required)
		1990-2000	2001-2015	
Water	Rural	1000	2600	155%
	Urban	1900	3100	65%
Sanitation	Rural	100	3600	2800%
	Urban	1100	3500	230%

Finance

Needs

WaterAid's own calculations are that the water and sanitation MDG targets require spending of \$85m each year. Actual expenditure at present is just \$17m. Spending therefore needs to increase by \$68m per year⁵.

Performance

Alongside these increases in inputs, the sector also needs to deliver huge improvements in its own performance. The monthly numbers of households which must gain access to water and sanitation for the first time are between two and 36 times greater than what has been achieved before (Table 1).

Share of government spending

These financial requirements grossly exceed the existing commitments of both the Government and donors to the sector. In 2002 for example the Government's own budget allocated 21% of total expenditure to poverty reduction activities under the GPRS. Just 1% of this poverty reduction spending – that is 0.2% of all spending – was allocated to water and sanitation (although there were other allocations for economic services reflecting increased water tariffs designed to get GWCL back on-track for full cost recovery).

Donors

Ghana relies heavily on external donor support for the water sector. From 1990-2003 major donors contributed approximately \$500m for water and sanitation projects.

Urban water received the highest single amount (Table 2), mainly attributable to the World Bank's US\$120 million Water Sector Rehabilitation Project. In terms of volume, most donors focused on rural and small town water supply schemes together worth more than \$270m. Sanitation received significantly less attention.

Planned investment by some donors (excluding NGOs) is estimated at \$185m for the period 2004-2010, some 85% of the total planned finance. In addition a multi-donor budget support (MDBS) system is being established where donors pool all of their funds. This will then enable the Government

to allocate the funds in line with its own development and sector priorities. By contrast in 2001 the Community Water and Sanitation Agency identified seven donors each of whom was the sole funder for one or more of 10 planned projects.

Together therefore **Government and donors should close the annual water finance gap of \$68m.** Civil society organisations such as the Coalition of NGOs in Water and Sanitation are already campaigning for increased government commitments to be worth 20% of all sector investments. The Government has access to some extra resources through the Highly-Indebted Poor Countries (HIPC) debt relief scheme and some of these have been allocated to the sector⁷. However the overall benefits of the HIPC scheme remain unclear. In 2002 some 6.7% of spending was to be through the HIPC fund but provisional figures indicated that the fund's actual disbursements were worth only 1.99%. At the same time debt servicing (external and domestic) still accounted for 70% of statutory expenditures (or 30% of all Government spending).



Table 2: Donor water sector investments: 1990-2003

	Water supply		Sanitation		Water supply and sanitation	
	Projects	Cost (\$m)	Projects	Cost (\$m)	Projects	Cost (\$m)
Rural and small towns	17	171	2	53	5	46
Urban	5	196	-	_	1	24

Government and users

Government spending however is overwhelmingly devoted to personal staff costs which have risen from below 50% of discretionary expenditure in 2001 to more than 60% in 2003. Key departments such as education and health are thus spending as little as 0.8% and 1.9% respectively of their total expenditure on investment compared with the 92% or 82% which they used for staff costs?

The Government has also not been willing to approve regular tariff increases to allow water agencies sufficient revenue to cover their recurrent costs, let alone provide reserves for future investment. The average tariff between 1990 and 1997 was in the range of US\$0.15 to US\$0.20/m3. However with the establishment of the utility regulator there have been significant improvements in tariffs although they remain below cost recovery levels. The 2004 average tariff was about \$0.50/m3. Wastages stemming from the weak pricing and weak commercial system have led to a situation where consumption and investments necessary to meet increasing demand are significantly higher than would have been necessary if a rational pricing policy had been implemented originally.

The Government has then aggravated this situation by itself failing to pay water bills. Figure 2 shows that GWCL's collection rates

for Government water bills are significantly worse than those for other customers. Similar problems with public sector customers have been encountered by the Northern Ghana Association of Water Boards. The boards have been struggling to function – especially to pay their electricity bills – in the face of arrears of Cedis 279m (\$31,000). It is now proposed that the Ministry of Finance should pay the water bills directly.

However, alongside the shortfalls in the quantity of financing there are also deficiencies in the capacity to use it well. GWCL for example has actually been unable to utilise significant funding when it has been available (Figure 3).

This failure has been attributed to lack of capacity for the management of a maintenance programme. Similar limitations within District Assemblies have been identified as the cause of slowness in delivery of rural projects.

Decentralisation

Ghana's decentralisation programme is over 15 years old and has developed substantially, especially regarding participation in decision-making processes for service delivery at local levels. The role of communities in both selecting the location, types and design of facilities and then in managing them is increasing. District Assemblies prepare

Figure 2: Performance of Ghana Water Company Limited 1992-2000

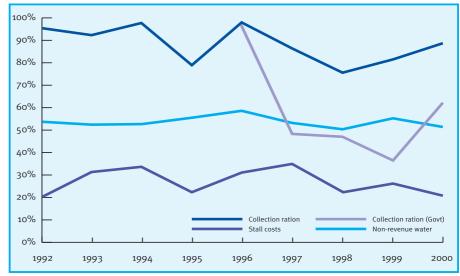
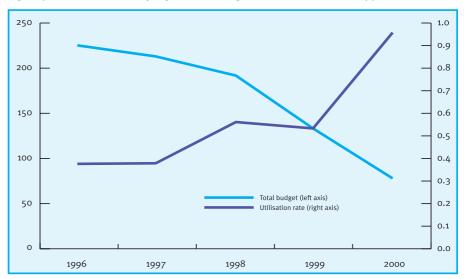


Figure 3: Ghana Water Company Limited budget and utilisation rates 1996-2000



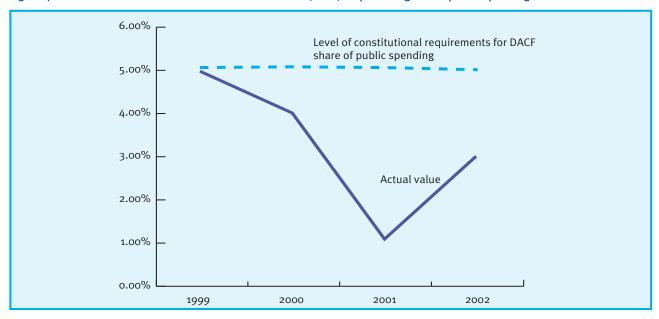
their own budgets which largely take care of anticipated central government transfers and other external inflows. They receive allocations under the District Assemblies Common Fund (DACF) for the provision of social services. The standardised formula for DACF allocations reflects: need, responsiveness, equity and service pressure factors¹².

However there are constraints in this system of funding allocation. Constitutionally the Government is required to allocate 5% of its total revenue through the DACF for district assemblies' development expenditures. However in recent years (Figure 4) this requirement has not been met as actual DACF spending has dipped as low as 1.07% despite an earlier decision that the allocation should increase from 5% to 7.5%.

There are also long delays in the release of funds to districts. This may encourage them to make use of their mandates to generate local revenue for development programmes such as water and sanitation. However securing additional funds from donors can also bring significant administrative burdens — a district may find itself providing as many as 20 reports a month to different donors¹³.

As a result of gaps in reporting of all these financing arrangements it has been noted that it is difficult to determine the total amount of resource inflows¹⁴.

Figure 4: Actual value of district assemblies common fund (DACF) as percentage of all public spending



Sector coordination

In policy and regulation

The Ghana water and sanitation sector is characterised by a wide range of sector actors with potentially confusing and conflicting roles. For the period 1998-2002 for example the Community Water and Sanitation Agency identified funding streams from 15 different agencies and organisations. Government and donors should establish an effective mechanism for sector coordination.

This mechanism should build upon the existing institutional framework:

Box 1: Existing institutional framework

Equity

There is a basic inequity between rural areas which have 44% access to safe water and urban areas with access of 61%. This is one of the factors behind the poverty rate which varies from 5.2% in the Greater Accra Region to 88.3% in the Upper East Region.

District water access rates are calculated on the assumption that each safe water source will be used by 300 people. The rate is therefore equivalent to the number of sources multiplied by 300 and divided by the total population. However, while this ratio is hypothetically ideal for meeting the need for an adequate supply of drinking water, in practice it masks wide variations in the ease of access.

Policy and regulation

Ministry of Works and Housing (MoWH) – responsible for policy formulation and coordination, for soliciting funding from external support agencies (ESA); monitoring activities of the water supply and sanitation sector, and advising the cabinet.

Water Resources Commission (WRC) – regulates water resource uses and licenses water abstraction and wastewater discharges.

Environmental Protection Agency (EPA) – enforces environmental quality laws, including controls on pollution of water resources.

Public Utilities Regulatory Commission (PURC) – examines and approves tariffs for water, electricity and gas utility services.

District Assemblies regulate tariffs in community-managed small town piped systems and rural handpump water supply systems.

Rural water

Community Water and Sanitation Agency (CWSA) – facilitates development of water and sanitation in rural areas and small urban towns including promotion of appropriate management models, integration of health and hygiene, and capacity building of sector practitioners.

District Assemblies – establish *District Water and Sanitation Teams (DWST)* to select beneficiary communities, apply for national funds, manage implementation and approve tariffs.

Communities – apply to District Assemblies for new schemes for which they demonstrate their commitment by depositing funds to meet 5% of capital costs. They establish *Community Water and Sanitation Committees (WATSANs)* to set tariffs, maintain accounts and manage day-to-day operations of water points.

 $\ensuremath{\mathsf{NGOs}}$ – provide technical assistance and capacity building to community management groups.

Urban water

Ghana Water Company Limited (GWCL)

- responsible for the provision, distribution and management of urban water supply. Plans for private sector participation envisage the operation and maintenance of the water supply systems being ceded to a private operator while GWCL continues with sector planning and development.

Local people's expectations are that water should be available within 100 metres, not only for drinking but also for household income generation and other activities.

The use of mapping tools – developed in Afram Plains jointly by the District Assembly and a local NGO – by selected District Assemblies is now uncovering the reality of the distribution of safe water points and the access which various populations have to them. This kind of information has been critical to the ability of civil society organisations to monitor service delivery and then advocate for improvements. This has made service providers more accountable to water users with success in particular for poor rural communities.

Rox 2

Pro-poor technologies – the rope pump

WaterAid Ghana and local partners are currently advocating and promoting a rope pump as a low cost but effective technology. The intention is to obtain national recognition for it in order to increase rural water coverage.

Key concerns about the rope pump have focused on the durability of the rope, likely contamination of the rope and the availability of parts. Over the years, these issues have been investigated and resolved with the result that there have been tremendous improvements in the pumps. Moreover a manufacturing base for them has been established in the northern town of Bolgatanga.

The advantage of this pump for poor communities is that its much lower cost – Cedis 1.2m (\$133) compared with Cedis 6m for the imported Nira handpump – means that they do not have to find so much money for their 5% capital contribution. WaterAid's partners are therefore committed to spend between 5% and 10% of their resources for wells in 2005/06 on rope pump schemes.

Equity is also compromised by the rules which are set for community projects. District assemblies are expected by CWSA to structure project finances so that the assembly pays 5%, a project grant is used to cover 90% while the remaining 5% falls on the beneficiary community (although actual contributions vary due to different interpretations across projects). While this requirement stems from the need to adopt a demand-responsive approach its effect is to worsen the plight of the poor. Not only does it make it difficult or impossible for poor people to gain access to safe water and sanitation facilities, it leaves them dependent on unsafe water sources with all the health implications they entail.

The coalition of NGOs in water and sanitation has therefore started an advocacy campaign to ensure that the 5% capital contribution requirement does not prevent poor communities from gaining access to safe water.

To cater for the poor, a lifeline tariff has been proposed in official documents such as the GPRS, however, this has to yet be actualised or put into operation. The need to implement it is urgent due to growing poverty in both rural and urban areas.

Sustainability

As the mapping work in the Afram Plains has shown sustainability is a real problem in Ghana. However, the following range of measures has been adopted to try and increase the sustainability of facilities.

Rural and small town water supply and sanitation

Community management

The Community Water and Sanitation Program (NCWSP) has adopted a Community Ownership and Management strategy under which community water and sanitation committees handle day-to-day maintenance and repair needs by training two pump caretakers. More complex maintenance and repair needs are undertaken by district area mechanics. Underpinning community management is the demand-responsive approach where communities contribute 5% of capital costs – although in the absence of technology choices this can have implications for equity.

Hygiene and sanitation promotion

Under the NCWSP, communities benefiting from water facilities must also receive a minimum content of hygiene education and sanitation promotion activities. Despite this policy, however, not all projects include hygiene and sanitation.

Decentralised and programmatic strategy

The National Community Water and Sanitation Program is administered nationally by CWSA and locally by the districts. A standard implementation strategy, focusing on community management and the demand responsive approach, is applied.

Urban water supply

Autonomy

The state Ghana Water Company Limited manages the water supply systems of the 100 largest towns and cities. The level of staff training for routine operations is considered high and comparable internationally. GWCL uses professionals outside the organisation for technical studies, detailed engineering design, contract supervision and management, civil engineering construction of water supply systems and installation and repair of heavy pumping plant and equipment.

Effective regulation

PURC and the WRC have been established as part of the restructuring of the water sector to enhance the regulation of the sector.

Growth of private sector

The Government is currently in the process of entering into a management contract with a private operator for the operation of GWCL's Accra and other urban water supply systems. The need for improved management is clear from the figures: unaccounted for water rates of 50% represent lost income of Cedis 1.259bn (\$140,000). At the same time GWCL is reported¹5 to have 400 staff in its head office and 4327 in the regions, just three and one of whom respectively are professional engineers.

The Consumers' Association has run a stakeholders' workshop on the draft management contract. This includes performance measures and incentive targets for serving the poor, taking account of the need to focus on system expansions and not simply on revenues from lifeline tariff billing which could just reflect increased consumption by those already served. Expansions are needed to deal with the present situation in which the urban poor pay water vendors more than 10 times the price paid by those with connections to the piped water network. Government and civil society should respectively ensure and monitor that the management contract to improve the performance of the GWCL equally benefits the poorest people.

Transparency and civil society

The Government itself has noted¹⁶ that "paucity of recent and reliable data on access makes a complete assessment of progress in this sector difficult." It has ordered the publication of budget and expenditure data, especially for the Ghana Water Company Limited. Circulation of this information however is still very limited and there is a downward spiral where poor performance leads to less openness instead of transparency producing public pressure for better performance. GWCL Annual Reports were not published for 2001, 2002 or 2003¹⁷.

There are some opportunities for transparency in the requirements for public spending plans to be considered and agreed by Cabinet and/or Parliament. In addition the Urban Water Project has a steering committee with a union, private sector and Consumers' Association as well as Government representatives.

NGOs active in the water sector include World Vision International, WaterAid, ProNet and several church funded organisations. The longstanding Mole Conference series is an annual opportunity for public discussion of water sector issues. The Coalition of NGOs in water and sanitation is coordinating advocacy activities, presently on the issue of pro-poor access to water.

More widely there is an active civil society engaged, for example in monitoring the spending of HIPC debt relief funds. District HIPC Monitoring Committees have been credited with uncovering unused funds of Cedis 500m (\$56,000) in one district alone¹⁸. However lack of information – for example on the allocation of HIPC funds – has been identified¹⁹ as hampering civil society's ability to hold government accountable.

Conclusion

Ghana needs to substantially increase the outputs from its water sector if the Millennium Development Goals are to be met. This requires more finance. But before that it needs increases in capacity to ensure that even the existing inadequate funds can be fully utilised. In urban areas the plan to improve capacity by awarding a management contract to a private operator needs to be carefully implemented and monitored to ensure that the improvements also benefit the poorest people. In rural areas, District Assemblies need to be properly funded to fulfil their responsibilities for water and sanitation services. To ensure that there is this coherence in the water sector, those involved – government, donors and NGOs – need to identify both an effective mechanism for coordinating themselves and also arrangements for collecting and publishing data about their activities so that they are properly accountable to Ghanaians.



WaterAid – water for life The international NGO dedicated exclusively to the provision of safe domestic water, sanitation and hygiene education to the world's poorest people

Further information

This document is one in a series from WaterAid Country Programmes assessing national water sector issues in support of both national and international advocacy work in 2005. This document was written by Abdul-Nashiru Mohammed, Advocacy Manager, WaterAid Ghana. The full set of documents is available at www.wateraid.org/boilingpoint. Further information on this document can be obtained from Abdul-Nashiru Mohammed at abdulnashiru@wateraidghana.org and on the international advocacy work from Belinda Calaguas at belindacalaguas@wateraid.org

References

- ¹ Private communication, National Water Commission, August 2004
- ² Ghana at a Glance from www.worldbank.org/data/countrydata accessed on 7 April 2005. This represents a trebling of 2002's repayments of \$193m and a return to the \$580m level reported for 1998 by the Jubilee 2000 coalition in its "Eye of the needle the Africa debt report"
- ³ Private communication, National Water Commission, August 2004
- ⁴ The Community Water and Sanitation Agency noted in its 2001 Annual Report that its overall sanitation activities had resulted in overall coverage of just 1.32 latrines per community with the impact of the intended "demonstration" effect as yet unclear
- Other estimates are even higher with safe water investments calculated to be US\$654 million for rural areas and \$891 million for urban centres, a total of US\$1545 million. This estimate does not include mobilisation/delivery costs for which the UN has suggested making an allowance of 10%, bringing the total for water supply to US\$ 1700 million in current dollars. For sanitation, estimates are of a further \$722m (urban) and \$249m (rural)
- The 2002 Budget of Ghana: Into the 3rd Year of HIPC and "Property Owning Democracy" ed. Vitus Azeem (The Centre for Budget Advocacy of ISODEC 2003)
- For example it was reported in August 2004 that Cedis 6 billion of HIPC funds were being allocated to drill 70 boreholes in the guinea worm endemic communities in the Upper East Region (Business and Financial Times August 9-15 2004)
- An Analysis of the 2003 Annual Budget and Economic Policy Statement of the Government of Ghana (The Centre for Budget Advocacy of ISODEC, March 2004)
- op.cit. (ISODEC 2004)
- ¹⁰ Private communication, National Water Commission, August 2004
- " Community Water and Sanitation Agency 2001 Annual Report (Ministry of Works and Housing 2001)
- Accessible Information for Development Dialogue. ISSER and CEPA, Commissioned by DFID, Accra, 2004
- Private communication Talensi/Nabdam, District Assembly Chief Executive
- op.cit. (ISSER and CEPA) pg 59
- ¹⁵ World Bank Country Assessment Report, Ghana 2004
- Implementation of the Ghana Poverty Reduction Strategy: 2002 Annual Progress Report (National Development Planning Commission May 30 2003)
- During this period GWCL was effectively bankrupted by a combination of inadequate tariffs and enormous debts relating to foreign currency loans (made to the Ghana Government but on-lent to the GWCL), the repayments for which hugely increased following the collapse in the Ghana currency, the cedi.
- ¹⁸ HIPC Watch Update April-June 2004 Vol. 3 No. 6 (Social Enterprise Development Foundation of West Africa)
- 19 op.cit (ISODEC 2003)