



Mapping human resource capacity gaps in the water supply and sanitation sector

Country briefing note Burkina Faso

Human resource capacity assessment

Briefing Note • Burkina Faso

KEY POINTS

- According to the Ministry Burkina Faso's rate of access to drinking water supply and sanitation are among the lowest in the world
 - The rate of access to drinking water was estimated at 57% in rural areas and 75% in urban areas and sanitation services were 1% in rural areas and 14% in urban areas.
 - Financial investments in Burkina Faso's human resources and in the water supply and sanitation services are limited.
- The human resources (HR) demand is directly linked to the geographical spread of the population and this is directly linked to two aspects, namely geography of dispersed rural communities and the high urbanisation rate.
- The public sector employs 81% of the existing human resources that work in the water supply and sanitation sectors, with non-governmental organisations (NGOs) and community-based organisations (CBOs) 11% and the private sector 8%. Most of public staff fulfil positions within the management and finance discipline, including large numbers of supporting staff (administrative, and

- secretarial functions).
- Burkina Faso has a severe human resources deficit in all aspects of water supply and sanitation:
 - The need for social development personnel in dispersed rural areas to achieve universal coverage of water supply and sanitation is very high, with approximately 10,000 staff needed in the water supply sector and 7,600 staff needed in the sanitation sector.
 - In addition to the human resources capacity gaps, there are acute difficulties with general organisational capacity.
 - The lack in both the numbers as well as the quality
 of the human resources working in the water supply
 and sanitation sectors is directly linked to the very
 low financial capacity of organisations to recruit and
 retain staff.
 - Human resources needs arise most acutely in rural areas where the population is larger, with a concomitant effect on the lack of organisational capacity in the water supply and sanitation sectors

BACKGROUND

This Briefing Note summarises the findings from a study in Burkina Faso, made possible through the support of the United States Agency for International Development (USAID) under the auspices of their Capacity Building of Local/National WASH NGOs/CBOs in Africa (Cap-WASH) Program. It set out to assess the human resources needs to provide water supply and sanitation services in three countries: Mozambique, Burkina Faso, and Tanzania.

Burkina Faso is a landlocked country in West Africa, surrounded by Mali, Niger,

Benin, Togo, Ghana and Ivory Coast, covering 274200 km2.

The country has three climatic regions, and two very distinct seasons. In rainy season the country receives 600-900mm of rain, whilst in dry season the wind blows from the Sahara. This makes the Sahelian country's water resources highly variable and unpredictable.

Burkina faso's economy is mainly based on agriculture, and the country has among the world's lowest GDP figures and literacy rates.

ASSESSMENT APPROACH

The methodological framework, defines the following steps to assess the human resources requirements in the sector, in terms of numbers (shortages), skills and competencies (gaps).

- 1. Estimate the 2015 population to incorporate growth.
- Determine the current water supply and sanitation coverage and calculates the increases needed to achieve a) the Millennium Development Goals (MDGs) and b) universal service coverage.
- 3. Estimate a proxy of HR demand per



- type of service delivery per 10,000 people.
- Determine the existing HR capacity in the country in terms of numbers and skill sets.
- Assess the HR supply in the years up to 2015 in terms of graduates as well as vocational training.
- Calculate the HR shortages and assess the HR gaps.
- Provide recommendations for the way in which training institutions can address the shortages and gaps, as well as provides recommendations for alternative ways to meet the said shortages and gaps.

DISCIPLINES TO MAP HUMAN RESOURCE CAPACITY

The study used the following disciplines to map human resources capacity in the water supply and sanitation sectors:

- Technical specialisation specific to water and sanitation services (WATSAN technical field): a person who is professionally engaged in a technical field specifically related to the provision of water and sanitation facilities or infrastructure (for instance civil/environmental engineers).
- Technical specialisation, not specific to the provision of water and sanitation services (other technical field): a person who is professionally engaged in another technical field that is required in the planning, design or operation of water and sanitation facilities or infrastructure (such as hydro-geologists, mechanical/electrical engineers), but is not water and sanitation sector specific.
- Management and finance: a person
 who is professionally engaged in
 management (for instance finance,
 human resources or strategic
 managers and office managers fulfilling
 administrative functions) as well as

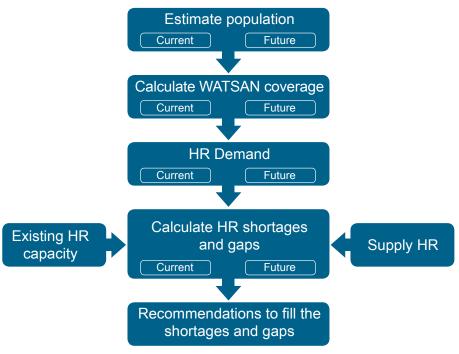


Figure 1: Methodological framework to assess human resource shortages and gaps

persons who procure goods and services or cost planners.

• Social development: a person who is professionally engaged in hygiene promotion or other relevant water, sanitation and health professions in the social sciences (for instance health promotion specialist, sociologist, community development worker).

COMPONENTS OF THE WASH SERVICE DELIVERY PATHWAY

It investigated the capacity of these four disciplines, whilst distinguishing the human resource requirements for three different types of work noted below. Whilst this study reflects data from the water supply and sanitation sectors, the research considered hygiene practices as defined by the water supply, sanitation and hygiene (WASH) sector.

- Design and construction;
- · Operation and maintenance;
- Community mobilisation/sanitation and hygiene promotion.

ASSUMPTIONS

The assessment hinged on a number of assumptions:

- Existing coverage data is sufficiently accurate;
- This study used national coverage and target figures;
- Different settlement sizes are typically served in each country by the same water and sanitation service delivery mechanism.
- In Burkina Faso the different settlement sizes, do not coincide with those used in the methodology because they have a different categorisation of geographical sectors, being rural, dispersed rural, urban, etc. In an attempt to follow the methodology, the researchers used the assigned categories for rural, dispersed rural, urban, etc. but in Burkina Faso the categories are both labelled differently, and divided differently. This impacted on the differentiation in the statistics; and
- The methodology assesses professionals, hence does not



include unskilled workers, household and community involvement.

DATA COLLECTION

This study aimed to capitalise on information of quantitative and qualitative nature, targeting WASH actors in the public sector, private sector, NGOs and CBOs, and who were identified as part of a representative sample of the whole of Burkina Faso. Criteria included: the area of intervention, the diversity of geographical areas, profile and size of organisations, gender and the nature of the services provided.

The investigations were undertaken in seven regions of Burkina Faso, being the Central East Region (Eastern zone of Burkina Faso, in the provinces and Boulgou Koulpelogo), Central Region (Central Zone of Burkina Faso, in the province of Kadiogo), the Central West Region (West Central area of Burkina, province Boulkiemdé), Northern Region (Northern Burkina, at provincial level Yatenga and Zondoma) and Hauts Basin (western Burkina, in Houet province), the North Central Region (in the province of Sanmatenga) and Region Mouhoun (Dédougou investigations conducted in the capital of the province Mouhoun). In total, the study was conducted in seven regions, covering nine provinces and fifteen communes.

The surveys were conducted with 95 structures including 12 NGOs, 13 CBOs, 34 private structures, 30 utilities and six training institutions.

The methodology is designed to use the information received from the sample to estimate the national capacity.

Data were collected through a variety of sources, including population census, national demographic databases, national data describing existing coverage and MDG targets, primary sources such as telephone interviews and consultations, workshops, key informant interviews, semi-structured interviews and surveys, was analysed and distilled in order to derive the final estimates in order to extract the trends.

The same methodological framework is applied to all the countries where the research took place and country-specific traits are reflected in the finer detail and statistics published in the country reports.

SECTOR CONTEXT

The government and technical partners adopted the National Programme for Water Supply and Sanitation (PN-AEPA) in 2006 as the instrument through which Burkina Faso prioritised water supply and sanitation. This programme aims to create the basis for an institutional framework and sectoral planning that will contribute to achieving the objectives of the Accelerated Growth Strategy for Sustainable Development and the Millennium Development Goals (MDGs). In addition, this programme established expected outcomes for rural and urban areas. The targets set for rural areas

were the provision of adequate drinking water to an additional four million people, which would advance the access rate of 52% in 2005 to 76% in 2015. For rural sanitation, the target was an additional 5.7 million people, raising the access rate to 54% in 2015. In urban areas the expected outcomes are to provide adequate drinking water to an additional 1.8 million people by 2015 reaching a coverage level of 87% and expand sanitation services for 2.1 million people (reaching 57% coverage).

INSTITUTIONAL FRAMEWORK FOR SERVICE DELIVERY

Burkina Faso's policy on water supply and sanitation falls under the Ministry of Agriculture and Water (MAH), through two branches, the Directorate General of Water Resources (DGRE) and the General Directorate of Sanitation Wastewater and excreta (DGAEUE). The MAH is also responsible for facilitating the interface between different actors (public sector, private sector, NGOs, CBOs and donors) and to mobilise resources to implement the National Programme of Water Supply and Sanitation (PN-AEPA).

The National Office for Water and

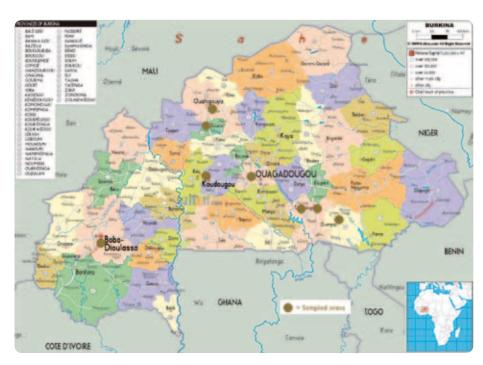




Table 1: MDG and universal service coverage deficit (absolute population numbers)

| Settlements | Population (2015) | MDG deficit Water | | Universal service | Universal service coverage deficit |
|-----------------|-------------------|-------------------|------------|-------------------|------------------------------------|
| | | | Sanitation | coverage water | sanitation |
| Rural dispersed | 12,675,065 | 3,195,178 | 6,730,852 | 6,237,194 | 12,561,382 |
| Rural village | 1,518,250 | 382,726 | 806,238 | 747,106 | 1,504,633 |
| Small town | 705,245 | 238,198 | 330,921 | 329,880 | 634,176 |
| Large town | 159,552 | 53,889 | 74,866 | 74,631 | 143,473 |
| City | 3,555,633 | 1,200,923 | 1,668,402 | 1,663,155 | 3,197,324 |
| Total | 18,613,745 | 5,070,914 | 9,611,279 | 9,051,966 | 18,040,988 |

Sanitation (ONEA) is both the regulatory institution and the water and sanitation service provider of urban and suburban areas and delegates this responsibility for service provision to the municipalities. The implementation of this delegation of power and authority is still on-going.

In Burkina Faso there are:

- 461 public sector structures involved in the field of drinking water and sanitation
- 153 private structures involved in the field of drinking water and sanitation (112 companies and 41 offices)
- 101 NGOs and CBOs involved in the field of drinking water and sanitation

NGOs contribute to PN-AEPA through capacity building, social project management, policy influencing and resource mobilisation, mostly at municipal level. The private sector is mobilised for the implementation of the PN-AEPA, as they have traditionally played the role of service provider. In Burkina Faso, water-user associations play a large role in rural service provision, as they manage technologies and equipment, and ensure financial contributions by water end-users.

POPULATION, EXISTING COVERAGE, MDGS AND UNIVERSAL COVERAGE DEFICITS

By 2015, the population of Burkina Faso will have grown to approximately 18.6 million inhabitants, of which the great majority (67.7%) will continue to live in the dispersed rural communities. The

rural population is still growing (2.2%), even if this growth rate is far below the urban population growth rate of 7.1%. The issue of access to drinking water services and sanitation is acute.

According to government statistics the household access to sanitation facilities and the rate of sanitation access in Burkina Faso is 4.7% with disparities between rural areas (1%) and urban (14.2%). The equivalent figures from the JMP 2012 report (based on 2010 data) are 17% for national with rural access at 6% and urban access at 50%. The rural deficit numbers indicate the need for priority attention. The few households with access to sanitation in these areas are served by public or institutional latrines. Only some cities (>500.000 population) have limited sewerage systems in place.

Table 1 shows that the deficit to achieve MDG or universal service coverage for water supply is approximately half that is required to achieve the sanitation targets. According to government statistics, in 2010, the rate of access to drinking water was estimated at 56.63% in rural areas and 75% in urban areas. However, still a significant number of people require access to drinking water, especially in the cities and rural dispersed areas.

In the rural areas, water is supplied via boreholes, modern wells (sometimes with hand pumps), private wells, and simplified drinking water supply systems (AEPS). The smaller towns depend on classic water towers, with pipeline supply and distribution of water (private / collective service through standpipes), and in cities water supply is primarily provided through classic water towers with pipeline network supply, through taps or standpipes.

REASONS FOR COVERAGE DEFICITS AND SOME REMEDIAL ACTIONS

- With a current estimated population of over 16 million people, Burkina
 Faso is a Sahelian country where water resources are highly variable and unpredictable. The rate of population's access to drinking water supply and sanitation are among the lowest in the world.
- A severe lack of investment in water supply and sanitation services is at the heart of the coverage deficits in both rural and urban areas, and water supply and sanitation infrastructure.
- The human resources needs arise most acutely in rural areas where the population is larger, with a concomitant effect on the lack of organisational capacity in the water supply and sanitation sectors.
- The lack of quality as well as the low numbers of human resources working in the water supply and sanitation sectors is intrinsically linked to the low financial capacity of organisations to meet the demands in the sector.
- Qualified people tend to live in the cities and not in the rural areas where their services are needed the most.
- · Volunteers usually work in the



sector for CBOs and community associations as these types of organisations do not normally have the financial means to recruit and pay professionally qualified employees.

 Male employees constitute more than 70% of the workforce in the water supply and sanitation sectors.

HUMAN RESOURCES IN THE WASH SECTOR

HUMAN RESOURCE DEMAND

On the basis of the described technologies used in the various settlement sizes, key informant interviews supported the estimation of human resource (HR) demand to serve those currently covered and meet the MDGs/universal coverage. In this stance, 'demand' refers to what is considered 'ideal' to serve the population under the current coverage figures and hence is different from what is currently in place, which, as explained, includes a number of sections of the population whose coverage is below recommended standards.

The HR demand for achieving the MDGs and universal coverage, was calculated based on the existing water supply and sanitation coverage in both rural and urban setup in terms of design, construction, operation and maintenance and community mobilisation. The analysis was based on interviews, particularly on what could be the ideal number of human resources to deliver the services. In the computation process, an assumption was made on the distribution of the human resources in the different categories in both water supply and sanitation.

Table 2 highlights the total human resources demand for achieving the MDG for water, categorised in different geographical sectors.

Table 2: Total HR demand for water to achieve MDGs (Note: Refer to Assumptions and research scope for clarification of the statistics)

| Future HR DEMAND for water to achieve the MDGs | WATSAN technical field | Other technical field | Management and finance | Social development |
|--|------------------------|-----------------------------|------------------------|--------------------|
| Water delivery: dispersed rural communities | 3,853 | 2,889 | 7,706 | 7,706 |
| Water delivery: rural villages | 461 | 346 | 923 | 923 |
| Water delivery: small towns | 429 | 429 | 613 | 490 |
| Water delivery: large towns | 83 | 97 | 111 | 111 |
| Water delivery: city | 1,546 | 1,546 | 2,165 | 2,165 |
| Total future HR DEMAND for water to achieve the MDGs | 6,374 | 5,309 | 11,519 | 11,396 |

Table 3: HR demand for sanitation sector to achieve MDGs (Note: Refer to Assumptions and research scope for clarification of the statistics)

| Future HR DEMAND for sanitation to achieve MDGs | WATSAN technical field | Other technical field | Management & finance | Social development | Total |
|--|------------------------------|-----------------------------|-------------------------|-----------------------|--------|
| Sanitation delivery: dispersed rural communities | 2,053 | 2,053 | 6,160 | 4,107 | 14,373 |
| Sanitation delivery : rural villages | 246 | 246 | 573 | 492 | 1,557 |
| Sanitation delivery : small towns | 121 | 121 | 241 | 241 | 723 |
| Sanitation delivery : large towns | 27 | 27 | 54 | 55 | 163 |
| Sanitation delivery : city | 608 | 608 | 1,418 | 1,216 | 3850 |
| Total future HR DEMAND for sanitation to achieve MDGs | 3,055 | 3,055 | 8,448 | 6,110 | 20,669 |

While the water supply sector's human resources demand represents 65% of the total human resources demand, the human resources demand is also visible in the sanitation sector. Table 3 highlights the total human resources demand for achieving the MDGs for sanitation, categorised in different geographical sectors.

Tables 4 and 5 highlight the total HR demand for achieving full coverage for both water and sanitation, categorised in different geographical sectors.

The high demand for services in cities can be linked to the high level of urbanisation. However, demand is also very high in dispersed rural areas, where there is a high demand on human and other resources to cover the

geographically-spread population. The services most needed are personnel for community mobilisation (awareness, training, monitoring and support), design, implementation, feasibility studies, environmental impact assessments, etc.

To provide the infrastructure and continued support to ensure sustainable water supply and sanitation services, requires a high level of support, especially in remote areas where professional and qualified services are not readily available. This requires intervention from all levels of the public, private and NGO/CBO sectors.

The need for social development personnel in dispersed rural areas to achieve universal coverage of water supply and sanitation is very high, with approximately 10,000 staff needed in



the water supply sector and 7,600 staff needed in the sanitation sector. Large numbers of management/financial personnel are also required in rural areas, particularly for sanitation at over 11,000. The number of technical staff required, although less than either social development and financial/management, is still considerable.

The evaluation of the urban figures reflects the service deficits and the need for qualified staff to deliver services while at the same time one needs to consider that these services are delivered in situations significantly more complex to implement than rural water and sanitation supply. It is estimated that approximately 7,400 and 3,800 staff will be needed for city implementation if the MDGs for sanitation and water respectively are to be achieved.

EXISTING HUMAN RESOURCE CAPACITY

The research investigated what human resources capacity current exists to meet the HR demand for personnel to deliver WASH services.

Table 6 is a compilation of the existing human resources in the water and sanitation sector and illustrates a relatively equal distribution of staff in the water and sanitation sector likely due to prevailing low sanitation coverage figures.

There is, however, an enormous difference in the availability of staff within the various types of organisations. Currently, the public sector employs 81% of the existing human resources, NGOs/CBOs 11% and the private sector 7.6%. Most of public staff fulfil positions within the management and finance discipline, including large numbers of supporting staff (administrative, and secretary functions). Of the total staff working in the public sector, 79% work

Table 4: HR demand for water to achieve universal coverage (Note: Refer to Assumptions and research scope for clarification of the statistics)

| Future HR DEMAND for water to achieve universal coverage | WATSAN technical field | Other technical | Management and finance | Social development |
|--|---------------------------|--------------------|------------------------|--------------------|
| Water delivery: dispersed rural community | 5,070 | 3,802 | 10,140 | 10,140 |
| Water delivery: rural village | 607 | 455 | 1,214 | 1,214 |
| Water delivery: small towns | 493 | 493 | 705 | 564 |
| Water delivery: large towns | 95 | 111 | 127 | 127 |
| Water delivery: city | 1,777 | 1,777 | 2,488 | 2,488 |
| Total future HR DEMAND for water if achieving universal coverage | 8,044 | 6,641 | 14,676 | 14,535 |

Table 5: HR demand for sanitation to achieve universal coverage (Note: Refer to Assumptions and research scope for clarification of the statistics)

| Future HR DEMAND for sanitation to achieve universal coverage | WATSAN technical field | Other technical | Management and finance | Social development |
|---|---------------------------|--------------------|------------------------|-----------------------|
| Sanitation delivery: dispersed rural communities | 3,802 | 3,802 | 11,407 | 7,605 |
| Sanitation delivery rural villages | 455 | 455 | 1,062 | 910 |
| Sanitation delivery: small towns | 211 | 211 | 423 | 423 |
| sanitation delivery: large towns | 47 | 47 | 95 | 95 |
| Sanitation delivery: city | 1,066 | 1,066 | 2,488 | 2,133 |
| Total future HR DEMAND for sanitation if achieving universal coverage | 5,584 | 5,584 | 15,478 | 11,168 |

exclusively in urban areas which in light of the decentralisation of responsibilities to municipalities could already indicate a major shortage at rural level.

HUMAN RESOURCE CAPACITY IN NGOS AND CBOS

- In NGOs and CBOs most of the staff (45%) is qualified to work in the social development field, working on raising awareness, community mobilisation and capacity building.
- Most NGOs focus on projects that implement community-managed systems, in rural and urban areas, which explain why a large number of staff is allocated to perform this work.
- 93% of NGOs operate rurally, while 67% of their qualified staff lives in the urban areas, indicating that qualified human resources are still mainly

- found in urban areas.
- o 38% of the NGOs and CBO interviewed indicated to rely on volunteers, usually students at the end of training, unemployed graduates, unqualified people and unemployed looking to gain experience in the water supply and sanitation sector. Very often these volunteers fill the lack of human resources in these structures.

In comparison to both the public and private sectors, NGOs tend to attract the least personnel with no diplomas.

HUMAN RESOURCE CAPACITY IN THE PUBLIC AND PRIVATE SECTORS

 Only 37% and 35% of public and private sector staff have only obtained secondary education.



Table 6: Existing human resource capacity

| | WATSAN technical field | Other technical | Management and finance | Social development | Total |
|--|------------------------------|--------------------|------------------------|--------------------|--------|
| NGO | | | | | |
| Existing HR capacity in NGO in water | 131 | 161 | 323 | 464 | 1080 |
| Existing HR capacity in NGO in sanitation | 121 | 151 | 313 | 525 | 1,111 |
| Private sector | | | | | |
| Existing HR capacity in private sector organisations in water | 69 | 75 | 260 | 273 | 678 |
| Existing HR capacity in private sector organisations in sanitation | 50 | 74 | 309 | 404 | 838 |
| Public sector | | | | | |
| Existing HR capacity in public sector organisations in water | 1,307 | 947 | 5,340 | 981 | 8,576 |
| Existing HR capacity in public sector organisations in sanitation | 735 | 923 | 5,210 | 599 | 7,468 |
| Total numbers working in Water | 1,507 | 1,183 | 5,923 | 1,718 | 10,334 |
| Total numbers working in sanitation | 905 | 1,148 | 5,832 | 1,528 | 9417 |

- The public sector has a relatively large number with PhD level working at central level.
- In all organisations, the technical disciplines are under-represented and the qualitative analysis illustrated that organisations face a barrier in hiring high level

engineers, since the organisations do not have the financial capacity to do so. Organisations tend to hire technicians instead which effectively means under-qualified personnel and hence a gap.



OTHER OBSERVATIONS

- The human resources needs arise most acutely in rural areas where the population is larger (the rural population of Burkina Faso is 78% of the total population) with a concomitant effect on the lack of organisational capacity in the water supply and sanitation sectors.
- The lack of quality as well as the low numbers of human resources working in the water supply and sanitation sector is directly linked to the low financial capacity of organisations to meet the demands for water and sanitation facilities.
- More than 50% of councillors, working at decentralized levels, are illiterate.
- The rural/urban divide in both infrastructure and specialised or quality staff (particularly water engineers and other technical fields) contributes to the low coverage throughout the country.
- NGOs face fewer problems with availability of personnel in quantity and quality compared to CBOs and other rural associations.
- The qualified human resources tend to live in the cities rather than in the rural areas where most NGOs/CBOs operate.
- Volunteers usually work on behalf of CBOs and associations because these organisations generally do not have the financial resources to recruit and appoint qualified staff.

GENDER INEQUALITY AND REMEDIAL ACTION

The high proportion of men working in the sector is due to unequal distribution in graduate outputs. Thus women are poorly represented in the different structures: 34% in NGOs and CBOs, 36% in the private sector and 36% in the public sector.

Staff working in the water supply and



sanitation sector is mainly made up of men (more than 70% of the workforce) because of the history of this area that was traditionally male and the nature of some components needing physical strength, such as digging septic tanks, construction, etc. Burkina Faso has a legacy of excluding women from the education sector and concomitantly from the workforce. In addition, the prevalence of certain discriminatory perceptions, suggesting that a man is more productive than a woman, favours the recruitment of men.

For many years, socio-cultural and economic factors predisposed families to enrol boys in school rather than girls. Effectively, in rural areas the low financial capacity of households determines whom they will spend their money on and families prefer to invest in boy rather than girl education after primary education.

Gender equality policies are in a process of change and female education, recruitment of women and scholarships for women are being promoted. Some remedial actions are:

- The current education policy encourages girls' education and includes the provision of scholarships. This will work towards eradicating discriminatory gender practices.
- The new labour law and labour code create an environment conducive to employing women.
- New initiatives such as scholarships and labour legislation will change the perception that women cannot do the work previously reserved for men.

SUPPLY OF HUMAN RESOURCES TO THE WASH SECTOR

UNIVERSITIES AND TECHNICAL INSTITUTIONS

In Burkina Faso, only seven of the 50 institutions (universities, institutes, colleges, schools, vocational training centres) provide training of qualified human resources capable of working in the drinking water and sanitation sectors. The numbers of graduates from these universities are relatively limited. The Institute of Rural Development, for example, brings only 17 geologists and ten hydro-geologists onto the market each year.

Statistics have shown that of these 50 institutions, only seven train managers and technicians who at the end of their training are equipped to enter the water supply and sanitation sector immediately.

TRAINING CENTRES

In addition to diploma-level education, some training centres exist, such as Centre of Water Businesses of ONEA (CMEau) 2iE and WSA that provide short courses to people in the sector: project management for communal water supply and sanitation, utility management, simplified water supply systems, production and distribution of drinking water, sanitation (sewage and excreta). This institute trains about 500 people at municipal level each year.

All universities and training institutions focus mainly on theoretical training and less on the practical aspects, with the result that at the end of their degree or diploma studies, students are not equipped with the skills needed to plan, implement, monitor and evaluate a water supply and/or a sanitation project. In addition, there is a mismatch between what the water supply and sanitation

sectors need and what the training provides.

GENERAL EDUCATION AND IMPACTS

Statistics have shown that there is a significant demand in the social development disciplines (approximately 14,000 staff qualified in social development needed to work in the sector to achieve MDGs and approximately 22,000 for universal coverage), with a particular need for specialists in community mobilisation, health workers, and communication specialists. These high numbers are mainly a result of the high population numbers in areas where demand for community-based systems is high, being rural and rural dispersed areas.

The number of people that enter the technical and other professional fields, is especially low in rural areas where very few engineers and technicians – water or sanitary engineers, hydro-geologists, geophysicists and hydrologists – work, mainly due to low remuneration packages, and poor working conditions, due to organisations' incapacity to pay the salary these people could earn in other sectors. Also urbanisation is causing a high demand for technical professionals to work in the cities.

Although HR demands are significant, it is also a fact that a relatively high number of graduates enter the workforce. The low absorption level within the water supply and sanitation sectors is directly related to the fact that graduates do not enter the sector; that not enough water and sanitation professionals are trained; and there is a mismatch between graduates and what the water supply and sanitation sectors need.

EDUCATION LEVELS

There are institutions (universities, institutes, colleges, schools, vocational





training centres) to ensure that qualified people are available to work in the field of drinking water and sanitation. However, the number of people being trained each year for absorption into the labour market, especially water supply and sanitation, such as engineers, is not enough to fill the gap. It is a fact that there is a mismatch between the training provided and the needs in the field.

HUMAN RESOURCE SHORTAGES

There is a general human resources deficit in the water supply and sanitation sectors in Burkina Faso, which impacts negatively on a wide range of health and wellbeing issues. This general deficit is compounded by the fact that many workers are not adequately and appropriately educated to meet the challenges of increasing drinking-water and sanitation service provision.

HUMAN RESOURCE SHORTAGES FOR VARIOUS TYPE OF WORK

The results of the study show that the HR shortages in general are very high

and concern the following profiles:

- Technical field (WATSAN): hydro-geologists, geophysicists, hydrologists, civil engineers;
- Technical field (other): agronomists, architects, mechanical engineers;
- Administration and finance: managers, accountants, secretaries, administrative staff;
- Social development specialists: sociologists, community mobilisation and lawyers, communication specialists, health workers (health education).

The human resources shortages in NGOs/CBOs have reached critical levels and the reasons for this are numerous. To obtain sufficient data from these organisations in order to pinpoint all the reasons for the shortages and concomitant challenges is often difficult as these organisations are dispersed and as a result of their diminished administrative and management capacity little formal statistics is available.

The reasons for the shortage of suitably

qualified personnel include: gender inequalities; lack of financing for infrastructure and education; and lack of access to institutions to acquire skills and education.

The issue of human resources in the water supply and sanitation sector in Burkina Faso has not been adequately documented and is usually addressed in policy documents, strategies, programmes and projects without clearly stating concrete and effective action to remedy shortcomings. Thus, achieving the MDGs and then moving towards universal water supply and sanitation coverage remains a concern for everyone. It is clear that while actions are planned to achieve these targets through infrastructure provision, adequate human resources which should enable their implementation are neglected and poorly managed.

EDUCATION LEVELS AND HUMAN RESOURCE DEFICITS IN DIFFERENT TYPES OF ORGANISATIONS

While there is a shortage of all personnel, and particularly of technical competencies, professional as well as intermediate, and considering the difficulties to attract qualified staff to work in the rural and dispersed rural communities, municipalities and CBOs may find it easier to attract intermediate staff as they are more affordable and accessible.

Notwithstanding the fact that NGOs/ CBOs suffer severe social, financial and capacity deficits, it is clear that these organisations have fulfilled a major task in providing water supply and sanitation services in rural villages and dispersed rural areas.

However, NGOs have a general lack of technical staff as their low financial capacity is a limiting factor in hiring qualified hydraulic technicians,



Table 7: HR shortages to achieve the MDGs / universal coverage

| Quantifying the HR shortages | WATSAN technical field | Other technical | Management and finance | Social development | TOTAL |
|---|------------------------------|-----------------|------------------------|-----------------------|--------|
| WATER SECTOR | | | | | |
| HR shortage to achieve MDG | 4,778 | 3,899 | 3,346 | 9,391 | 21,415 |
| HR shortage to achieve universal coverage | 6,448 | 5,231 | 6,503 | 12,529 | 30,713 |
| SANITATION SECTOR | | | | | |
| HR shortage to achieve MDGs | 2,061 | 1,680 | 365 | 4,295 | 8,402 |
| HR shortage to achieve universal coverage | 4,590 | 4,209 | 7,395 | 9,352 | 25,548 |
| Total HR shortage to achieve MDGs | 6,840 | 5,579 | 3,712 | 13,686 | 29,818 |
| Total HR shortage to achieve universal coverage | 11,039 | 9,440 | 13,898 | 21,882 | 56,261 |

engineers, sanitary technician, senior managers with knowledge of water and sanitation issues, and monitoring and evaluation specialists. Despite the fact that the NGO sector pays relatively high salaries, they do not attract qualified people to the rural areas where they operate.

Private sector organisations appear to play a relatively large role in rural settings, where most municipalities contract them to implement water supply or sanitation services. ONEA is expanding its services into rural settings, and both of these will require more staff. Municipalities will also require a huge number of knowledgeable staff to meet the challenges.

Overall, the organisations indicated that analytical skills were mostly absent and the job absorption levels of academic staff is low due to financial constraints. One over-arching challenge is that the general lack of experience or knowledge of the sector. Organisations tend to hire personnel that are lower educated in order to fill the engineering jobs, because of lack of financial capacity to pay for them. Graduates entering the

sector often require intense mentoring before they meet the requirements of the positions they fill.

The low overall capacity of organisations in the water supply and sanitation sectors to retain or attract staff is adding to its own difficulties which have resulted in qualified persons migrating to other sectors, less plagued by problems.

RECOMMENDATIONS TO MEET HUMAN RESOURCE NEEDS

Institutional capacity building, organisational capacity building and training a professional cadre of human resources for absorption into the water supply and sanitation sectors are in need of attention of Burkina Faso's decision makers.

SHORT TERM RECOMMENDATIONS

The following short-term recommendations will be a start in addressing the human resources capacity gap in the water supply and sanitation sectors in Burkina Faso:

General advocacy to strengthen

water and sanitation knowledge in municipalities through targeted sessions on reform of the water sector, water governance, local planning, marketing water supply and sanitation, the monitoring and evaluation of water supply and sanitation projects. In organising these sessions, the illiteracy rate needs to be considered as more than 50% of councillors (on decentralized level) cannot read or write making technical advocacy difficult.

- The creation of a national directory and a monitoring system of human resources by National Observatory of Employment and Training (Observatoire National de l'Emploi et de la Formation professionnelle -ONEF) to give greater visibility to the issue and enable the various actors to refine their policies and strategies to achieve the MDGs.
- More professional development courses should be offered at intermediate skills level to ensure trained staff exists for absorption into the sector. Examples of such courses are those provided by the CMEau.
- Each municipality should employ at least one water and sanitation specialist. This can temporarily be done through volunteering organisations that offer specialists for periods of a year (for instance JICA, UNV, France Volunteer, etc.) who train national staff.
- Strengthen the capacity of CBOs through financial support for the implementation of activities likely to generate local resources, to become sustainable and have enough financial capacity to hire full- time staff.
- Develop organisational retention strategies, besides salaries.
- Improve DGRE focal points on PN-AEPA and use these to provide local technical services.





LONG TERM RECOMMENDATIONS

- National inventory and monitoring system of human resources and training in the water supply and sanitation sectors, taking a similar approach as by ONEF, will provide greater visibility and enable the various actors to refine their policies and strategies in order to achieve the MDGs in Burkina Faso. This should also enable a synergy between the education and WASH sector to plan for capacity building on the long term.
- Developing and implementing a capacity building strategy to stakeholders.
- Create an enabling environment by
 - Making the vocational training environment a part of the WASH sector financing, as it is an important component to ensure

- good governance, maintain service quality and sustainability of achievements
- Strengthening the institutional and operational capacity of the Directorate General of Sanitation Wastewater and Excreta has been done for the DGRE, to allow optimal management and efficient use of human resources currently existing in the various ministries.
- Separating the water supply and sanitation budget in municipalities, as it currently falls under environment committee and local development councils.
- Developing (as agreed at the Sharm el Sheikh Declaration of the African Union in 2008) inter-municipality cooperation to overcome the lack of human

- resources at municipal level.
 This is an alternative to each
 municipality employing qualified
 and professional water supply
 and sanitation specialists.
- Advocate with the ministries in charge of water supply and sanitation for the redeployment of technicians (engineers and technicians) from the central government to provincial and community levels.
- Introduction of incentives for staff to work in rural areas where the needs are greatest and the conditions are likely to be the most problematic.

Full references are noted in the full country assessment report available at www.iwahq.org/hrcapacity

