



# Private sector role is critical to meeting WASH targets

This learning note describes the private sector landscape in the WASH sector in Ethiopia. A report identifies bottlenecks and details recommendations to enable the private sector to play a greater role in meeting Government targets and objectives.

## Study examined roles and trends

DFID/UNICEF asked the IRC/Hoarec consortium to analyse the role of the private sector in WASH and make recommendations to support the One WaSH National Program (OWNP).

The study examined:

- Roles and trends
- Actors, institutions, legislation, policies, and programmes
- Interaction between the government, donors and the private sector

It focused in particular on:

- Small and medium-sized enterprises in town water supply and sanitation, including solid and liquid waste management
- Private drilling firms

Service areas included:

- Construction of water and sanitation facilities;
- Supply of hardware and spare parts
- Services, including operation and maintenance.

Interviews were conducted with key informants and preliminary findings were reviewed at workshops with stakeholders.

## Private firms need support to grow and reach potential

The private sector in Ethiopia has the potential to play a greater role in developing water supply services and solid and liquid waste management. If the private sector can improve its efficiency and performance, it can contribute to faster progress and lower costs.

A report, *Private Sector Landscape for WASH in Ethiopia*, published by the ONEWASH Plus Programme identifies opportunities and bottlenecks and calls for improvements in private sector capacity.

Private companies and consultants already contribute in the water and sanitation sector on a range of services. Expanding their role could help the One WaSH National Program to meet its targets and speed up delivery in under-resourced regions.

The Growth and Transformation Plan (GTP2) for urban services will deliver a higher level of more reliable water connections and the safe transportation and management of faecal waste.

The study by IRC/Hoarec analysed the WASH private sector landscape and challenges in relation to small towns and found that it is less developed in WASH than in several other sectors. The report makes recommendations in three key areas:

- **Finance:** improve access to loans and credits for WASH to make it possible for companies to invest in up to date equipment, expand and become more efficient.
- **Reduce bureaucracy:** to speed up decision making in awarding contracts and for flexible implementation. Delays and bureaucracy drive up prices and frustrate local services – particularly for dealing with waste (including faecal waste).
- **Improve private sector performance:** to address weaknesses that increase delays and costs and reduce quality. Some private sector bottlenecks are self-inflicted, such as underbidding to win contracts which they cannot deliver on time to the right quality standards.

The report recommends that the National WaSH Coordination Office (NWCO) takes the lead developing an agreed action plan. For further recommendations see Page 8 of this note.

## WASH is a national priority area for growth and poverty reduction

Currently, the main private sector activities in WASH are focused on:

- Study and design
- Construction
- Drilling
- Supply of goods
- Liquid and solid-waste
- Maintenance services
- Microfinance in rural WASH

According to the study, private suppliers and artisans could play a role in establishing supply chains for products and spare parts and for repair services, as well as providing support for self-supply activities.

Micro and small enterprises collect solid waste from households while larger firms undertake bulk collection.

The private sector is involved in liquid waste management in cities, from where neighbouring smaller towns buy in their services. In some small towns informal manual operators extract faecal sludge by hand.

Private banks and microfinance institutions (MFIs) provide some limited financial services to communities.

## Private sector scope is limited but growing

The Government of Ethiopia (GoE) has made water and sanitation a priority area for achieving sustainable growth and poverty reduction, and set targets for 98.5% water supply and 100% sanitation access, with improved hygiene.

Collaboration between private and public sectors has been identified as a fundamental strategy to achieve WASH service development.

The Ethiopian economy is one of the fastest growing in Africa with an average real gross domestic product (GDP) growth of 11.3 per cent between 2003-04 and 2009-10. The private sector has been growing significantly since 1991 and especially since the GoE established the Ethiopian Privatization Agency (EPA).

Privatisation is conducted through sale, joint venture with the public sector, or by leasing assets to commercial companies. However, The EPA mandate does not cover utilities, infrastructure or financial services. A recent decision to permit private sector electricity generation could set a precedent for utilities such as town water supplies.

Currently town water supply services are owned and operated by public sector utilities, but the role of the private sector is growing in consultancy, supply of goods, construction, drilling and maintenance. Under changes being piloted by UNICEF, the private sector may play a greater role in upgrading the skills of the utilities to operate systems that the private sector has designed and constructed (see page 6 of this learning note).

The promotion of private sector involvement requires an enabling environment that provides security, and scope for income generation. The GoE has been taking measures, especially since 2003, to provide this.

The Water Resource Management Policy and Ethiopian Water Sector Strategy both promote participation by the private sector.

A government Trade Practices Commission oversee a proclamation that regulates unfair trading practice and promotes competition.

Some private companies have complained of a lack of fair competition between private companies and public enterprises. However, federal and regional agencies (supported by contract registers) indicate that over 90% of works and studies for town water supplies and over 80% of drilling works have been carried out by private companies.

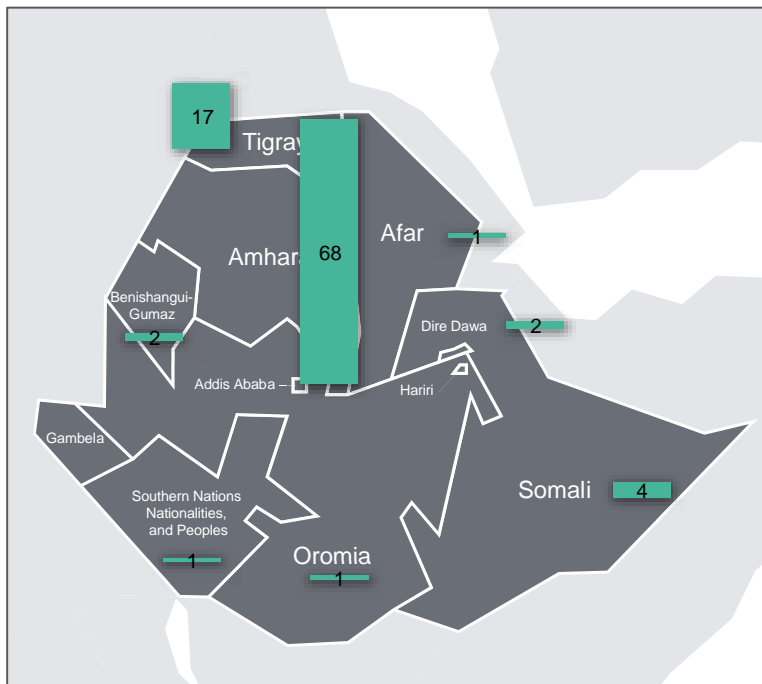
However, there are still structural difficulties. The private sector role in liquid and solid waste management is limited due to lack of clear policies or a public organisation responsible for urban WASH.

## Drilling sector is dynamic but cannot keep up with demand for wells

A dynamic drilling sector has become more competitive and attracts companies from all over the world. The number of private drilling companies registered in Ethiopia increased from 25 in 2005 to 96 in 2014. However, most of 79 locally owned enterprises possess only one or two old rigs with low productivity and high costs and can only drill shallow and medium wells. They find it difficult to compete with the 17 international drilling companies, primarily from China and India that work in several sectors and drill to all depths. Most foreign companies have access to capital and spare parts and have higher efficiency.

There is still a capacity gap to drill 14,000 wells per annum to reach the target of 60,000 new wells and the drilling companies are very concentrated on Addis Ababa. There is demand for about 43,200 wells in rural areas, 2,000 in towns and 14,800 in institutions such as businesses, NGOs or religious institutions.

**Figure 1 Location of 96 private drilling companies by region**



There is strong competition for small and shallow wells but only a couple of Chinese companies and one local company are in a position to bid for wells more than 400 meters deep with a diameter larger than 16 inches, as required for large urban water supply projects and large irrigation projects. Some public enterprises have the capacity to drill deep medium diameter wells in small towns.

## Expertise and resources are clustered on Addis Ababa

### Drilling companies:

According to the Ministry of Water, Irrigation and Energy (MoWIE) only 28 private drilling firms are located in the regions (see Figure 1). Of these 17 are in Tigray. Some regions have only one company while Gambela has none.

**Contractors:** There were 993 licensed private water works contractors in 2006 EC (2014). They employ about 4,000 professional and semi-professional staff. Of these contractors 623 (63%) are in Addis Ababa and almost all the others are based in Amhara, Oromia, SNNPR or Tigray regions.

**Consultants:** There are 45 water works consulting firms of which 39 (87%) are in Addis Ababa. They employ about 250 professional staff. Only 11 (25%) of these firms are placed in the top three categories for size and resources.

**Suppliers:** There are probably fewer than ten major suppliers of pumps, generators, pipes, water meters etc. in the water sector, leading to fears of monopolies arising.

**Manufacture:** A small local industry has begun to assemble drilling rigs but is short of financial backing and of orders.

## Private market driven by public sector

The WASH sector will remain a publically-driven market for many years to come with government the biggest source of business for private enterprises.

However, attempts to improve contracting and increase effectiveness and efficiency open new windows of opportunity for private companies.

The One WaSH National Program Document (2013) stresses the importance of the role of the private sector for activities with an estimated US\$ 2.6 billion budget.

Contractors, consultants and suppliers can be involved in:

- Designing, building and operating more than 55,600 new water points and water supply schemes (with another 19,500 needing rehabilitation).
- Drilling 60,000 wells
- A wide range of work in more than 300 towns, including solid and liquid waste management.

The Program Operation Manual (POM) proposes strengthening programme management units at all level. Attempts to improve contracting and to increase project implementation efficiency offer private companies new opportunities.

The private sector can also become involved in post-construction support.

## Finance for investment is a major challenge

### Finance hard to find for investment

Finance for investment is a major challenge for private companies, especially because contractors and consultants in the WASH sector face cash-flow problems due to delays in being paid.

Private banks offer high interest rates and short-term loans and rarely accept assets other than buildings and vehicles as collateral. It is hard to see the emergence of a viable private drilling and construction sector without financial support.

The Development Bank of Ethiopia provides favourable loans to some sectors but not for WASH (see below).

Access to funds is also a serious problem for companies in small towns where there are few financial institutions and limited micro-credit. They often pay high interest rates to moneylenders.

Regulations and lack of foreign currency puts Ethiopian firms at a disadvantage with international companies.

Around 40% of private firms cite the taxation system as a challenge, especially small businesses, with limited capacity for financial management.

Many companies fail because they start in the water sector without a business plan, fail to research the market, underestimate competition and don't meet their revenue goals.

### Development bank taps fail to flow

The state owned Development Bank of Ethiopia (DBE) was established to support development. Credit mainly goes to manufacturing, and commercial farming and it does not finance construction. It is possible in theory to obtain a DBE loan for the water sector, but in practice there is no mechanism to do so.

- The bank loan covers 60% of the investment costs
- The interest rate is 8.5% on money disbursed and 0.5% on the undisbursed balance
- There is a 1-4 years grace period before repayments begin
- An applicant must show 3 years of financial statements.

It is rare for a company to be able to finance the high cost of establishing a private drilling company from its own resources, while private banks offer short loan periods and finance only 50% of necessary investment. There are few tax incentives for investment and a critical shortage of foreign currency.

Given the importance of water resources development and supply in Ethiopia, there is a need for the government to pay more attention to the financial needs of the sector.

## Towns and woredas face difficulties in managing WASH contracts

The One WaSH National Program is giving priority to addressing capacity gaps which remain a threat to successful implementation.

However, there is no comprehensive assessment of the capacity of WASH organisations to identify needs, formulate required services, prepare bid documents, award contracts and monitor private sector services and products.

An evaluation by DFID found substantial capacity constraints within WASH organisations. Town utilities and woreda sector offices have difficulties in managing contracts.

There is also limited awareness and experience of using the private sector and a historical bias against it.

The limited number of skilled professionals and frequent staff turnover is related to inadequate incentive packages, lack of qualifications, and a poor working environment.

### Urban WASH lacks clear lines of responsibility

The major institutional challenge for developing services in towns remains the absence of a clearly delineated organisation for urban WASH services.

Responsibilities are shared between water utilities, municipalities and health offices. The private sector role in liquid and solid waste management is limited due to the lack of clear policies or a public organisation responsible for urban WASH.

Despite the water policy highlighting the need for the separation of regulatory and service provision functions, there is no regulatory agency at national or regional level.

Because of the limited capacity at woreda and town level, most contracts are managed at regional level, which can create divided responsibilities for private contractors and lead to delays and confusion.

Private companies also lack capacity. Government sources indicate that most cannot provide any better service than the public sector due to chronic capacity constraints.

Contractors who come from other sectors often find the WASH sector to be more complex and to require greater skills than expected. This seems to be reflected in the low proportion of contractors that have renewed their licences with the Ministry of Water, Irrigation and Energy.

## Clients and consultants complain of low standards

Public sector clients complain that contractors and consultants often deliver low quality work.

Complaints include:

- Bidding for a low price to win contracts; then not being able to deliver
- Bidding without fully understanding the work or making a site visit
- Using senior staff to win tenders but junior staff carry out the work
- Delays in supply of materials and lack of appropriate machinery
- Lack of skilled staff and high staff turnover
- Cutting corners in the belief that supervision will not be thorough

However, the private sector complains of excessive bureaucracy and delay in public organisations that increases costs and damages morale, and says that the lowest bid almost always wins the contract.

They complain in particular of:

- Low quality requests for proposals
- Unrealistic deadlines that compromise quality
- Missing items off the bill of quantities
- Failure to allow for design variations
- Limited capacity to review reports, studies and designs
- Weak or corrupt supervision



## Dispersed sites and uncertain rock conditions push up costs

A number of practical issues make groundwater development more difficult and expensive.

Ethiopia has complex hydrogeology. It is possible to encounter different rock formations when drilling.

But hydrogeological studies often fail to identify problems leading to delays and cost overruns. As a result, contractors prepare bids on the basis of the worst possible conditions.

Contracting issues also make drilling more expensive. Most tender packages are for a few wells at sites that are far apart. If tenders were prepared in clusters of 10-20 wells within a close area, contractors could reduce costs.

Most drilling contractors are unable to achieve their contractual target depth, due to the inexperience of the drillers, poor condition of drilling machines and the low quality of hydrogeological studies.

There are often breakdowns. Lack of spare parts and poor maintenance leads to down time as high as 40%.

One option is to package drilling together with feasibility studies and prospecting to place more of the risk of dry boreholes with the contractor.

## Town water service concessions need greater clarity

A number of benefits are claimed when urban authorities involve the private sector in delivering water supplies. These include:

- Increasing the skills of public sector staff in utilities
- Shifting the culture towards commercial principles
- Increased levels of accountability
- Increased focus on customers
- Streamlined processes and procedures leading to greater operating efficiency

The typical practice for town water supplies is a “build and transfer” arrangement where design and construction is contracted out and ownership remains with the utility.

These can be achieved through various forms of public private partnership (PSP) including, in many countries, a build-operate-transfer (BOT) system under which all operational, commercial and investment risks pass to the private sector for the period of a concession while ownership remains with the contracting body.

BOT is a system that may be considered in future in Ethiopia but is not possible under existing regulations.

The ONEWASH Plus Program is currently piloting a system known as “build capacity build transfer” (BCBT) in which a contract to design and construct a water system includes a component to train the water utility in its use before the system is handed over.

This is seen as a way to use private sector expertise to improve the performance of public sector utilities. Under the contract, the water service must hit performance indicators and part of the payment to the private companies depends on the utility hitting those targets.

Transfer schemes comply with The Ethiopian Water Resource Management Proclamation under which all water resources are the common property of the Ethiopian people and the state, because ownership is retained by the municipality. However, many regions have adopted proclamations that say that the water service must also be run by the publicly-owned utility.

There are also complexities because a town has exclusive rights to grant a concession to operate but a permit to use water can only be granted at federal or regional level. There are also divided responsibilities for reviewing tariffs, which could jeopardise the financial stability of contracting arrangements.

Any step towards a concession under which the private sector runs the utility would therefore require changes to proclamations and regulations.

## Urban sanitation and waste management are key areas for reform

The absence of an urban sanitation strategy, lack of consistent coordination and inadequate budgeting has led to poor sanitation in most urban centres. According to the Joint Monitoring Programme use of improved or shared sanitation facilities is at 67 per cent and the rest rely on unimproved facilities or open defecation.

Mandates for improving urban sanitation are unclear and a city level WASH coordination mechanism has not yet been implemented.

A new integrated urban sanitation and hygiene strategy (IUSHS) requires a partnership between the government, private sector and other stakeholders, especially for improving the management of faecal waste.

### Faecal waste requires higher priority

Liquid waste (human faeces and sludge and some pre-treated commercial waste) is managed by municipalities, utilities and the formal and informal private sector. Smaller towns often use private operators from bigger towns.

Amongst weaknesses identified in the study are

- inadequate capacity and lack of priority by public utilities for faecal sludge management and an inadequate public awareness of faecal sludge threats
- lack of policy to support and encourage faecal sludge private operators, including occupational safety and workers health

In cities and large towns, private operators provide liquid waste extraction and transport using vacuum trucks. Most companies are small (1-4 trucks) and have a good understanding of the business. However they complain public utility providers reduce fees and compete with them unfairly.

Mechanised operators don't have associations to support them and they don't get support for occupational safety. They have high costs but find it difficult to access loans.

In smaller towns, households often use informal manual emptying services, provided by daily labourers, especially where there is a nearby river for (illegal) dumping. The work is done secretly at night and is not recognised by municipal officials. It carries health risks for the emptier and the local population.

A critical intervention to improve the role of the private sector in solid and liquid waste collection and management is the introduction of appropriate and affordable technologies that can be used in small towns.

Financial support is also needed for start-up enterprises.

## SMEs could expand role in solid waste disposal

Solid waste management is a municipal responsibility. Most towns have formed independent 'sanitation and beautification agencies' to do the work with a direct budget from the city administration. Most agencies cannot generate enough income from households to cover operation and maintenance costs.

In most larger towns, initial collection is by small and micro enterprises (SMEs) organised by the urban authority.

Attempts to engage the private sector in taking waste to dumping sites have been successful only in few towns and cities.

Some private entrepreneurs have plans to provide bio-gas treatment plants, but have assumed donors will finance them.

The major problems are limited coverage, high operational costs, low quality services, low customer satisfaction and lack of environmentally sound disposal systems.

Most waste is dumped on open fields or in poorly designed and operated landfill sites often near a river channel.

## Conclusions: Changes required to work towards common goal

The private sector is expected to play an important role in achieving the GoE targets to improve access to safe water, sanitation and hygiene for all citizens. Increasing the private sector role could free the public sector to focus on setting policies and strategies and on regulation and licensing.

Constraints and bottlenecks include policy weaknesses, absence of strategic clarity, and lack of support. There are also weaknesses in technology, capacity, finance, and contracting.

Progressive improvements and changes are required at government and WASH sector level and by the private sector. Partnership implies working towards a common goal and cannot be achieved by finger pointing and blame.

The private sector also needs to organise itself as a responsive and committed partner, with ethical codes of conduct and high standards.

There is a need to develop the private sector in the regions and to make safe and regularise the small-scale informal sector.

### Recommendations

The three priority areas for improving private sector performance, capacity and scale, as outlined on the front page of this note, are *finance, reducing bureaucratic obstacles and improving performance and capacity*.

Government can acknowledge the private sector as a key partner by offering the same tax incentives, access to finance and customs privileges as are available in other sectors.

Finance can be strengthened through Development Bank of Ethiopia.

The OWP can include a budget line for the private sector in its capacity development and technical assistance programme.

An effective dialogue forum should be established between public and private sectors at federal, regional, town and woreda levels.

Bidding evaluation should become more transparent and less bureaucratic, with innovative contracting to spread risks and ensure completion of functioning systems.

Other recommendations include:

- Review licensing arrangements for professionals to permit freelance arrangements and associations.
- Improve training of professionals and introduce performance standards.
- Package drilling contracts to reduce down time and reduce costs.
- Improve groundwater study and design.
- Establish an institutional framework for solid and liquid waste management in small towns with clear mandates for the public and private sectors.
- Make policy and legal changes to improve the capacity of utilities to run newly developed water services in small towns.

### Implementation and monitoring

The OWP can support implementation by collaborating with MoWIE and other WASH partners to developing an action plan.

The National WaSH Coordination Office (NWCO) should be assigned with a clear terms of reference and the staff, budget, authority and guidance to carry through changes.

A private sector development programme should be launched with the participation of development partners, NGOs and regions.

Sector monitoring should include indicators for private sector health and performance.

## Learning to do better...

ONEWASH Plus learning notes promote the sharing of experiences from innovations within the ONEWASH Plus Programme, which is funded by the UK Department for International Development (DFID) and implemented by UNICEF, with government and other partners, to help fill specific gaps within the Government-led One WASH National Programme.

This learning note is based on the report, *Private Sector Landscape for WASH in Ethiopia: Bottlenecks and opportunities* by Eyob Defere (IRC). This note was prepared by Peter McIntyre (IRC) with input from Michele Paba (UNICEF). A copy of the full report can be accessed at

<http://www.ircwash.org/resources/private-sector-landscape-wash-ethiopia-bottlenecks-and-opportunities>