

However, during the 2004 celebration of his second year as President, Amadou Toumani Touré publicly expressed his resentment at the high tariffs applied to water and electricity. To redress this situation, the Government provided significant further subsidies – several billion FCFA were disbursed by the Government to compensate for the equipment and gas used by EDM, and a further FCFA 5 billion was paid to EDM to lower water and electricity tariffs.

Transparency and civil society

Data

Good information on the water sector is difficult to locate. Water and sanitation figures are available from several sources (for example, the Ministry of Water, the Journal of National Statistics and the World Bank) but these are often different from one another. For example Mali official statistics report rural safe water access of 62% but the WHO/UNICEF Joint Monitoring Programme 2004 Mid-Term Assessment gives a figure of 35%. Budget and expenditure figures are not published and can only be obtained with a great deal of persistence.

Civil society

The end of military rule in 1991 brought a freedom of expression which all areas, including water and sanitation, benefited from, as can be seen from the improvements to those services. But even now there are no genuinely participatory poverty assessments which have real impact on national planning processes.

Local NGOs have been present in Mali since the 1960s when missionaries encouraged their development. Those kinds of NGOs contributed to improvements in the rural population's way of life. National NGOs emerged during the 1974 drought but it was the end of dictatorship in 1991 which saw NGO numbers dramatically increase. The presence of International NGOs also increased.

All these NGOs generally adopt both participatory approaches within a community and financial systems which enable them to monitor expenses according to outcomes. Most of the INGOs work with local NGOs providing training and capacity building. NGOs work in accordance with the national policies established by the Government to ensure the most effective results.

There is a grouping of NGOs called CCA-ONG (Conseil de Concertation et d'Appui aux Organisations non Gouvernementales) which coordinates all NGOs in Mali. In addition to CCA-ONG there is CAPEA (Coordination des Acteurs pour l'Eau potable et l'Assainissement) for water sector NGOs. CAPEA tries to harmonise NGOs' activities, plan strategies and influence policies in the sector.



WaterAid, Prince Consort House, 27-29 Albert Embankment, London SE1 7UB. Telephone: +44(0)20 7793 4500
UK charity registration number 288701
Photo credit: WaterAid/Daniel O'Leary

Conclusion

Mali faces massive challenges in improving the performance of its water sector to reach the levels required by the Millennium Development Goals, especially the sanitation target. Issues of equity are central: water resources need to be made available for the poor as well as the rich, and financial resources must be allocated so that all regions can enjoy the same levels of water service. The decentralised administrative system has the potential to improve the targeting of new investments and the sustainability of supply systems. But to realise this potential there needs to be improvements in technical skills and monitoring systems.

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 Kadiatou Aw, Advocacy and Communication Manager, WaterAid Mali. As well as WaterAid Programme Staff, the assessment was discussed with government officials in the Departments of Hydraulic Engineering and of Planning. The full set of documents is available at www.wateraid.org/boilingpoint. Further information on this document can be obtained from Kadiatou Aw at kadiatouaw@wateraid-mali.org and on the international advocacy work from Belinda Calaguas at belindacalaguas@wateraid.org

References

- ¹ World Population Prospects: The 2004 Revision (UN Department of Economic and Social Affairs Population Division 24 February 2005)
- ² ibid
- ³ Private communication Direction Nationale de la Santé (DNS)
- ⁴ Mali figures using impact calculation methodology developed by WHO in Hutton G & Haller L (2004) 'The costs and benefits of water and sanitation improvements at the global level'
- ⁵ ibid
- ⁶ From World Bank "Country at a glance" table for Mali at <http://www.worldbank.org/cgi-bin/> May 2005
- ⁷ Data from Direction Nationale de la Planification: Budget Spécial d'Investissements (BSI)
- ⁸ Personal communication, Deputy Director of DNH and technical council on water and sanitation of the Ministry of Water
- ⁹ A total of 216,012 water points across Mali is reported in Carte de l'eaux (DNH, October 2000)
- ¹⁰ Personal communication, Director of Department of Hydraulic Engineering
- ¹¹ Figures from consessional contract signed by EDM and the Government of Mali on 13 November 2000

Mali

Where barely 50% of the population have safe drinking water but it is left to donors to provide 80% of the water sector's funds



WaterAid – calls to action

- Government should prioritise water and sanitation to provide easier access to domestic funding through the national budget
- Government should fully implement its decentralisation policy to ensure that the 701 local communes have the resources, as well as the responsibility, for water and sanitation
- Government, donors and NGOs must work together to ensure that the water sector always prepares local communities to manage their water supplies to ensure they are sustainable

www.wateraid.org

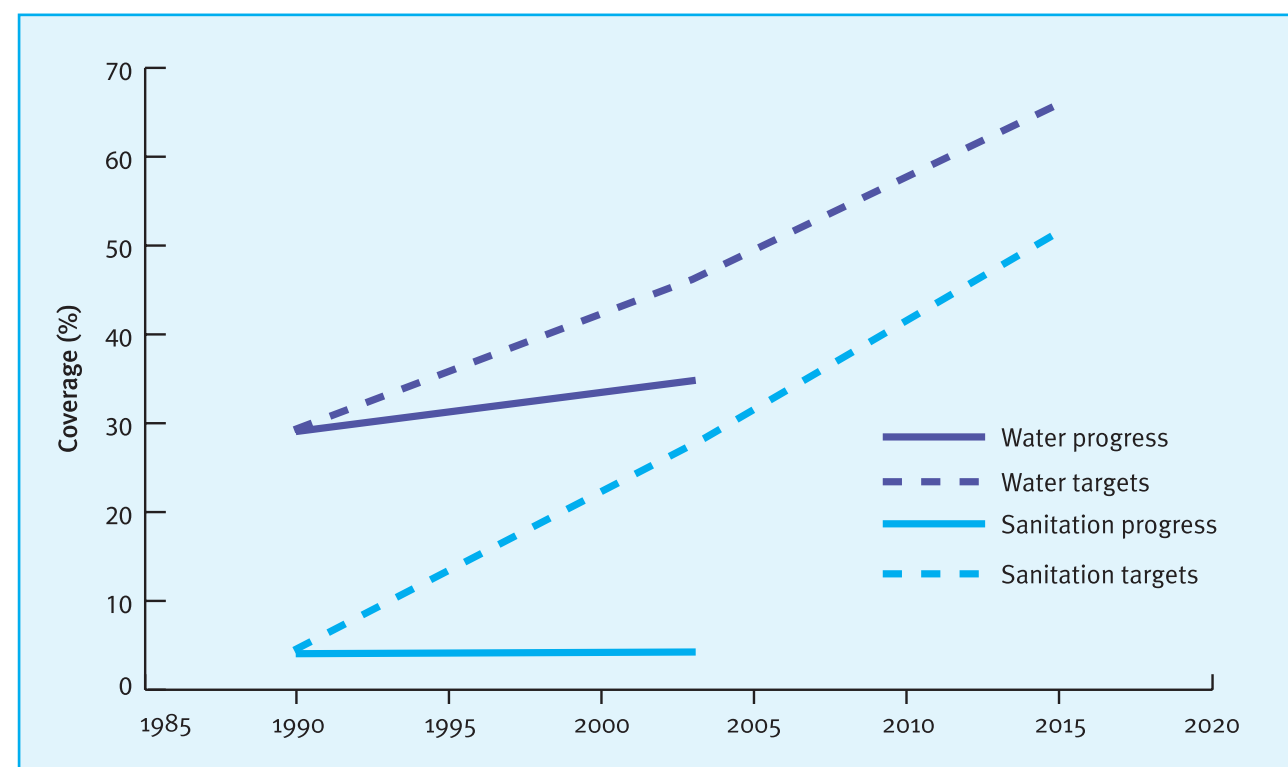
June 2005

Introduction

The Republic of Mali is a vast, landlocked country covering an area of approximately 1,410,238 km² and sharing almost 7200km of borders with seven other countries. Mali has a population of 13.5 million, 65% of whom live in rural areas. Life expectancy is 48 years. Of every 1000 live-born children 123 die before their first birthday and of every 1000 surviving past the age of one, 233 die before their fifth birthday. Mali is one of the poorest countries in the world

and the annual per capita income is one of the lowest at US\$240. Mali did experience an economic recovery from 1994 to 2000 when average growth rates were 5.4%. Nonetheless between 1989 and 1996 the poverty rate showed an overall increase of 25% in urban areas and of 31% in rural areas. Mali's Human Poverty Index was 47.8% in 2001, indicating high rates of poverty.

Figure 1: Progress towards urban and rural national water targets



Fact box

Population projection 2005 – total (rural/urban)	13.5m (8.8m/4.7m)
Population projection ² for 2015 – total (rural/urban)	18.1m
Present access to safe water (rural/urban)	62%/50%
Present access to basic sanitation (rural/urban)	8% /30%
Annual deaths of under fives due to diarrhoea ³	19,576
Productive days which would be gained with 100% access ⁴ to water and sanitation	917,000
School days which would be gained with 100% access ⁵ to water and sanitation	2 million
Monthly number of households requiring access to reach water MDG	4438
– increase required (on performance since 1990)	130%
Monthly number of households requiring access to reach sanitation MDG	6172
– increase required (on performance since 1990)	950%
Current annual water spend	\$11.8m
Water/sanitation sector annual finance need for MDGs	\$56.6m
Water sector annual MDG spending gap	\$44.8m
Annual national debt service payment (2003) ⁶	\$83m

Key events

1960	Independence	1998	Presidential decree creates National Department of Sanitation, Pollution and Nuisance control (DNACPN) but no resources are provided for it to operate
1961	Energie du Mali (EDM) established to produce and distribute urban drinking water	2000	Government adopts water code
1974	Sahel drought – government responds with massive rural water supply programme	2004	Water tariffs reduced by 10%. Ministry of Environment and Sanitation created. Mali Army deployed on nationwide sanitation project. National Plan for Access to Water adopted
1992	Return to democratic rule		
1996	Third Republic formed – decentralisation policy introduced		

Water sector characteristics

Barely 50% of people in Mali have access to safe water, leaving the majority of the population having to drink water from unimproved or unsafe sources. The objective of the National Water Access Plan is to ensure that 75% of the population will have access to potable water by 2015. The National Department of Hydraulic Infrastructure (Directional National de Hydraulique or DNH) plans to achieve this by working towards one modern water point in each village.

Law

The institutional framework stipulates that in rural and peri-urban areas decentralised local authorities are either the contracting authorities for public services or are the direct providers of water infrastructure. Centres of population greater than 10,000 are served by the private utility, EDM.

The Commission of Regulation of Water and Electricity (CREE – Commission de Regulation de l'Eau et de l'Electricité) works with the Prime Minister. It is a legally constituted body and has financial independence. On the request of the Ministry of Mines, Energy and Water, the CREE can participate in the development of water and sanitation sector plans. The CREE is consulted for all projects. It is responsible for defending consumers' interests and for ensuring the quality of public services. But at the same time the CREE must also promote and organise competition in the sector. The CREE has the power to investigate any department, individual or operator without restrictions to make sure that regulations are respected. Its administrative decisions are applicable at the national level and are imposed upon contracting authorities, users and operators as soon as they appear in the Official Journal of laws, appointments and other government business published monthly.

Sanitation

In 1998 a National Department of Sanitation, Pollution and Nuisance Control (DNACPN) was created by presidential

decree. However DNACPN has yet to be given a budget to carry out works. Moreover, the Department now forms part of the Ministry of Environment and Sanitation whose coordination with other departments dealing with sanitation issues is proving increasingly problematic. Collectively the departments fail to:

- Collect waste within different neighbourhoods
- Empty pits and latrines (not even those of the Government)
- Manage any sludge treatment plant for pit and latrine sewage
- Clean ditches (except where international donors fund ad hoc operations)
- Construct or manage any sewage systems

Resource management

The country's water resources far outweigh its needs, which should in theory mean that all water and sanitation needs can be catered for in the long term. Therefore the real issue is the lack of mobilisation and distribution to ensure these resources reach everyone including the poorest people.

Finance

Needs

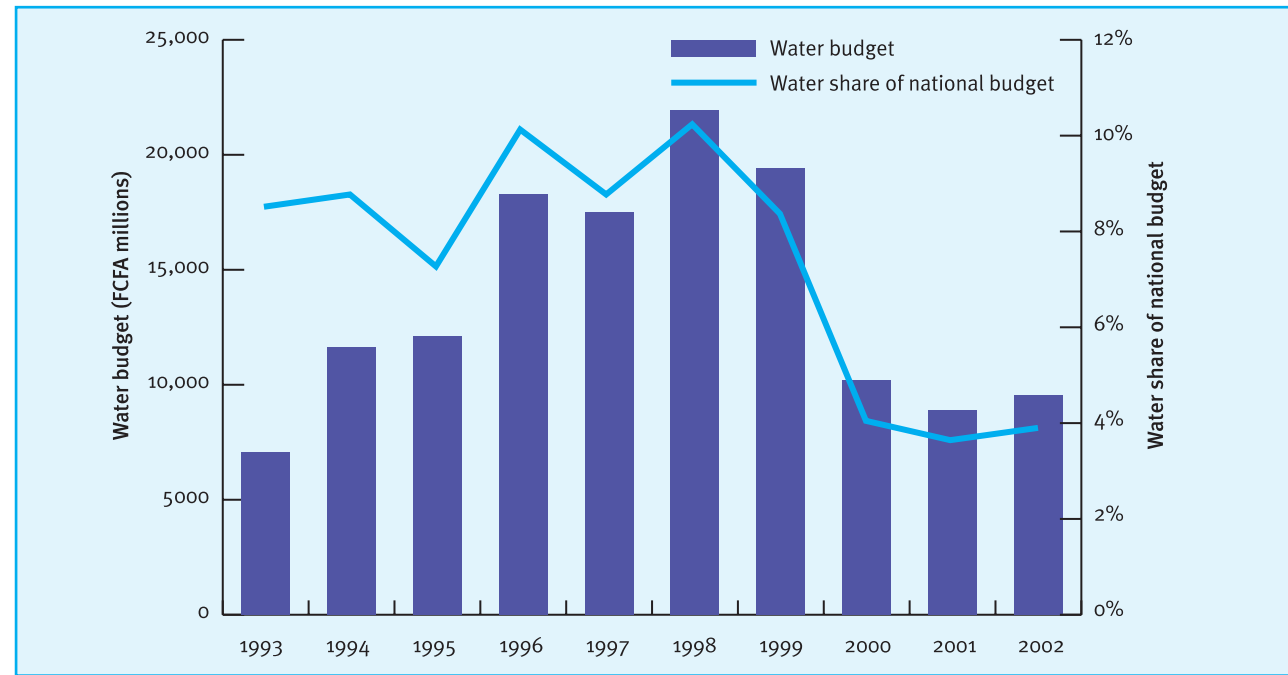
WaterAid calculates that the water and sanitation Millennium Development Goal (MDG) targets require spending of \$56.6m each year. While the total budget is currently \$18.4m actual expenditure is just \$11.8m. Spending therefore needs to increase by \$44.8m per year.

Massive increases in output are required (Table 1) from the water sector if the MDG targets are to be met. The monthly numbers of households which must get access to water and sanitation for the first time are up to 100 times greater than what has been achieved before.

Table 1: Performance increases needed to meet the water and sanitation MDGs

Sector	Location	Performance (Households per month)		Increases required for MDGs (Additional performance required)
		1990-2003	2004-2015	
Water	Rural	456	2156	373%
	Urban	1482	2282	54%
Sanitation	Rural	29	2925	10,147%
	Urban	562	3247	478%

Figure 2: Water budgets and share of national budget 1993-2002



Government finances and share of total public spending

Mali has allocated resources to the water and sanitation sector which have to date enabled the construction of 10,160 boreholes with handpumps, 4,498 wide diameter wells and 400 trunk mains. However the budget has recently fallen (Figure 2⁷), possibly reflecting previous failures to utilise the full budget allocated.

Donors

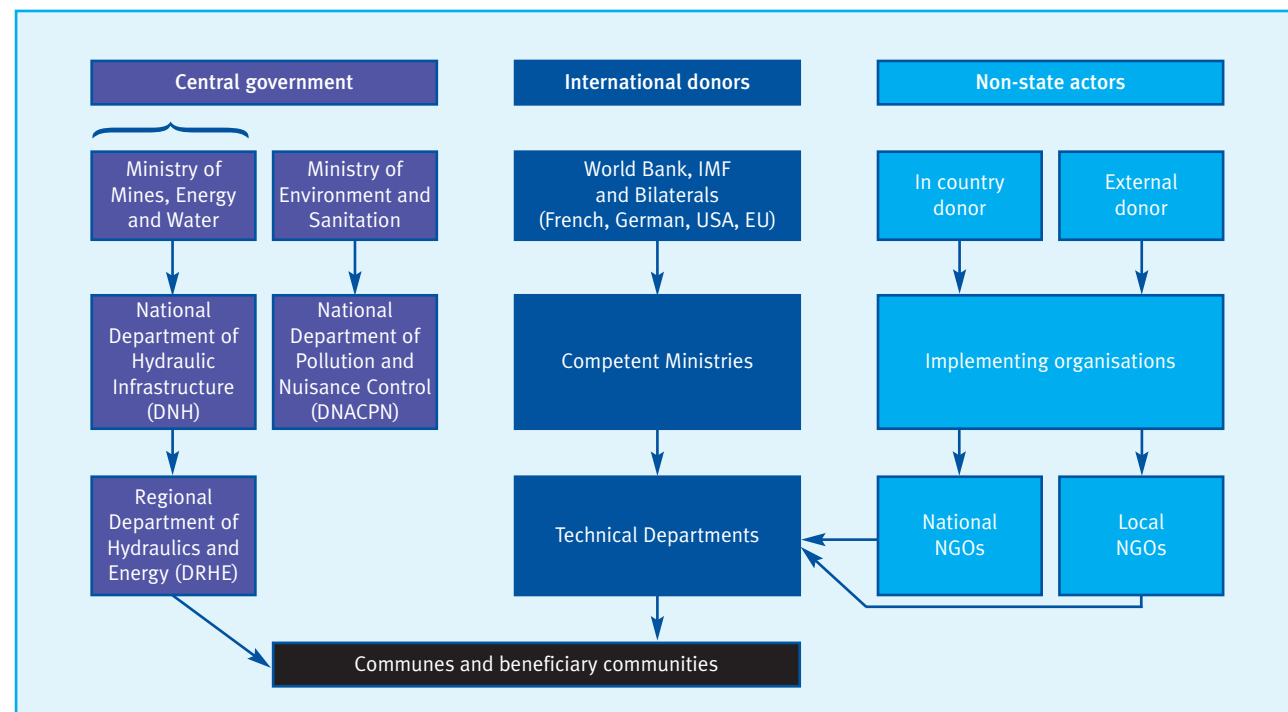
Some 80% of water sector investments come from external donors⁸.

Government should prioritise water and sanitation to provide easier access to domestic funding through the national budget.

Sector coordination

The Inter-Ministerial Water and Sanitation committee is chaired by the Ministry of Water with the Department of Hydraulic Infrastructure (DNH) serving as Technical Secretary. Inside this structure the Water Management Commission and the Environment Commission hold monthly meetings.

The Permanent Water Commission gathers each month to discuss the sector problems and assess achievements and financing. A Sector Consultation on Access to Safe Water and Sanitation was also held on 3 and 4 December 2004 to identify the needs of the sector and mobilise funding. Yet, despite these efforts at coordination there remains a plethora of routes for funding to reach projects on the ground.



This, together with other factors such as the shortage of engineers probably accounts for the frequent failures to utilise all the money available under the water budget (Figure 3).

Decentralisation

At the start of the Third Republic in 1996 the Mali Government set in motion vast administrative reforms. These reforms have led to the country being divided into 701 communes, 682 rural and 19 urban. The Bamako District is ranked as a region and comprises six urban communes. These urban communes are run by mayors assisted by fully-elected municipal councils. Elsewhere, between the regional and commune administrative levels is an intermediary level, the *cercle*. The *cercle* council is chosen by the elected commune councillors. At the regional

level, there is a regional assembly chosen by members of the *cercle* councils. All these local authorities, with legal status and financial autonomy, report to the Ministry for Territorial Administration and Local Authorities.

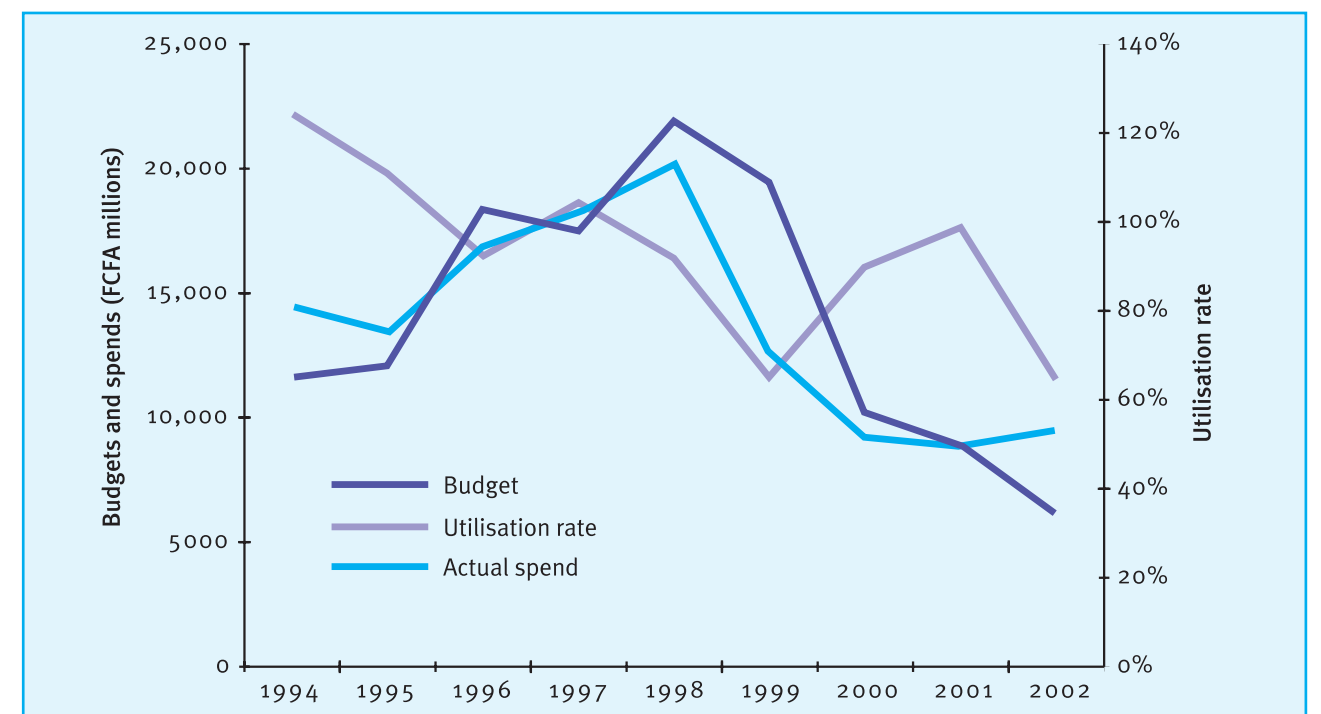
Following the decentralisation process, the role of the actors in the water sector has been entirely redefined (Table 2). This reorganisation is characterised by:

- A refocusing of the State on its policy, legislative and monitoring function and a disengagement from operational functions
- A transfer of operational responsibility to local level
- A greater involvement of water users, particularly in the payment of recurrent costs and management
- Involvement of the private sector

Table 2: Water sector responsibilities

Actor	Responsibilities
The State	Provides financial aid and large investments. Prepares and implements legislation. Defines and enforces standards for design, construction and use.
The communal council	Ensures the proper functioning of water services by delegating authority as appropriate for the management of water infrastructure.
The users	May ensure management through the organisation of a water users association. They participate in defining management terms and conditions, pay for the water service, and ensure rational and hygienic water use.
Operators	Ensure water supply and distribution, including the operation and maintenance of water installations and the financial management systems.
Private operators	Execute the tasks linked to the construction and use of water supply systems (feasibility studies, construction, repair, supply of replacement parts, training). They ensure management, technical and financial monitoring and support/advice.

Figure 3: Mali water sector budgets and spends 1994-2002



The decentralisation process delegates authority for public water services to locally elected authorities. This policy applies to three territorial levels: regions, districts and communes and is intended to contribute to the economic, social and cultural development of the country.

Article 14 of law number 95-034 of the local authorities' code indicates the communes' responsibilities in terms of the powers of the communal council: "The communal council, through its deliberations, rules on the affairs of the commune... it thus deliberates, among other things, on: rural and urban water."

Communes are therefore responsible for the planning, conception, construction and use of water infrastructure in their areas of jurisdiction. During these different stages communal councils receive support from regional technical state offices and from other organisations such as the Communal Advisory Centres (CCC – Centre Communales de Conseil).

Communes manage the money that they receive directly from the State and also have the authority to collect taxes from their localities for use according to the local needs. But the money that they receive is insignificant compared to the size of the localities and their needs. Government disburses funds through the Agence National d'Investissement des Collectivités Territoriales (ANICT), a national body with a remit to manage subsidies earmarked for local investments. ANICT therefore has discretion over the amount of funding allocated to each region or commune according to the project proposals submitted from those administrative levels. Those proposals are themselves constrained however by the requirement that to access ANICT funds, communes must supply some 20% of the total funding needed by the project from their own revenues. **Government should fully implement its decentralisation policy to ensure that the 701 local communes have the resources, as well as the responsibility, for water and sanitation.**

This position is exacerbated by the lack of qualified staff which means that projects are not always well implemented, resulting in bad investment from the Government. Between 1996 and 2003, some 1245 engineers graduated from the

National Engineering School, sufficient for each local authority to have just 1.5 engineers. This is nothing compared to the actual needs of even the water sector – it equates to one engineer for every 170 modern or traditional water points⁹.

Equity

There is considerable variation (Figure 4) in the levels of both water services and funding between the nine different regions (including Bamako) of Mali. Although construction costs can of course vary according to local topography and resource availability, there appears little correlation between the numbers of people reliant on each functioning water point and the funding available to either rehabilitate broken water points or construct new ones.

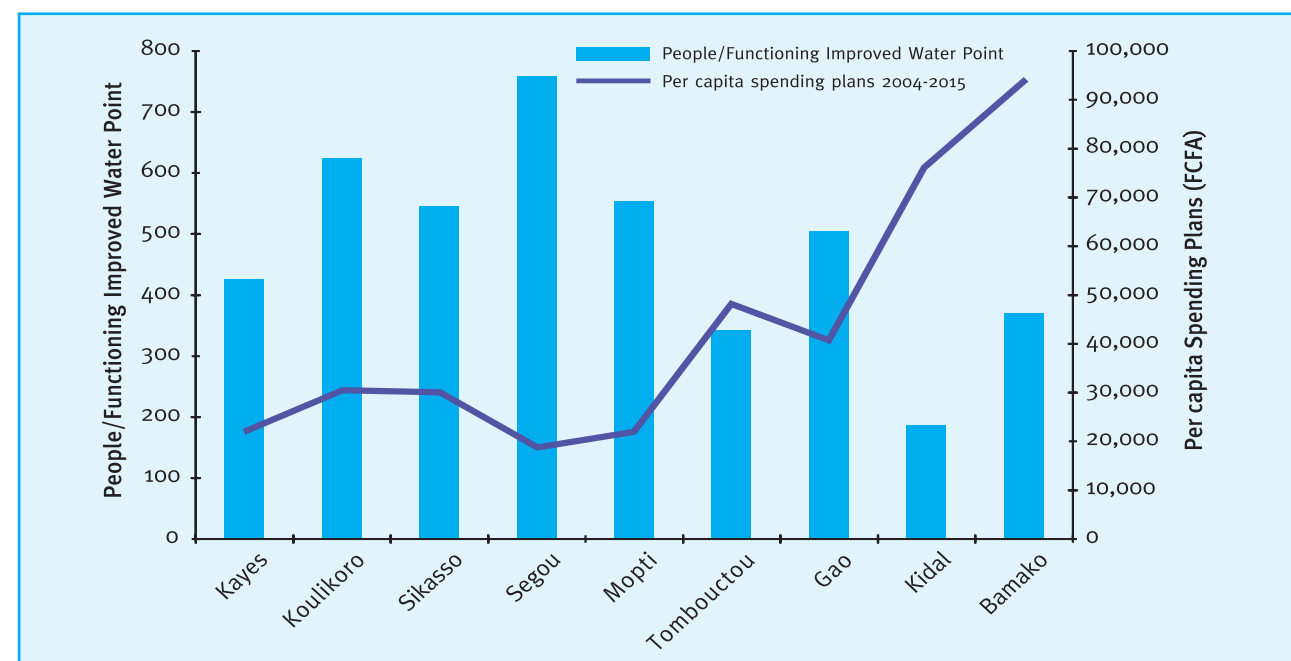
The high investments in Kidal reflect a new water supply project costing FCFA 1.5 billion which was 80% financed by the African Economic Support Bank (BADEA) with the rest from the Government. The water distribution network here has 250 private subscribers, 27 public stand pipes and 14 institutional connections.

Sustainability

Responsibility for the first pumps installed in Mali fell entirely to the State due to the urgency of intervention required to remedy the harmful effects of the 1974 drought. However it soon became apparent that because the water points were installed as a matter of urgency, the local populations received training on how to manage them:

- No awareness raising/animation was undertaken
- No financial contribution was required from the people
- No water point management committees were put in place
- No local pump mechanics were trained
- Maintenance was difficult to provide by the State, which was often distant and had little funds
- No spare parts shops were set up

Figure 4: Comparison of spending plans with current service levels in the Mali water sector



Pump maintenance was also a problem, and despite corrective measures (focussing on training local pump mechanics and the creation of water point management committees) continues to be an obstacle to the operation of village water systems. This is demonstrated by the DNHE statistics on their rate of operation (Figure 5).

In practice, village water committees hardly function. Methods for recovering pump maintenance costs vary tremendously. Very few villages manage to establish a maintenance fund, and pump repairs are generally undertaken in a piecemeal fashion with one-off contributions being levied. The sale of water and preventive visits by pump mechanics are still not current practice in rural areas. According to data collected from the mapping of water points established by DNH, of the 14,182 pumps inventoried across Mali 9360 were working and 4822 were broken (Figure 5). **Government, donors and NGOs must work together to ensure that the water sector always prepares local communities to manage their water supplies to ensure they are sustainable.**

The sustainability of wells is also determined by whether they are deep enough to provide water throughout the year during fluctuations in the water table. Even modern wells do not all provide year round service.

In 2005/6 an additional FCFA 700 million has been allocated to improve water point sustainability. This equates to FCFA 145,000 or \$280 per broken pump.

Gender

In WaterAid's experience, the gender make-up of sector institutions is a good indicator of sustainability. This is because water is usually a female responsibility so women and girls have clearer vested interests in the continued functioning of water supply systems. They are therefore more likely to take care of the infrastructure and of any funds collected to maintain it. Over the last few years in Mali women have become increasingly active and present in

government institutions, however there remains significant imbalance in their numbers. For example of the 260 staff at the National Department of Hydraulic Infrastructure (DNH) only 28 or 10% are women although these do include five in senior positions, three of them as engineers¹⁰. At the community level women are also involved in managing water points. Where the relevant project has included promotion of revenue generating activities such as soap making, women have become more independent.

Growth of private sector

There has been a trend towards privatising water and electricity provision in Mali. In line with its strategy to rapidly improve coverage rates of safe water the Malian Government decided to privatise 60% of the operations of EDM. The privatised EDM is responsible for providing potable water in accordance with a concessionary contract. The terms and conditions of this privatisation also required the operator to contribute to planned new investments. EDM's plans however (Table 3) are worth some FCFA 7.5 billion or \$14.5 million per year compared to the total need estimated by WaterAid of \$45 million.

Table 3: Planned EDM investments¹¹ in water services 2001-2020

Period	2001-2005 (FCFA billion)	2006-2020 (FCFA billion)	Total (FCFA billion)
Production, supply, storage, distribution	38.4	103.6	142.0
Supervision of external activities studies	1.2	3.1	4.3
Water meters	1.2	3.2	4.4
Total	40.8	109.9	150.7

Figure 5: Numbers of water pumps (working and total) together with functionality rates by region

