

EUROPEAN  
COURT OF AUDITORS

Special Report No 13

2012

EUROPEAN UNION DEVELOPMENT  
ASSISTANCE FOR DRINKING WATER  
SUPPLY AND BASIC SANITATION  
IN SUB-SAHARAN COUNTRIES



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Special Report No 13 // 2012

# EUROPEAN UNION DEVELOPMENT ASSISTANCE FOR DRINKING WATER SUPPLY AND BASIC SANITATION IN SUB-SAHARAN COUNTRIES

(pursuant to Article 287(4), second subparagraph, TFEU)

EUROPEAN COURT OF AUDITORS  
12, rue Alcide De Gasperi  
1615 Luxembourg  
LUXEMBOURG

Tel. +352 4398-1  
Fax +352 4398-46410  
E-mail: [eca-info@eca.europa.eu](mailto:eca-info@eca.europa.eu)  
Internet: <http://eca.europa.eu>

## Special Report No 13 // 2012

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Cataloguing data can be found at the end of this publication.  
Luxembourg: Publications Office of the European Union, 2012

ISBN 978-92-9237-826-4  
doi:10.2865/10664

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*Printed in Luxembourg*

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# ABBREVIATIONS AND ACRONYMS

**ACP:** African, Caribbean and Pacific states

**CRIS:** Common Relex Information System

**Development and Cooperation DG — EuropeAid:** Directorate-General for Development and Cooperation — EuropeAid

**EDF:** European Development Fund

**EUWI:** European Union Water Initiative

**IGAD:** Intergovernmental Authority on Development

**JMP:** WHO/Unicef Joint Monitoring Programme

**MDGs:** Millennium development goals

**ROM:** Results-oriented monitoring

**SADC:** South African Development Community

**Unicef:** United Nations Children's Fund

**WHO:** World Health Organisation

## EXECUTIVE SUMMARY

### I.

Sub-Saharan Africa is not on track to meet the millennium development goals for water and sanitation. The audit aimed to assess whether the Commission has managed EU development assistance for drinking water and basic sanitation in sub-Saharan Africa so as to lead to effective and sustainable results.

### II.

The Court examined a sample of 23 projects in six countries, which represent a significant part of the aid delivered to that region, to see whether project results had been delivered and were likely to be sustained over time.

### III.

The principal findings of the audit were as follows:

- Overall, equipment was installed as planned and was in working order.
- However, fewer than half of the projects examined delivered results meeting the beneficiaries' needs.
- Overall the projects examined promoted the use of standard technology and locally available materials: they were sustainable in technical terms.
- For a majority of projects, results and benefits will not continue to flow in the medium and long term unless non-tariff revenue is ensured; or because of institutional weaknesses (weak capacity by operators to run the equipment installed).
- The Commission's project management procedures cover sustainability comprehensively but the Commission did not make good use of those procedures to increase the likelihood that projects will bring lasting benefits.

### IV.

The Court recommends that in a number of respects the Commission should make better use of its existing procedures, so as to maximise the benefits from EU development expenditure in this area and sector.



# INTRODUCTION

## WATER AND SANITATION SECTOR: ACHIEVEMENTS AND CHALLENGES

1. Improvements in water supply and sanitation are critical elements in meeting the millennium development goals (MDGs)<sup>1</sup>. Safe drinking water and sanitation contribute to economic growth and reducing poverty, mainly through better public health<sup>2</sup> and support other development objectives including gender equality and food and nutrition security.
2. The sector presents some characteristic challenges. The systems installed need to be environmentally sustainable, avoiding both degradation of water resources, for example by overuse, and ecological damage such as results from inadequate sanitation and waste water disposal systems.
3. Sanitation improvements usually need changes in personal behaviour, and so depend on hygiene campaigns to achieve general social acceptance and adoption. And particularly in rural areas, operational tasks, minor maintenance and financial management generally fall not to a permanent agency but to local people who need both training and support in establishing suitable institutions.
4. MDGs include a specific target (MDG 7, target 7c) for water and sanitation, which is to 'halve, by 2015 (by reference to 1990), the proportion of people without sustainable access to safe drinking water and basic sanitation'. The WHO/Unicef Joint Monitoring Programme (JMP) for Water Supply and Sanitation is the United Nations' mechanism for monitoring progress towards the water and sanitation MDGs.
5. According to the 2012 JMP report, the world has reached the drinking water target, although it is unlikely to meet the target for sanitation. Urban–rural disparities are striking: worldwide, 79 % of the people still lacking an improved drinking-water source, and 72 % of those without improved sanitation, live in rural areas<sup>3</sup>.

<sup>1</sup>ci1 The millennium development goals were established by the United Nations Millennium Declaration, signed in September 2000 by 189 nations (<http://www.un.org/millennium/declaration/ares552e.pdf>), to free people from extreme poverty and multiple deprivations by 2015. Those goals refer to eradication of poverty and hunger, universal education, gender equality, child health, maternal health, the fight against HIV/AIDS, environmental sustainability and the global partnership for development. Water and sanitation are included under MDG 7 on environmental sustainability; however, they make a key contribution to the achievements of all MDGs.

<sup>2</sup> The World Health Organisation (WHO) estimates that 6,3 % of deaths worldwide (8 % if considering only developing countries) could be prevented through better water supply, sanitation and hygiene. The majority of those preventable deaths are children in developing countries.

<sup>3</sup> The Unicef/WHO JMP defines an improved drinking water source as one that is protected from outside contamination, in particular from contamination with faecal matter. It considers the following as improved sources of water: piped water into dwelling, yard or plot; public tap or standpipe; tubewell or borehole; protected dug well; protected spring; and rainwater collection. An improved sanitation facility is defined as one that hygienically separates human excreta from human contact, such as: flush or pour-flush to piped sewer system, septic tank, pit latrine; ventilated improved pit latrine; pit latrine with slab; or composting toilet (<http://www.wssinfo.org/definitions-methods/introduction/>).

6. Water and sanitation targets are far from being met in sub-Saharan Africa. In 2010, 39 % of the population had no access to an improved source of drinking water and 70 % were without improved sanitation facilities. The respective targets were 25 % and 36 %.
7. Estimates of the funding (additional to that already planned) needed to meet the MDGs for water and sanitation differ significantly. The World Bank published an estimate of the funding gap in sub-Saharan Africa (both urban and rural areas) of 11,8 billion US dollars a year from 2011 to 2015<sup>4</sup>. The Marseille Declaration of March 2012<sup>5</sup>, on the other hand, quotes 8 billion US dollars as the total additional sum to be mobilised over the period from 2012 to 2015 to meet these targets in the whole of rural Africa.

## EU POLICY AND FINANCIAL ASSISTANCE TO THE SECTOR

### WATER AND SANITATION POLICIES

8. EU development assistance for water and sanitation is guided by the 2002 Commission communication on water management<sup>6</sup>, as endorsed by the Council resolution of 30 May 2002 on water management in developing countries<sup>7</sup>. The importance of water in EU development assistance was reiterated in the 2005 EU Consensus on Development<sup>8</sup>.
9. The 2002 Commission communication identifies, as one of the main objectives of development assistance, ensuring a supply to every human being, especially the poorest, of sufficient drinking water of good quality and adequate means of waste disposal.

<sup>4</sup> Table 8.7 in Sudeshna Ghosh Banerjee and Elvira Morella, *Africa's water and sanitation infrastructure: Access, affordability, and alternatives*, World Bank, 2011.

<sup>5</sup> Declaration of the Conference on the Rural Water Supply and Sanitation Initiative and the African Water Facility, Marseille, 14 March 2012 (<http://www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/RWSSI-AWF%20Conference%20Declaration%20Final%2014%20Mar%202012.pdf>).

<sup>6</sup> COM(2002) 132 final of 12 March 2002 — Water management in developing countries: Policy and priorities for EU development cooperation.

<sup>7</sup> Council document 9696/02.

<sup>8</sup> Paragraphs 80 and 81 of the European Consensus on Development (OJ C 46, 24.2.2006): water (together with energy) is included amongst the nine priority areas for EU development policy.

10. Stemming from the communication, at the 2002 World Summit on Sustainable Development in Johannesburg the EU launched a Water Initiative (EUWI) designed to help achieve the MDGs for drinking water and sanitation (see **Box 1**).

## FINANCING

11. The EU channels funds for water and sanitation through both thematic and geographical (national and regional) programmes<sup>9</sup>. Furthermore, the EU provides funds in the context of humanitarian aid operations.
12. The Commission's external actions information system, the Common Relex Information System (CRIS), shows that expenditure on water and sanitation in sub-Saharan countries between 2001 and 2010 was 1 010 million euro (see **Annex I**). However, since funding for water and sanitation also features in other sectors of assistance, such as rural development, agriculture, environment, health and education, the total amount of the support provided by the Commission will have been higher.

<sup>9</sup> European Development Funds (EDF) for the ACP countries and, for the 2007–2013 financial framework, the Development Cooperation Instrument for Asia and Latin America and the European Neighbourhood Policy Instrument for neighbourhood countries.

### BOX 1

## OBJECTIVES OF THE EU WATER INITIATIVE

The EUWI aims to:

- reinforce political commitment to action and raising the profile of water and sanitation issues in the context of poverty reduction efforts;
- promote better water governance arrangements (through strengthening institutional capacity and public–private partnerships);
- improve coordination and cooperation in the implementation of water and sanitation-related interventions;
- encourage regional and subregional cooperation in the framework of integrated water resource management; and
- catalyse additional funding.

## AUDIT SCOPE AND APPROACH

13. The audit assessed whether EU development assistance for drinking water supply and sanitation in six sub-Saharan countries selected for their financial significance amongst the 10 most important recipients is leading to sustainable results. It focused on the following two questions:
  - (a) Were the planned results of the projects financed by the EU achieved, and are they sustainable?
  - (b) Did the Commission take appropriate steps to ensure sustainable results in water supply and sanitation?
14. The audit considered whether projects met the technical, financial and institutional conditions necessary for them to be sustainable. To the extent possible, consideration was also given to whether the projects also had social and environmental impacts<sup>10</sup>.
15. The audit work was carried out between February and December 2011. It included detailed examination of EU-funded water and sanitation projects in six beneficiary countries: Angola, Benin, Burkina Faso, Ghana, Nigeria and Tanzania (see **Annex II**). Visits to Burkina Faso, Nigeria and Tanzania were carried out between April and July 2011.
16. The audit examined a sample of 23 projects and programmes, under contracts financed through the seventh, eighth and ninth European Development Funds, including the first ACP–EU Water Facility (funded by the ninth EDF), and from the EU general budget. The total cost of these contracts was over 400 million euro, 49 % of which was funded by the EU. **Annex III** provides a list of all projects and programmes selected for the audit.

<sup>10</sup> In line with the Commission position as expressed in COM(2002) 132 final, 'The strategic approach for sustainable access to and management of water resources integrates sectoral and cross-cutting issues and encompasses all aspects of sustainability. Economic, social and environmental sustainability ...'

## OBSERVATIONS

### **EQUIPMENT WAS INSTALLED, BUT BENEFICIARIES' NEEDS WERE NOT SATISFACTORILY MET IN MOST CASES AND SUSTAINABILITY IS AT RISK**

**OVERALL, EQUIPMENT HAD BEEN INSTALLED AS PLANNED AND WAS IN WORKING ORDER ...**

- 17.** The Court's visits and analyses of reports showed that appropriate equipment for water supply had been installed for all the projects. In some cases the original plans were adjusted in terms of quantity, technical specifications, location and timing in order to meet the local conditions encountered during implementation (see *Annex IV* and *Box 2*).



**Standpipe in a school in Kilolo - Tanzania**

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- 18.** At the time of the audit, information was available (either from EU delegations or as a result of inspection by the Court's auditors) about the current operation of:
- water-supply equipment in 18 of the 23 projects;
  - sanitation facilities in 10 of the 17 projects with a sanitation component.

## BOX 2

### **'CLOSING THE GAP': IMPROVING WATER SUPPLY AND SANITATION PROVISION FOR SMALL TOWNS IN NIGERIA**

The 'Closing the gap' project contributed to the provision of clean water and sanitation in 12 small towns of the state of Jigawa, in the north of Nigeria. The project financed the construction of simple water-supply systems (boreholes and a water network) which were in good condition and functioning correctly at the time of the auditors' visit (July 2011). In addition, household latrines were built using locally available materials.

The project did more than provide infrastructure. By helping local communities identify for themselves what they needed from the project, it aimed to make long-lasting changes in behaviour. Water consumer associations participated in the discussions on the technical specifications of the water-supply and sanitation systems, taking into account the needs of the customers, and were in charge of the day-to-day operation of the systems. They received support from the water and sanitation state agency when maintenance and repairs were needed.



**Water kiosk, Jigawa - Nigeria**  
© European Court of Auditors

The project has had positive effects on the lives of local communities. The small towns were visibly free from the problem of open defecation and there has been a decrease in water-borne illnesses.

At the time of the audit, the project was replicated in over 100 small towns.

### **'CROSS RIVER STATE RURAL WATER SUPPLY AND SANITATION', NIGERIA**

The beneficiary of the grant submitted an 'Interim narrative report' on 7 June 2011. This report covers the whole period of the implementation (from 1 January 2005 to 31 December 2010). According to the interim narrative report, the main outputs of the project had been implemented as provided by the project proposal and the grant agreement, with two main exceptions, namely, (a) the reduction of the number of boreholes that had been repaired to 61 (against 120 in the agreement) and (b) the abandoning of the construction of sanitation centres and latrines. In order to compensate for the reduction of the number of repaired boreholes, the grant beneficiary constructed 15 additional new boreholes.

19. In 10 out of the 18 projects for which information was available, the water-supply equipment installed was maintained in clean and good condition and was operating. Seven projects suffered from minor weaknesses affecting part of the project while for one serious weaknesses were noted (see **Box 3**).
20. Out of the 10 projects with a sanitation component for which information is available, five were successful, in two cases the facilities constructed were not in operation or in adequate working order, and in three other cases there were minor weaknesses (see **Annex IV**).



**Small Towns Water Supply and Sanitation Programme - Nigeria**  
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### BOX 3

#### **'RURAL WATER SUPPLY AND SANITATION IN THE NORTHERN REGION', GHANA**

According to the project's final evaluation report, hand pumps were sited in areas known to be prone to regular flooding, susceptible to contamination and periodically inaccessible.

As regards the boreholes rehabilitated in East Gonja and West Mamprusi, the following problems were reported by a verification mission carried out in 2010:

- in East Gonja, out of 17 boreholes inspected, five were not functioning and three were not in use, and
- in West Mamprusi district, out of seven boreholes inspected, one was not functioning.

Following a first visit carried out in 2009, it had been reported that, out of seven boreholes selected for inspection in the two districts, one had not been found and three were in bad working condition.

In addition, out of the 40 boreholes inspected in the West Gonja district in the context of the project's technical and financial audits conducted in 2009, three were not functioning.

**... BUT BENEFICIARIES' NEEDS WERE NOT SATISFACTORILY MET IN MOST CASES**

21. The needs of beneficiaries as defined in the projects were clearly met in only two of the 23 projects audited, and met with minor weaknesses in a further six cases. In other cases there were more serious weaknesses (see **Annex IV** and **Box 4**).
22. With two exceptions, the entities running the facilities did not carry out regular checks to ensure that the water quality meets the minimum standards required for human consumption (see **Box 5**).
23. Difficulty in organising regular tests and the risk of contamination<sup>11</sup> were among the most common obstacles to achieving these standards. Therefore, the populations served are often strongly advised to boil the water before using it for drinking or cooking.

<sup>11</sup> Old water distribution pipelines and insufficiently protected water sources are among the factors that more significantly contribute to contamination of the water supplied. Even where facilities are new, if piped distribution systems are not used the processes of transport and house storage of water add to the risk of its contamination.

**FOR A MAJORITY OF PROJECTS, RESULTS AND BENEFITS WILL NOT CONTINUE TO FLOW IN THE MEDIUM AND LONG TERM UNLESS NON-TARIFF REVENUE CAN BE ENSURED**

24. The Court assessed the technical, financial and institutional sustainability of the projects audited and, where possible, their social and environmental impact, by analysing technical documents and inspecting projects (see paragraph 14 and **Annex IV**).



## BOX 4

**'SMALL TOWNS WATER SUPPLY AND SANITATION PROGRAMME (STWSSP)', NIGERIA**

The programme included construction of boreholes, pumps and distribution networks in 24 small towns in Adamawa, Delta and Ekiti states.

The plans had relied on the electricity grid to power the pumps, but in the event this supply is almost non-existent. Although standby generators were installed, sufficient diesel to run them on a routine basis is too expensive. As a result the installations, though in good operating condition, were at the time of the audit being run only on rare occasions. Potential users therefore continued to use their previous sources of water, and the programme aimed at providing a reliable improved source of drinking water had delivered practically no benefits.

**'WATER SUPPLY PROGRAMME REGIONAL CENTRES PHASE I', TANZANIA**

In Mwanza, the construction of the waste water treatment plant originally planned was postponed to Phase II, albeit the implementation of the water-supply component of the project was already completed.

## BOX 5

**WATER QUALITY IN ANGOLA AND TANZANIA**

In the city of Tombwa, **Angola**, the entity in charge of the management of the water supply system declared that water analyses were carried out daily; however, no records of these analyses were provided to the auditors.

Water provided to the suburban areas of Luanda was chemically treated in the water treatment plant before distribution, and according to the reports it met the criteria suggested by WHO guidelines. However, the water network was subject to frequent breakages which increased the possibility of water contamination during distribution to the users.

In the rural areas, for the project to supply 10 villages of the northern province of Uige no water analyses were carried out due to logistical difficulties in reaching the water catchment area.

In **Tanzania**, the rural project to supply water to villages in Njombe could count on support from the local laboratory for water analysis, although quality tests were carried out irregularly. However, local farmers had recently planted barley near the water catchment area, using chemical fertilisers and pesticides. The local laboratory was not equipped for detecting these kinds of contamination and the water samples had to be sent to the capital, which implied long waiting periods for the results of the analysis to be known and increased costs.

## TECHNICAL SUSTAINABILITY

- 25.** Overall the projects audited promoted the use of standard technology and locally available materials for both water-supply and sanitation components. Particularly in the case of rural projects (15 of the 23 projects), they built easy-to-maintain boreholes, dug wells equipped with hand pumps for water supply and promoted the construction of low-cost toilet models using locally available materials.



**Standpipe - Burkina Faso**

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<sup>12</sup> Council resolution on water management in developing countries: Policy and priorities for EU development cooperation (9696/02 of 7 June 2002), paragraph 7.

<sup>13</sup> Although it has not to date been covered in EU development policy statements on water and sanitation, the use of a mix of tariffs, taxes and — for capital investment — transfers ('the 3Ts') is discussed, for example, in *Managing water for all* (Organisation for Economic Cooperation and Development, 2009).

## FINANCIAL SUSTAINABILITY

- 26.** Once handed over, the benefits of water and sanitation projects are only assured if they have sufficient reliable income to cover running costs, including routine maintenance, as well as repairs when necessary. In due course, installations will also need to be replaced or repaired. The Council concluded in 2002 that the pricing of water services should ensure financial sustainability, but added that meeting the basic needs of poor and vulnerable groups requires the design of appropriate tariff structures and collection systems<sup>12</sup>. National and local policies in partner countries vary, and for both practical and political reasons commonly make use of taxes and transfers as well as tariffs<sup>13</sup>.

27. Project designs include plans to ensure sustainability after handover, and therefore should analyse the locally available possibilities for ensuring financing, including the risks (e.g. that government funding might not be maintained, or that circumstances will make more subsidy necessary). Practical barriers to tariff-setting and collection can be addressed in the detailed design and, for example, by providing training as part of project implementation.
28. Few financial records for the operation of the systems installed were available, particularly for rural projects. The Court therefore analysed whatever documentation was available (e.g. tariff collection records and bank statements) and, where possible, discussed the financial situation with the entities responsible for operating the systems as well as the project final beneficiaries.
29. In only four of the 23 projects examined were tariffs set at a level to cover running costs. For the others unless transfers and taxes are available, their sustainability is put at risk. As explained in the three following paragraphs, tariffs were influenced by factors such as:
  - (a) perceived ability of the beneficiary population to pay for the service;
  - (b) rejection of water charges on the grounds that government should provide free water; and
  - (c) ineffective billing and fees collection.
30. In two rural projects in Burkina Faso ('Regional solar programme — Phase II' and 'Auto management of drinking water and sanitation in rural area of four provinces of Burkina Faso') the price was set by mayors without taking sufficiently into account the need to cover costs. This was also the case in two urban projects examined in Angola where the water price was subsidised. These provide examples where tariffs will be insufficient to cover costs and taxes or transfers will be needed to guarantee sustainability.
31. According to the agency implementing one of the projects audited in Nigeria ('Cross River State rural water supply and sanitation'), the local population considers water as a free social good and are against households or individuals paying for drinking water. For the project 'Rural water supply and sanitation in the Northern Region' in Ghana, according to the final evaluation report, many water and sanitation committees did not collect water charges.

- 32.** In eight projects, the Court noted widespread problems in billing and collection (low number of connections and significant proportion of water not billed, combined with a weak metering capacity). For example, for the project 'Water supply and sanitation for the suburban areas of Luanda', Angola, according to its 2010 activity report, EPAL (the public water utility of Luanda) invoiced only 46,5 % of the water produced (31,1 million euro), and only half of that was collected (15,4 million euro).

#### **INSTITUTIONAL SUSTAINABILITY**

- 33.** As regards institutional sustainability, it is important that local entities such as water user associations and committees should be empowered to manage and operate the installations and that they should have access to necessary skills and technical expertise.
- 34.** The projects audited ensured that the beneficiaries were involved in the original choices made and generally included development of the necessary local technical knowledge and expertise.
- 35.** However, in seven of the projects audited, the responsible entities were unable to ensure that the installations operated successfully. Among the difficulties found in those cases were the lack of sufficiently developed technical skills and failure to build ownership (see **Box 6**). In practice any of these limitations may mean that equipment is not used.

#### **BOX 6**

#### **'SMALL TOWNS WATER SUPPLY AND SANITATION PROGRAMME (STWSSP)', NIGERIA**

The communities did not have sufficient skills to organise maintenance and repairs of the schemes and had even less capacity to implement behavioural changes. In 2006, the mid-term evaluation report suggested that the water consumer associations would need support long after civil works were finalised.

The *ex post* monitoring report in mid-2010 found that the situation had not changed, as 'there was nobody in sight to move developing a community ownership model forward beyond finalisation of the works contracts'. The report concluded that the lack of support to the communities was jeopardising the sustainability of the project. This was confirmed by the Court's audit.

#### RESPONSIBILITIES OF PARTNER COUNTRIES

- 36.** Where the operation of projects depends on funding, technical support or other action by partner countries' governments and local authorities, their commitment is needed to ensure sustainability. However, in the three projects where formal commitments were made they were not respected (see **Box 7**). In the other 20 projects no formal commitments were made.

#### SOCIAL AND ENVIRONMENTAL IMPACTS

- 37.** In the absence of relevant data and environmental indicators, it is not possible to assess the extent to which the projects audited have contributed to improvements in the overall living conditions of the target populations and the conservation of the environment.
- 38.** Nevertheless, although all the projects were intended to focus on the needs of the poor, six cases were found where the poorest and most vulnerable did not have access to drinking water and basic sanitation.
- 39.** Also, despite the wide promotion of hygiene awareness and sensitisation campaigns, the relatively low importance ascribed to the sanitation component and the lack of a clear and effective integration of water, sanitation and hygiene issues significantly reduced the impact of those activities (see **Box 8**).

#### BOX 7

#### 'DRINKING WATER SUPPLY IN THE CITY OF TOMBWA', ANGOLA

The government of Angola did not respect its commitments as established in the financing agreement in terms of works (extension of the water supply system and the electrical power network), adjustment of water tariffs to their real cost and support to the restructuring process of EMAST (the public water utility of Tombwa). The government's respect of such commitments is of extreme importance to ensure sustainability of interventions.

## BOX 8

**‘REGIONAL SOLAR PROGRAMME — PHASE II’, BURKINA FASO**

The programme mainly focused on drinking-water-related activities. Sanitation aspects were not considered to the same extent and no sanitation infrastructure was provided for by the planning documents.

Due to delays in construction of the installations, parts of the training/awareness raising actions regarding hygiene good practices could not take place or took place too early.

**‘AN INTEGRATED APPROACH TO GUINEA WORM ERADICATION THROUGH WATER SUPPLY, SANITATION AND HYGIENE IN NORTHERN REGION’, GHANA**

One out of the four key results of the project related to hygiene awareness campaigns and included activities aiming at the implementation of improved hygiene behaviour practices.

However the results of the activities undertaken in the area of hygiene promotion in schools and in the community were found to be largely ineffective (2009 second performance monitoring report and 2010 ROM report).



**Regional solar programme - Burkina Faso**  
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**‘DRINKING WATER SUPPLY IN THE CITY OF TOMBWA’, ANGOLA**

The project did not include a sanitation component, although bad sanitation was reported in the prefeasibility studies as a major risk to the health of the population. At the time of the audit, the situation had not changed: open defecation and other poor sanitation practices which increase health hazards were still common.

40. In one project ('Closing the gap: improving water supply and sanitation provision for small towns in Nigeria', see **Box 2**), the implementation of hygiene awareness campaigns was a success. The communities were visibly free from the problem of open defecation. At the time of the audit, the project was replicated in over 100 small towns. Furthermore, the communities were visited by delegations from Niger (the border is 25 km away) who wanted to learn about the approach adopted so as to apply it in their country.

<sup>14</sup> Commission guidelines for water resources development cooperation (1998, updated in 2008) and a set of guidelines for the 10th EDF programming exercise ('The role of water and sanitation in achieving the millennium development goals').

### **DESPITE COMPREHENSIVE MANAGEMENT PROCEDURES, IMPORTANT MATTERS REGARDING SUSTAINABILITY NOT TACKLED**

41. In the water sector the mechanism that the Commission most widely uses for delivery of development aid has been the project approach. Projects are not directly implemented by Commission staff, but are designed and carried out either by an agency under the auspices of the relevant ministry in the partner country or by an NGO or international organisation.
42. The Commission has established procedures, and provides instructions, guidance and advice on approval and monitoring. Having found that sustainability is frequently at risk (see paragraphs 25 to 40), the Court examined whether these procedures were in principle capable of giving reasonable assurance that projects would be sustainable, and whether in fact they were successfully applied in the projects examined.

### **COMMISSION PROJECT MANAGEMENT PROCEDURES COVERED SUSTAINABILITY COMPREHENSIVELY**

43. The Commission provides internal guidance for each of the main phases of the project cycle: programming, identification, formulation, implementation and evaluation and audit. And there are specific guidelines for water and sanitation<sup>14</sup>.

**44.** The guidelines refer throughout to sustainability and prescribe a range of actions and checks at each stage that taken together provide assurance that risks to sustainability are identified and managed. They include ensuring that:

- (a) at the programming stage, national country programmes are in line with partner country and poverty reduction strategies and consider coordination with other donors;
- (b) at the identification and formulation stages, satisfactory technical solutions are proposed, the availability of stable funding sources is identified and clear indicators, objectives and targets are defined. In the case of grant contracts funded by the European Commission<sup>15</sup> such as those under the Water Facility, the outcome of the same type of analysis is taken into account in the selection process;
- (c) at implementation stage, the Commission monitors progress and takes remedial action in good time;
- (d) in both the implementation and the evaluation and audit phases, the Commission's results-oriented monitoring (ROM) system<sup>16</sup> includes assessment of potential and actual sustainability of results respectively in the course of and upon completion of project implementation; and
- (e) in the case of final evaluations contracted by the Commission services, the terms of reference include the need to assess sustainability of project results.

**HOWEVER, IN A SIGNIFICANT NUMBER OF CASES THE COMMISSION FAILED TO TACKLE IMPORTANT MATTERS REGARDING THE SUSTAINABILITY OF RESULTS**

**45.** No evidence existed to show that the Commission had identified, or taken action to address, the following project design weaknesses:

- (a) in nine projects, important aspects of the technical specifications missing or not sufficiently explained;
- (b) in 11 cases, insufficiently developed economic and financial analysis;
- (c) in eight projects, no clearly defined objectives and in another 10 no clearly defined indicators, baseline values or targets.

<sup>15</sup> According to paragraph 6.1.1 of the 'Practical guide to contract procedures for EU external actions' (January 2012 edition), a grant is a direct financial contribution, by way of a donation, from the EU budget or the EDF, in order to finance:

- either an action intended to help achieve an objective forming part of a European Union policy;
- or the functioning of a body which pursues an aim of general European interest or has an objective forming part of a European Union policy.

<sup>16</sup> The results-oriented monitoring (ROM) system of the Commission was established in 2000 in order to provide external, objective and impartial feedback on the performance of aid projects and programmes financed by the EU. ROM is part of the overall quality assurance cycle of EuropeAid, which starts with the design of projects and ends after its implementation. It gives recommendations for actions while projects are ongoing.



**46.** Weaknesses included:

- (a) insufficiently detailed information on either the technical solutions proposed or the mitigating measures to be adopted in cases of known risks to the sustainability of the projects (particularly in cases of adverse hydrogeological conditions for the exploitation of groundwater);
- (b) cases where the technical solution adopted proved to be inadequate; and
- (c) cases of imbalances between the water supply component and the waste water disposal and waste water treatment components of the projects.

**47.** Economic and financial aspects are of great importance for sustainability. Since tariffs are not usually sufficient to cover running and maintenance costs, it is crucial that stable alternative sources of funding are identified and, wherever feasible, committed before financing of project operations is approved.

**48.** In only one case — the ‘Regional solar programme — Phase II’ in Burkina Faso — was financial sustainability extensively discussed in the financing proposal. In 11 other cases, the documents reviewed do not indicate how it was planned to fund maintenance and replacement of the infrastructure.

**49.** Moreover, the particularly difficult context in which the projects operate (low income communities, lack of willingness to pay for water, etc.), and the difficulty of generating sufficient funds to cover their running costs (see paragraph 29), called for analysis at assessment stage of how financing gaps were to be filled, and would have justified making the financing decision dependent on particular commitments in that respect. This was not the case for any of the projects audited.

50. The lack of clear definition of project objectives relates mainly to equipment planned, its level of operation (quantity and quality) and the target population expected to benefit from project results. The lack of clear and quantified measures significantly hampered the Commission's ability to monitor progress during implementation and later to measure and check whether the results achieved were sustained over time or not (see **Box 9**).
51. The Commission monitored 18 out of the 23 projects using the ROM procedure. For eight of them, there is no evidence that the Commission acted on the recommendations made in the ROM reports.
52. Final evaluations are, as a rule, launched before or shortly after completion of project activities, and thus are too early to assess sustainability. On the other hand ex-post monitoring or *ex post* evaluations are carried out well after the end of the project to specifically address the issue of sustainability. Whilst 10 of the 23 projects examined were subject to final evaluation, in only two cases out of 20 that could have been subject to *ex post* monitoring did this occur<sup>17</sup>. Details can be found in **Annex V**.
53. Finally, it should be noted that other factors relevant for the sustainability of project results are outside the Commission's control, for example the reliability of data used to measure the impact of the projects (such as health, education and environment).

<sup>17</sup> *Ex post* monitoring is generally initiated within two years after completion of the project.

#### BOX 9

#### **'REDUCING CHILD MORTALITY AND INCREASING SCHOOL ATTENDANCE BY IMPROVING ACCESS TO WATER AND SANITATION IN RURAL AREAS OF ANGOLA'**

The project proposal did not specify the locations for construction of water supply and sanitation infrastructure and it failed to set clear outcomes in terms of water quality.

#### **'RURAL WATER SUPPLY AND SANITATION IN THE NORTHERN REGION', GHANA**

There were no consistent data available on the population targeted by the project: whilst the feasibility study carried out in 2000 referred to a total population of 576 000 inhabitants in 865 villages in the three districts concerned, the mid-term evaluation report referred to a population of 386 000 inhabitants in 2002 in the same area.

#### **'6TH MICRO PROJECTS' PROGRAMME', GHANA**

Although the project documents referred to increased access to drinking water, no targets were set in terms of water quantity and quality.

# CONCLUSIONS AND RECOMMENDATIONS

## CONCLUSIONS

- 54.** For the projects covered by the Court's audit, equipment had been installed as planned and was in working order (see paragraphs 17 to 20). However, fewer than half the projects delivered results meeting the beneficiaries' needs (see paragraphs 21 to 23). For a majority of projects, results and benefits will not continue to flow in the medium and long term unless non-tariff revenue is ensured (see paragraphs 24 to 36).
- 55.** The technology used was found to be appropriate (see paragraph 25).
- 56.** However, the tariffs set for water did not cover all the costs, either because they had been set on the basis of the ability to pay, or because of lack of willingness to pay and ineffective billing and collection. The long-term running costs resulting from the projects were therefore dependent on other funding (see paragraphs 26 to 32).
- 57.** In seven of the projects, the operators did not have the capacities to fulfil their responsibilities because of lack of sufficiently developed technical skills or failure to build ownership (see paragraphs 33 to 35). In the three projects where formal commitments by partner governments were made they were not respected (see paragraph 36).
- 58.** Although the Court found both good and bad examples of social and environmental impacts, in the absence of relevant data and environmental indicators, it is not possible to assess the projects' contributions (see paragraphs 37 to 40).
- 59.** Although its project management procedures covered sustainability comprehensively, in the projects examined the Commission failed to tackle important matters regarding the sustainability of results. At project design stage, the technical solutions proposed (eight projects) and financial viability (11 projects) were not sufficiently analysed. For 18 projects clear objectives, indicators and targets were not defined (see paragraphs 41 to 50).

- 60.** Monitoring, verification and evaluation reports were not fully used, limiting the Commission's capacity to introduce corrective measures. Moreover, in most of the completed projects, the absence of *ex post* monitoring or evaluations did not allow a useful assessment of the sustainability of results (see paragraphs 51 to 52).
- 61.** EU support has thus increased access to drinking water and basic sanitation in the six sub-Saharan countries audited, using standard technology and locally available materials, though meeting beneficiaries' needs in fewer than half of the projects examined. For a majority of projects results and benefits will not continue to flow in the medium and long term unless non-tariff revenue can be ensured. Despite comprehensive management procedures, the Commission did not tackle important matters regarding sustainability.

## RECOMMENDATIONS

- 62.** To maximise the benefits from EU development expenditure in this area and sector, the Commission should:
- (a) ensure that its procedures are properly applied, especially concerning the following points at project appraisal stage:
    - (i) the definition of explicit project objectives (quantities, type of equipment, location, direct and indirect beneficiaries);
    - (ii) the description of and justification for the technological solutions proposed (wherever applicable, with reference to alternative options); and
    - (iii) establishment of objective verifiable progress indicators, as well as baseline values and quantified targets for project results;
  - (b) carry out sufficient economic and financial analysis to allow easy identification of the expected sources of project funding in the future (including estimated contribution amounts and timing);
  - (c) explicitly consider before project approval whether the conditions for success, including partner country commitments, are likely to be met;
  - (d) ensure that full use is made of the results of monitoring, verification and evaluation work, and that recommendations made in the reports are considered and carried out.

This Report was adopted by Chamber III, headed by Mr Karel PINXTEN, Member of the Court of Auditors, in Luxembourg at its meeting of 10 July 2012.

*For the Court of Auditors*



Vítor Manuel da SILVA CALDEIRA  
*President*

## ANNEX I

**WATER AND SANITATION (SUB-SAHARAN COUNTRIES): CONTRACTED AMOUNTS  
2001–2010**

Zone benefiting from the action	Contracted (euro)		
	Geographical programmes	EUWF (9th EDF) <sup>1</sup>	Total
Mozambique	50 937 409,24	37 018 074,60	87 955 483,84
Burkina Faso <sup>2</sup>	59 080 872,33	7 125 461,00	66 206 333,33
Tanzania	38 059 850,98	27 852 366,00	65 912 216,98
Nigeria	61 930 227,68	3 416 645,95	65 346 873,63
Lesotho	34 779 134,56	10 000 000,00	44 779 134,56
Benin <sup>2</sup>	24 225 786,83	19 863 828,00	44 089 614,83
Ghana	37 998 463,78	2 764 826,00	40 763 289,78
Ethiopia	-	39 947 063,39	39 947 063,39
Mauritius <sup>2</sup>	38 945 583,78	-	38 945 583,78
Rwanda	29 957 191,50	8 573 355,25	38 530 546,75
Angola	32 026 905,70	5 018 240,00	37 045 145,70
Uganda	8 017 687,04	28 107 637,00	36 125 324,04
Côte d'Ivoire	34 664 325,20	1 400 001,00	36 064 326,20
Kenya	2 995 171,46	30 462 679,60	33 457 851,06
Madagascar	-	30 400 952,00	30 400 952,00
Mali	19 910 603,30	9 451 714,00	29 362 317,30
Chad	19 099 441,52	675 000,00	19 774 441,52
Malawi	4 725,00	17 619 266,75	17 623 991,75
Zambia	3 025 570,00	13 546 210,00	16 571 780,00
Senegal	1 221 044,55	14 350 685,37	15 571 729,92
Niger	1 608 065,01	9 491 300,64	11 099 365,65
Namibia	6 183 029,77	4 641 954,00	10 824 983,77
Djibouti	9 448 628,25	-	9 448 628,25
Congo (Democratic Republic of)	77 174,00	8 303 900,00	8 381 074,00
Zimbabwe	-	7 860 277,62	7 860 277,62
Cape Verde	6 398 887,39	609 351,00	7 008 238,39

<sup>1</sup> In the period considered, the amounts contracted under the second Water Facility (10th EDF) did not exceed 400 000 euro. According to the information in CRIS, a further 117 million euro was contracted in 2011.

<sup>2</sup> The geographical programmes figure includes sector budget support assistance, as follows: 38 million euro in the case of Burkina Faso, 4,8 million euro in the case of Benin and 37,4 million euro in the case of Mauritius.

## ANNEX I

Zone benefiting from the action	Contracted (euro)		
	Geographical programmes	EUWF (9th EDF) <sup>1</sup>	Total
Gambia	6 398 797,59	-	6 398 797,59
Mauritania	2 556 626,03	3 092 556,00	5 649 182,03
Guinea	1 824 749,33	2 563 390,00	4 388 139,33
Mayotte	4 267 566,78	-	4 267 566,78
Sierra Leone	-	3 792 465,00	3 792 465,00
São Tomé and Príncipe	2 511 626,65	1 032 898,00	3 544 524,65
Equatorial Guinea	3 493 422,26	-	3 493 422,26
Botswana	3 350 467,76	-	3 350 467,76
Eritrea	-	2 979 328,75	2 979 328,75
Central African Republic	172 136,00	2 648 430,01	2 820 566,01
Seychelles	2 814 129,34	-	2 814 129,34
Gabon	2 752 488,51	-	2 752 488,51
Cameroon	-	2 679 034,95	2 679 034,95
Burundi	-	2 569 826,25	2 569 826,25
Sudan	-	2 153 914,00	2 153 914,00
Comoros	-	2 136 805,16	2 136 805,16
Guinea-Bissau	87 206,94	1 754 270,90	1 841 477,84
Somalia	-	1 337 428,00	1 337 428,00
Togo	-	1 056 742,00	1 056 742,00
Swaziland	-	629 867,00	629 867,00
Multi-country	2 850 188,63	31 037 242,25	33 887 430,88
Others EUWF:			
African Water Initiative	-	20 000 000,00	20 000 000,00
Nile Basin Initiative	-	19 458 290,62	19 458 290,62
Rural communities South Sudan	-	8 000 000,00	8 000 000,00
Africa–EU Partnership Infrastructure	-	7 986 026,00	7 986 026,00
Others (geographical programmes):			
SADC region	647 456,00	-	647 456,00
IGAD region	139 331,00	-	139 331,00
<b>Total</b>	<b>554 461 971,69</b>	<b>455 409 304,06</b>	<b>1 009 871 275,75</b>

## ANNEX II

**POPULATION USING UNIMPROVED WATER SOURCE AND UNIMPROVED SANITATION FACILITIES, PERCENTAGE (ESTIMATED COVERAGE)**

(%)

		Water			Sanitation		
		Urban	Rural	Total	Urban	Rural	Total
<b>Angola</b>	1990	70	60	<b>64</b>	42	94	<b>75</b>
	2008	40	62	<b>50</b>	14	82	<b>43</b>
<b>Benin</b>	1990	28	53	<b>44</b>	86	99	<b>95</b>
	2008	16	31	<b>25</b>	76	96	<b>88</b>
<b>Burkina Faso</b>	1990	27	64	<b>59</b>	72	98	<b>94</b>
	2008	5	28	<b>24</b>	67	94	<b>89</b>
<b>Ghana</b>	1990	16	63	<b>46</b>	89	96	<b>93</b>
	2008	10	26	<b>18</b>	82	93	<b>87</b>
<b>Nigeria</b>	1990	21	70	<b>53</b>	61	64	<b>63</b>
	2008	25	58	<b>42</b>	64	72	<b>68</b>
<b>Tanzania</b>	1990	6	54	<b>45</b>	73	77	<b>76</b>
	2008	20	55	<b>46</b>	68	79	<b>76</b>

Source: Unicef/WHO Joint Monitoring Programme, March 2010 update  
<http://www.wssinfo.org/data-estimates/introduction/>.



## LIST OF PROJECTS AND PROGRAMMES AUDITED

Intervention	Funding source	Implementation modality	Cost (million euro)	European Commission contribution (million euro)
<b>Angola</b>				
Drinking water supply in the city of Tombwa	8th EDF	Stand-alone projects	8,8	8,8
Water supply and sanitation for the suburban areas of Luanda	9th EDF	Stand-alone projects	21,4	21,4
Reducing child mortality and increasing school attendance by improving access to water and sanitation in rural areas of Angola	9th EDF Water Facility	Contribution agreement with international organisation	4,9	3,7
Installation or renovation of a water supply system and promotion of hygiene and basic sanitation in 10 villages in rural areas in the province of Uige	9th EDF Water Facility	Action grant	1,0	0,5
<b>Benin</b>				
Water initiative in semi-urban centres (budget support programme)	9th EDF	Sector budget support	15,7	4,8
Supply of drinking water and basic sanitation in 200 vulnerable localities in Benin	9th EDF Water Facility	Contribution agreement with international organisation	2,2	1,2
Integrated management of domestic water by the Associative and Council Development in the North West of Benin	General EU budget	Action grant	0,7	0,5
<b>Burkina Faso</b>				
Drinking water supply in the city of Ouagadougou	8th EDF	Stand-alone projects	202,6	30,0
Regional solar programme — Phase II — Burkina Faso	8th EDF	Stand-alone projects	14,2	13,2
Auto management of drinking water and sanitation in rural areas of four provinces of Burkina Faso	9th EDF Water Facility	Action grant	1,2	0,9
Rehabilitation and exploitation of the water retention system in Zibako	9th EDF Water Facility	Action grant	0,4	0,1

## ANNEX III

Intervention	Funding source	Implementation modality	Cost (million euro)	European Commission contribution (million euro)
<b>Ghana</b>				
Rural water supply and sanitation in the Northern Region	8th EDF	Stand-alone projects	12,2	12,2
An integrated approach to guinea worm eradication through water supply, sanitation and hygiene in Northern Region, Ghana	9th EDF	Contribution agreement with international organisation	20,0	15,0
6th micro projects programme, Ghana	9th EDF	Stand-alone projects	20,2	20,2
Strengthening water, sanitation and hygiene promotion services in Ghana	General EU budget	Action grant	1,3	0,9
Providing sustainable water, sanitation and hygiene promotion to poor and deprived rural and urban communities in Ghana	General EU budget	Action grant	2,0	0,7
<b>Nigeria</b>				
Small towns water supply and sanitation programme	7th EDF	Stand-alone projects	19,1	7,2
Closing the gap: Improving water supply and sanitation provision for small towns in Nigeria	9th EDF — Water Facility	Action grant	3,9	2,9
Cross River State rural water supply and sanitation project	General EU budget	Action grant	0,9	0,7
<b>Tanzania</b>				
Water supply programme regional centres phase I	8th EDF	Stand-alone projects	44,8	33,6
Water supply programme regional centres phase II	9th EDF	Stand-alone projects	50,2	38,3
Water supply and sanitation for 14 villages in Njombe District	9th EDF Water Facility	Action grant	2,5	1,6
The Kilolo sustainable development programme	General EU budget	Action grant	0,5	0,4

## ANNEX IV

## ASSESSMENT OF THE PROJECTS AUDITED

		Project outputs were delivered		Equipment is in good operating condition		Operation level meets the beneficiaries needs	Revenue from tariffs covers running costs	Entities running the facilities have sufficient capacity
		Water	Sanitation	Water	Sanitation			
Angola	Drinking water supply in the city of Tombwa	Yes	N/A	Minor weaknesses	N/A	Serious weaknesses	Serious weaknesses	No
	Water supply and sanitation for the suburban areas of Luanda	Yes	Minor weaknesses	Insufficient evidence	Insufficient evidence	No	Serious weaknesses	No
	Reducing child mortality and increasing school attendance by improving access to water and sanitation in rural areas of Angola	Minor weaknesses	Serious weaknesses	Insufficient evidence	Insufficient evidence	Insufficient evidence	Insufficient evidence	Minor weaknesses
	Installation or renovation of a water supply system and promotion of hygiene and basic sanitation in 10 villages in rural areas in the province of Uige	Yes	Minor weaknesses	Minor weaknesses	Insufficient evidence	Insufficient evidence	Insufficient evidence	Insufficient evidence
Benin	Water initiative in semi-urban centres (budget support programme)	Yes	N/A	Yes	N/A	Insufficient evidence	Yes	Yes
	Supply of drinking water and basic sanitation in 200 vulnerable localities in Benin	Yes	Yes	Insufficient evidence	Insufficient evidence	Insufficient evidence	Yes	Yes
	Integrated management of domestic water by the Associative and Council Development in the North West of Benin	Yes	Yes	Yes	Yes	Yes	Minor weaknesses	Minor weaknesses
Burkina Faso	Drinking water supply in the city of Ouagadougou	Yes	Serious weaknesses	Yes	N/A	Yes	Yes	Yes
	Regional solar programme — Phase II — Burkina Faso	Yes	N/A	Minor weaknesses	N/A	Minor weaknesses	Yes	Minor weaknesses
	Auto management of drinking water and sanitation in rural areas of four provinces of Burkina Faso	Yes	N/A	Minor weaknesses	N/A	Minor weaknesses	Minor weaknesses	Minor weaknesses
	Rehabilitation and exploitation of the water retention system in Zibako	Yes	N/A	Yes	N/A	No	No	Insufficient evidence

 Yes

 Minor weaknesses

 Serious weaknesses

 No

 Insufficient evidence

 N/A

## ANNEX IV

		Project outputs were delivered		Equipment is in good operating condition		Operation level meets the beneficiaries' needs	Revenue from tariffs covers running costs	Entities running the facilities have sufficient capacity
		Water	Sanitation	Water	Sanitation			
Ghana	Rural water supply and sanitation in the Northern Region	Yes	Minor weaknesses	Serious weaknesses	No	Serious weaknesses	Serious weaknesses	No
	An integrated approach to guinea worm eradication through water supply, sanitation and hygiene in Northern Region, Ghana	Yes	Yes	Insufficient weaknesses	Insufficient weaknesses	Minor weaknesses	Serious weaknesses	Serious weaknesses
	6th micro projects programme, Ghana	Yes	Yes	Insufficient weaknesses	Minor weaknesses	Insufficient weaknesses	Serious weaknesses	Insufficient weaknesses
	Strengthening water, sanitation and hygiene promotion services in Ghana	Yes	Yes	Yes	Minor weaknesses	Serious weaknesses	No	Minor weaknesses
	Providing sustainable water, sanitation and hygiene promotion to poor and deprived rural and urban communities in Ghana	Yes	Yes	Yes	Minor weaknesses	Serious weaknesses	No	Minor weaknesses
Nigeria	Small towns water supply and sanitation programme	Yes	Serious weaknesses	Yes	No	No	No	Serious weaknesses
	Closing the gap: Improving water supply and sanitation provision for small towns in Nigeria	Yes	Yes	Yes	Yes	Minor weaknesses	Minor weaknesses	Yes
	Cross River State rural water supply and sanitation project	Yes	Serious weaknesses	Minor weaknesses	Insufficient weaknesses	Serious weaknesses	No	Serious weaknesses
Tanzania	Water supply programme regional centres phase I	Yes	N/A	Yes	N/A	Serious weaknesses	Serious weaknesses	Yes
	Water supply programme regional centres phase II	Yes	Yes	Minor weaknesses	Yes	Minor weaknesses	Serious weaknesses	Yes
	Water supply and sanitation for 14 villages in Njombe District	Yes	Yes	Yes	Yes	Minor weaknesses	Serious weaknesses	Serious weaknesses
	The Kilolo sustainable development programme	Yes	Minor weaknesses	Minor weaknesses	Yes	Serious weaknesses	Insufficient weaknesses	Minor weaknesses

 Yes

 Minor weaknesses

 Serious weaknesses

 No

 Insufficient weaknesses

 N/A

## ANNEX V

## FINAL EVALUATIONS

Project	Beneficiary country	Completion date	Final evaluation date	Observations
Drinking water supply in the city of Tombwa	Angola	30.6.2009	-	By the time of the audit the terms of reference for the final evaluation were under preparation
Water supply and sanitation for the suburban areas of Luanda	Angola	30.6.2009	-	The final evaluation is planned to take place during the first quarter of 2012
Reducing child mortality and increasing access to water and sanitation in rural areas of Angola	Angola	12.2009	-	An <i>ex post</i> ROM mission was carried out in March–April 2011
Installation or renovation of a water supply system and promotion of hygiene and basic sanitation in 10 villages in rural areas in the province of Uige	Angola	31.5.2009	-	No final evaluation was foreseen
Water initiative in semi-urban centres (budget support programme)	Benin	12.2011	-	By the time of the audit the project was still ongoing
Supply of drinking water and basic sanitation in 200 vulnerable localities in Benin	Benin	8.2011	-	By the time of the audit no final evaluation had been carried out
Integrated management of domestic water by the Associative and Council Development in the North West of Benin	Benin	2.2009	January 2009	
Drinking water supply in the city of Ouagadougou	Burkina Faso	31.6.2010	-	By the time of the audit the final evaluation had not been carried out yet
Regional solar programme — Phase II — Burkina Faso	Burkina Faso	30.9.2010	March 2009	
Auto management of drinking water and sanitation in rural areas of four provinces of Burkina Faso	Burkina Faso	29.6.2009	July 2009	
Rehabilitation and exploitation of the water retention system in Zibako	Burkina Faso	30.6.2008	-	No final evaluation was carried out
Rural water supply and sanitation in the Northern Region	Ghana	31.10.2007	February 2008	

## ANNEX V

Project	Beneficiary country	Completion date	Final evaluation date	Observations
An integrated approach to guinea worm eradication through water supply, sanitation and hygiene in Northern Region, Ghana	Ghana	5.6.2011	-	By the time of the audit no final evaluation had been carried out
6th micro projects programme	Ghana	30.6.2009	January 2010	
Strengthening water, sanitation and hygiene promotion services in Ghana	Ghana	1.4.2005	-	No final evaluation was carried out
Providing sustainable water, sanitation and hygiene promotion to poor and deprived rural and urban communities, Ghana	Ghana	31.3.2009	-	No final evaluation was carried out
Small towns water supply and sanitation programme (STWSSP)	Nigeria	31.12.2008	May 2009	An <i>ex post</i> ROM mission was carried out in July 2010
Closing the gap: Improving water supply and sanitation provision for small towns in Nigeria	Nigeria	13.9.2012 (planned)	-	By the time of the audit the project was still ongoing
Cross River State rural water supply and sanitation	Nigeria	31.12.2010	January–February 2011	
Water supply programme regional centres Phase I	Tanzania	31.12.2009	September 2009	
Water supply programme regional centres Phase II	Tanzania	31.12.2011 (planned)	-	By the time of the audit the project was still ongoing
The Kilolo sustainable development programme	Tanzania	30.6.2007	2005–08	Three visits were paid by the evaluators to the project in November 2005, March 2007 and May 2008
Water supply and sanitation in 14 villages in Njombe District	Tanzania	31.12.2009	December 2009	

# REPLY OF THE COMMISSION

## EXECUTIVE SUMMARY

### I.

The Commission welcomes the report of the Court of Auditors on the EU development assistance for drinking water supply and basic sanitation in sub-Saharan Africa.

### II.

The total EU contribution to the 23 selected projects amounts to 219 million euro while the Commission contracted more than 1 billion euro for water and sanitation projects in 46 sub-Saharan African countries from 2001 to 2010. The Court's audit thus covered 22 % of the amount contracted.

The Commission is of the view that care must be taken in drawing any general conclusions from the results of the Court's examination of these 23 diverse projects.

### III. Second indent

In most projects several needs were identified, of which at least one or more were met. A lot of projects were very ambitious and some needs, mainly secondary ones, were not fulfilled.

### III. Fifth indent

Most of the audited projects were approved before the establishment of quality support groups (QSG) effective as from 2005.

### IV.

The Commission takes note of the recommendation of the Court and will continue to improve the quality of development cooperation practices and operations and ensure that the existing procedures are fully implemented.

## REPLY OF THE COMMISSION

### OBSERVATIONS

In most projects several needs were identified of which at least one or more were met. A lot of projects were very ambitious and some needs, mainly secondary ones, were not fulfilled.

#### **Box 2 — ‘Closing the gap’: improving water supply and sanitation provision for small towns in Nigeria — Second paragraph**

Following the ‘Closing the gap’ project in Nigeria, the State government of Jigawa has adopted the strategy of community ownership and management which is now applied throughout the state.

#### **Box 2 — ‘Cross River State rural water supply and sanitation’, Nigeria**

In the ‘Cross River State rural water supply and sanitation’ project in Nigeria, changes were necessary because there were fewer broken down boreholes to be repaired than expected, which is actually a positive sign of the sustainability of rural water schemes in Cross River State.

The change in sanitation was in line with international development practice whereby subsidies for latrines have been discontinued. Instead the community-led total sanitation (CLTS) approach was successfully adopted.

#### **19.**

The Commission takes note that in 17 out of 18 projects for which information was available, the equipment installed was either well maintained and operated or suffered from only minor weaknesses. For the remaining one, the mentioned weaknesses directly relate to an external factor (very difficult hydrogeological conditions — see Box 3).

#### **Box 3 — Second paragraph**

As regards the number of non-functioning boreholes in East Gonja and West Mamprusi in the framework of the ‘Rural water supply and sanitation’ project in the Northern Region of Ghana, it is worth mentioning that these areas were prone to guinea worm infection and thereby in need of urgent interventions.

For that reason and despite the difficult hydrogeological conditions and the risks of low yields or drying schemes during the drought periods, regional and local authorities, government line services and the agency in charge of rural water (CWSA) have pushed ahead with drilling several boreholes in these two districts.

#### **20.**

The Commission takes note that eight out of 10 projects with a sanitation component were found to be successful or to have only minor weaknesses.

#### **21.**

In most projects several needs were identified, of which at least one or more were met. A lot of projects were very ambitious and some needs, mainly secondary ones, were not fulfilled.

#### **Box 4 — ‘Small towns water supply and sanitation programme (STWSSP)’, Nigeria**

In the ‘Small towns water supply and sanitation’ programme (STWSSP) in Nigeria, the community development component (community ownership and management) was not completed by the end of the project.

Indeed, the EDF funding for the STWSSP was stopped when it was no longer possible to extend the financing agreement for the project. The financing agreement was signed in 2001 but activities did not start until 2003.

The population has therefore not been sensitised to the need to cover running costs of the generators. During the successor projects, this issue will be taken up as one of the priorities.

#### **Box 4 — ‘Water supply programme regional centres phase I’, Tanzania**

In the water supply programme in Tanzania (Regional centres phase I), the waste water treatment plant was postponed for economic and administrative reasons. The total amount allocated (co-financed) to the action was insufficient after the procurement of the works (offers higher than engineer estimates) for the water treatment plant.



## REPLY OF THE COMMISSION

### 22.

The Commission agrees that setting up sustainable water quality control mechanisms is a very important issue that needs to be duly addressed when formulating and implementing projects.

See also the Commission's reply to Box 5.

### 23.

Ensuring that the water quality meets the minimum standards required for human consumption is a prerequisite before acceptance of the water schemes. In parallel and in order to avoid any contamination, the beneficiaries are sensitised to the correct use of water, water source protection, hygiene promotion and wastewater disposal.

However, given the risk of future contamination and the difficulty in organising regular water quality tests, the Commission believes that advising the population to boil the water before using it is the right approach and contributes to building confidence between services which are still weak and the consumers.

### Box 5

In Angola, the water supply system of Tombwa has a small laboratory. The province of Namibe also has a laboratory, which facilitates the analyses.

Regarding the project in the suburban areas of Luanda, besides treatment of water collection, there is also an additional treatment in the distribution centres. Through awareness-raising actions, each user, including those that supply via standpipes, receives instructions on water care and the appropriate treatment to undertake at home. Treatment is not done at each fountain.

The lack of suitable equipment on the spot made it difficult to carry out water analyses in remote water catchment areas. The Commission highlights the fact that an on-going project will supply laboratory equipment for some provinces (including Uíge) suitable for reaching those areas.

### 27.

In order to address financial sustainability issues, the Commission recognises the need for capacity building and training at all levels as a major component during project implementation.

### 28.

The rejection of water charges on the ground and the lack of capacity of the responsible entities are even more prominent in rural areas. This is the reason why the Commission supports the setting up of local structures to help these entities in the long term.

### 29. – 30.

For the Commission, establishing the water sector on a financially sustainable basis requires establishing the appropriate balance between tariffs, transfers and taxes (3Ts).

#### 29. (a)

The ability of the beneficiary population to pay for the service is assessed at the beginning of the projects when socioeconomic surveys are carried out. The results of these surveys are used to evaluate the financial viability of the projects.

#### 29. (b)

The rejection of water charges on the ground is a major issue, which needs to be addressed through extensive sensitisation campaigns. Behavioral changes usually take more time than project implementation.

#### 29. (c)

Capacity building and extensive training are key elements which support the operators with billing and fees collection.

## REPLY OF THE COMMISSION

### 31.

See the Commission's reply to paragraph 29 (b).

In Nigeria, in many parts of the country, water is considered as a free social good by governments, politicians and the general public. Changes will take time but the Commission is supporting corresponding reform efforts.

In Ghana, the project faced a lot of issues with the technical assistance team and CWSA, the water and sanitation Government's partner, has not fulfilled its contractual obligations. The above reasons have led to the implementation of a project with mitigated results.

### 32.

See the Commission's reply to paragraph 29 (c).

Urban water, small towns and rural projects have specific operation and maintenance arrangements. Improving billing and collection in urban areas is a project on its own since it entails extensive sensitisation, training and capacity building.

### 33.

The Commission fully supports reforms of the water supply and sanitation sector which empower water user associations and communities to own, manage and operate their water supply installations (sometimes with the support of the local authorities or the private sector).

### 35.

The Court's observation highlights the critical importance of undertaking capacity-building and training activities for the entities responsible to successfully operate the installations.

This is even more important in remote rural areas in which the literacy and education level of the population is very low.

This is the reason why the Commission supports the setting up of local structures to help the entities responsible in the long term.

See also the Commission's reply to Box 6.

### Box 6

In the Nigerian 'Small towns water supply and sanitation' project (STWSSP), the EDF funding was stopped when it was no longer possible to extend the financing agreement, which was signed in 2001. It has therefore left the community development aspect of the project insufficiently attended to.

Capacity-building and training activities for the communities concerned will be taken up in the successor projects.

### 36.

Respect for partner countries' commitments is a key issue, which is very difficult to tackle. In Ghana, the water sector has been decentralised (financial and managerial responsibilities) in order to avoid these problems. The district assemblies (municipalities) are the only entities responsible for supervision and assistance to the water boards.

### Box 7

In Angola, works are under way for home network rehabilitation and extension, i.e. smaller diameter pipes, including the replacement of galvanised iron pipes over 50 years old with polyethylene and the installation of water meters. Also under construction are a few water kiosks, including laundries in the peri-urban zone.

The government has restored the power line which supplies the city. The conditions have therefore been created for the installation, from this line, of power extensions for each group (collection and distribution).

Tariffs will be increased once the works of the network rehabilitation and the installation of the meters are complete.

### 37.

In many countries, the lack of reliable statistical data is a major problem for the establishment of project indicators on the environment.

## REPLY OF THE COMMISSION

**38.**

The choice of the final beneficiaries sometimes depends on the decisions of the local authorities. However, the Commission will make sure that the needs of the poor are duly addressed in future projects.

**39.**

The Commission agrees with the Court that the sanitation component has not been sufficiently addressed in the past. The Commission now acknowledges its importance and requests hygiene and sanitation to be duly addressed when submitting proposals for the Water Facility.

### **Box 8 — ‘Regional solar programme — Phase II’, Burkina Faso**

In Burkina Faso, the sanitation component is now duly taken into account under the 10th EDF.

### **Box 8 — ‘An integrated approach to Guinea worm eradication through water supply, sanitation and hygiene in Northern Region’, Ghana**

In Ghana, at the time the mid-term and the result-oriented evaluations were carried out, all the boreholes (250) in the communities were not already drilled (delayed activity according to schedule). The construction work was completed late in 2010 and 2011 and more improvements on the sanitation aspects were observed. However, the observation remains pertinent.

### **Box 8 — ‘Drinking water supply in the city of Tombwa’, Angola**

In Angola, under the ongoing project, the municipality of Tombwa will benefit from some environmental sanitation improvements, through the community-led total sanitation (CLTS) approach.

**40.**

The Commission is pleased that the Court recognises the fact that the community-led total approach (CLTS) was a success in Nigeria. The same approach is now being implemented in Ghana in rural areas and is enforced as a national policy.

### **‘Despite comprehensive management procedures, important matters regarding sustainability not tackled’**

In most of the projects audited, the Commission tackled important matters regarding the sustainability of results. Most of the audited projects were approved before the establishment of quality support groups (QSG) effective as from 2005.

**41.**

The Commission wishes to highlight that in most cases, it delegates the responsibility for project implementation to the beneficiary country, which becomes in turn the contracting authority (Lomé and Cotonou agreements).

### **‘However, in a significant number of cases the Commission failed to tackle important matters regarding the sustainability of results’**

In most of the projects audited, the Commission tackled important matters regarding the sustainability of results.

**45.**

Most of the audited projects were approved before the establishment of quality support groups (QSG) in 2005.

**45. (b)**

In the QSG mechanism, one of the quality checks required at formulation stage is to make sure that the proposed projects are supported by sound economic and financial analyses.

**45. (c)**

In the QSG mechanism, one of the quality checks required at formulation stage is to make sure that clear objectives, indicators, baseline values and targets are defined.

**47.**

The Commission recognises the key importance of the economic and financial aspects with regard to sustainability.

## REPLY OF THE COMMISSION

**48.**

In the QSG mechanism, established in 2005, one of the quality checks required at formulation stage is to make sure that financial sustainability issues are duly addressed.

**49.**

The financing decision, which is formalised by the signature of a financing agreement with the beneficiary country, includes details of the government's commitment.

The Commission agrees that the fulfilment of partner countries' commitments is a key issue that needs to be addressed at the early stages of project implementation.

**50.**

In the QSG mechanism, established in 2005, one of the quality checks required at formulation stage is to make sure that clear objectives, indicators, baseline values and targets are defined.

**Box 9 — 'Reducing child mortality and increasing school attendance by improving access to water and sanitation in rural areas of Angola'**

In many projects in rural areas, there is a self-selection and demand-driven process at the beginning of the project to select the beneficiary communities based on a set of indicators.

**Box 9 — 'Rural water supply and sanitation in the Northern Region', Ghana**

Regarding the lack of available and reliable data in the rural water supply and sanitation project in the Northern Region of Ghana, the Commission agrees that this is a key issue in many projects.

**Box 9 — '6th micro projects programme', Ghana**

For the micro-project in Ghana, the Commission wishes to highlight the fact that the water component of the project represented less than 10 % of the total budget. At the end, 20 boreholes were equipped with hand-pumps.

**51.**

The Court mentions that in eight projects out of the 18 projects that were monitored, there is no evidence that the Commission acted on the recommendations made. Depending on the type of recommendations, the Commission may at times only be able to verbally advise those responsible for project implementation.

### CONCLUSIONS AND RECOMMENDATIONS

#### CONCLUSIONS

**54.**

In most projects several needs were identified of which at least one or more were met. A lot of projects were very ambitious and some needs, mainly secondary ones, were not fulfilled.

**56.**

For most countries, the cost is to be covered by tariffs, taxes and transfers. This approach is even more relevant to the African context.

**57.**

Despite difficulties, the Commission will continue to work with governments, local authorities and civil society in order to improve ownership and sustainability of projects.

Capacity development is one of the most critical dimensions of project implementation and its success depends on social and political factors which are often out of the scope of the project.

**59.**

In most of the projects audited, the Commission tackled important matters regarding the sustainability of results. Most of the audited projects were approved before the establishment of quality support groups (QSG) effective as from 2005.

## REPLY OF THE COMMISSION

### 61.

Most of the audited projects were approved before the establishment of quality support groups (QSG) in 2005.

Notwithstanding this, in most of the projects audited, the Commission tackled important matters regarding the sustainability of results.

In addition, in most projects several needs were identified, of which at least one or more were met.

A lot of projects were very ambitious and some needs, mainly secondary ones, were not fulfilled.

## RECOMMENDATIONS

### 62. (a)

With the establishment of the QSG mechanism in 2005, greatly improved rules are now applied during the identification and the formulation phases.

#### 62. (a) (i)

The Commission agrees with this recommendation. At present, these issues are examined by the project studies that should be ready before the approval of the project by the Commission.

#### 62. (a) (ii)

Following the existing rules, the Commission always tries to adopt technologies adapted to the specific country conditions and the capacity of the beneficiary country.

#### 62. (a) (iii)

According to the present rules, these indicators should be mentioned in the logframe of each project.

### 62. (b)

The Commission agrees with this recommendation. For all projects including works, these issues are also examined by the project studies before the funding decision of the Commission.

### 62. (c)

The Commission agrees with this recommendation. The partner country policy and the contribution of each project to the objectives of this policy are currently examined during the formulation phase.

### 62. (d)

The Commission agrees with this recommendation. Lessons learnt and complementary actions are mentioned at the formulation phase and are now considered before project approval.



European Court of Auditors

**Special Report No 13/2012**

**European Union Development Assistance for Drinking Water Supply and Basic Sanitation in Sub-Saharan Countries**

Luxembourg: Publications Office of the European Union

2012 — 43 pp. — 21 × 29.7 cm

ISBN 978-92-9237-826-4

doi:10.2865/10664





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IMPROVEMENTS IN ACCESS TO SAFE DRINKING WATER AND BASIC SANITATION ARE CRITICAL ELEMENTS IN MEETING THE MILLENNIUM DEVELOPMENT GOALS.

THE COURT ASSESSED WHETHER EU DEVELOPMENT ASSISTANCE FOR DRINKING WATER SUPPLY AND BASIC SANITATION IN SIX SUB-SAHARAN COUNTRIES IS LEADING TO SUSTAINABLE RESULTS. IT CONCLUDED THAT IN GENERAL, EQUIPMENT HAD BEEN INSTALLED AND WAS IN WORKING ORDER. HOWEVER, FEWER THAN HALF OF THE PROJECTS MET BENEFICIARIES' NEEDS AND RESULTS AND BENEFITS WILL NOT CONTINUE TO FLOW IN THE MEDIUM AND LONG TERM UNLESS NON-TARIFF REVENUE IS ENSURED.

THE COMMISSION DID NOT MAKE GOOD USE OF ITS MANAGEMENT PROCEDURES TO INCREASE THE LIKELIHOOD THAT PROJECTS WILL BRING LASTING BENEFITS.



EUROPEAN COURT OF AUDITORS



ISBN 978-92-9237-826-4

