



## How can the increasing water demands be met within existing public financial resources?

### Overview

The Second National Development Plan (NDP II) 2015-2020, identifies the provision of adequate water supply and improved sanitation as one of the key priority areas for promoting sustainable wealth creation and inclusive growth.

Water is a central issue in Uganda that is increasingly getting urbanised with a rising population to serve. Every year, water consumption and need rise both in amount and per capita demand.

A number of new water facilities like solar pumped systems have been set up to serve more people than the point water sources such as boreholes. However, access to safe water services is still a challenge. There exists a number of water financing systems, some are working well, while others are performing poorly, due to a number of reasons.

This policy brief highlights: i) the main drivers for increased water demand, ii) assesses whether the available cash flows are sufficient and effectively utilised, and iii) explores options for maximising use of the existing financial flows.

### Introduction

“Water is the driving force of all nature” is a popular phrase coined by Leonardo da Vinci. This underscores the value of water as a key source that every living organism on this planet depends on. Lack of safe water affects every aspect of life. Without it, several health and sanitation related challenges become pervasive in society.

The 1996 United Nations (UN) report assessing the freshwater resources of the world concludes that water use has been growing at more than twice the rate of the population increase during this century and already a number of regions are chronically water short. About one-third of the world’s population lives in countries that are

### Key Issues

- A. The main drivers for increasing water demand include;
  - Greater urbanisation due to population growth.
  - Increased economic and industrialisation activities.
  - Climatic change.
  - Growing social, public health and environmental concerns with water quality.
- B. The key factors affecting financing and utilisation of Water and Environment Sector projects and programmes are;
  - Insufficient, delays and non-release of funds.
  - Poor planning.
  - Lengthy procurement process, and
  - Low capacity of the contractors.

experiencing moderate to high water stress, resulting in part from increasing demands fuelled by population growth and human activity. Uganda has experienced two decades of economic growth, leading to large population movements from rural areas to informal settlements around urban centres.

The population has risen from 9.54million in the year 1970 to 45.7million according to the latest UN estimates. High population growth - nearly triple the global average - stress the water and sanitation services that exist. As of June 2018, the percentage of Ugandan population with access to safe water in rural areas was estimated to be 70% and 74% safe drinking water in urban areas (Water and Environment Sector (WES) Performance Report, 2018).

Considering the increasing demand for safe water, the Government of Uganda prioritized access to clean water through establishment of



specialized water facilities round the country. Therefore, with the responsibilities for water management shared between the different sectors, there is an urgent need to effectively manage the available resources to meet the increasing water demand.

### Main drivers for increasing water demand

**Greater urbanisation due to population growth and rising living standards:** These have led to more water consumption per head. In 1991, Uganda had a total of 67 urban centres (including town boards, city and municipalities) with a total population of 1.67million. Today, there are 259 urban centres with an increased total population of 7.42million people which has increased the demand for safe water (Uganda Bureau of Statistics–National Population and Housing Census (UBOS-NPHC- Report 2014).

**Increased economic and industrialisation activities:** Increase in production and manufacturing in Uganda has generated increasing demand for water use and water pollution too. Most industries’ priority is to maximise production rather than water efficiency and conservation. Therefore, industrialists do not invest in water efficiency technologies which increases the demand for water. On the other hand, they increase pollution of the available water sources. For example, the Ministry of Water and Environment (MWE) report for FY 2016/17 indicated that Lake Victoria receives 25 tons of biodegradable substances and four tons of plant nutrients from the local industries, urban centres and fishing villages.

**Climatic change:** This has resulted in growing uncertainty about water availability and demand. Changes in flooding and drought patterns have been varying from region to region in Uganda. Areas with or projected low water supply face a clear reduction in value of services provided by water resources. For instance, the cattle corridor that covers approximately 40% Uganda’s land is vulnerable to climatic change, and there is an

anecdotal evidence of increasing flooding in historically drought prone areas of North eastern Uganda, mainly in Karamoja region. This has potentially translated into new demands for water security.

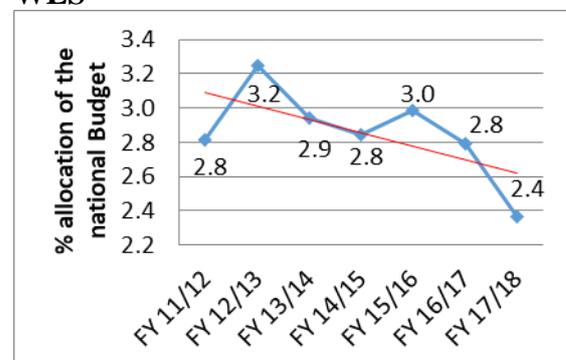
**Growing social, public health and environmental concerns with water quality (poor water quality):** Lack of water of suitable quality for specific purpose due to poor sources, inadequate treatment of fresh water, and wastewater pollution or contamination has increased the demand for safe water.

### Financing of the Water and Environment Sector

#### A. Allocations to the WES

The proportion of the National Budget allocated to the WES declined from 3.25% in FY 2012/13 to 2.37% in FY 2017/18.

**Figure 1: Percentage allocation to the WES**



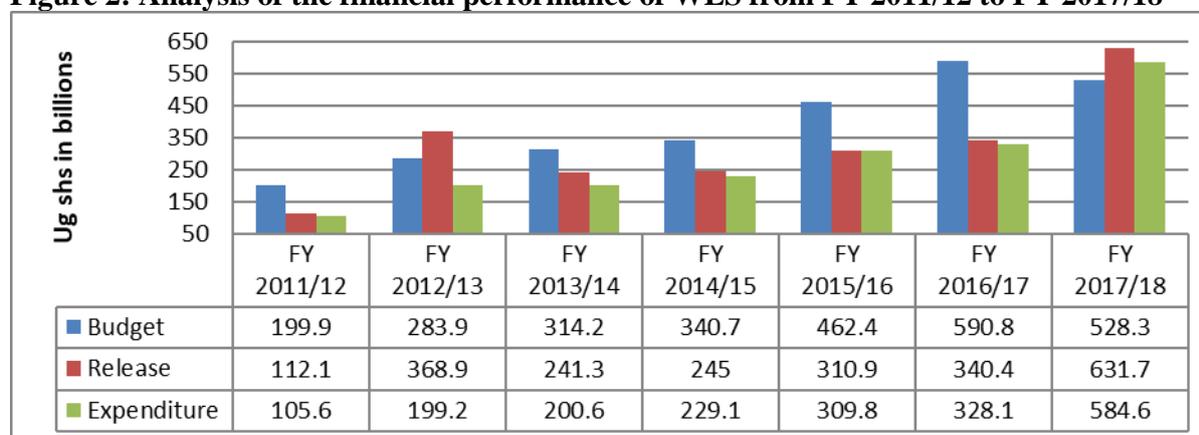
Source: Approved Estimates of Revenue & Expenditure (FY 2011/12 to FY 2017/18)

#### B. Trend in financial performance of WES

There are variances between the amount allocated, disbursed and the actual amount spent for all financial years (FYs 2011/12-FY 2017/18). Except for FYs 2012/13 and 2017/18, the releases are always below the budget allocations (Figure 2). This has consequently affected the WES performance.



**Figure 2: Analysis of the financial performance of WES from FY 2011/12 to FY 2017/18**



Source: Annual Budget Performance Reports from FY 2011/12 to FY 2017/18

As shown in Figure 2, while the allocation in absolute terms increased from Ug shs 199.9bn in FY 2011/12, to Ug shs 340.7bn in FY 2014/15 and to Ug shs 528.3bn in FY 2017/18, there is increasing concern among sector stakeholders that the increment is not in line with the population growth estimated at 3.3% per annum. This limits the sector's ability to meet the water demand. The most affected areas were the recurrent costs of Operation and Maintenance (O&M) for rural water supply facilities, where a lot of money is required to repair the existing system and replace broken pipes. For example, in FY 2014/15 and FY 2015/16, the deficit was 16.4% on average, which widened to 66.02% in FY 2016/17.

### Key factors affecting financing of the Water and Environment Sector

**i) Insufficient amounts, delays and non-release of funds:** This affects implementation of the planned water coverage. For instance, in FY 2015/16 under Urban Water Supply, sanitation activities were not carried out in Pacego, Padibe, Moyo and Pabbo towns due to limited counterpart funding. Similarly, in the same FY, the Budget Monitoring and Accountability Unit (BMAU) reported the non-receipt of funds for the second and

fourth quarters (47% shortfall) under the Water and Sanitation Development Facility-North. Ultimately this curtailed the sectors' ability to meet the existing safe water demand.

**ii) Poor planning:** Project implementers make very ambitious plans to achieve several outputs that cannot be achieved based on the available resources (*Medium Term Expenditure Framework FY 2014/15 – FY 2018/19*). As a result, several projects cannot be completed, thereby constraining coverage and failure to meet the ever increasing water demand. For instance, the BMAU report for FY 2015/16, noted that in the Water and Sanitation Development Facility-South West project, five out of the 25 water systems were constructed, due to poor planning. The planned activities could not be financed with the available budget.

### Key factors affecting utilisation of the available resources

**iii) Low capacity of the contractors:** For instance, in FY2013/14, construction of Mayuge Town Piped Water Supply System works for the booster station were not completed during the period, because the contractor took time revising the drawings,



which led to low spending, thus affecting project implementation during that FY.

**iv) Lengthy procurement processes** affected the execution of the budget in FY 2014/15, due to the framework contract approach (BMAU FY2014/15 Report). Similarly, in FY 2013/14, the BMAU report noted the low absorption of funds (50.3% of the released funds) for the construction works at Wadelai Water, and Sanitation Scheme in Nebbi District due to procurement delays and design changes.

### **Conclusion**

The increasing demand for water is mainly fuelled by population growth and human activities, calling for efficient allocation of available financial resources. However, some of the financial resources released have been limited and not utilised effectively and efficiently. This is due to procurement issues, poor planning, low capacity of contractors, and delays in disbursements.

The efficiency in the provision of safe water must go beyond building new facilities but also guarantee sustainability of the existing ones by allocating sufficient resources for their operation and maintenance.

### **Recommendations**

#### **The Government should:**

1. Use political and legal authorities to develop appropriate incentives for industries to align their business decisions with the public interests of water and environmental conservation.
2. Use economic instruments such as polluter charges. This tool would play a big role in financing water facilities, to generate revenue that can augment the public budget.
3. Explore the low costs option for instance, relying on the ecosystem, green infrastructure such as floodplains

or wetlands which can be more cost effective. Taping such opportunities can reduce the cost of increasing the water coverage.

4. Ensure that regional water projects are designed or structured in such a way that cash generated by the more profitable facilities are available to cross-subsidize unprofitable or less-profitable elements.
5. The Ministry of Finance, Planning and Economic Development and MWE should ensure timely disbursements for effective implementation of water projects. On their part, project implementers should prepare procurement work-plans in time.
6. Accounting officers with persistent implementation delays should be sanctioned.
7. The MWE should promote contractual methods that give efficiency incentives to private operators. For example, re-contracting basing on performance.
8. The project implementers should always project the level of operational costs over a full life of the water facility in conjunction with planning of capital spending, to avoid sub-optimal performance of service and difficulties in attracting suitable finances.

### **References**

1. BMAU Monitoring Reports – FY2013/14, FY 2015/16
2. MFPED, Approved Estimates of Revenue and Expenditure (recurrent & development) from FY 2011/12 to FY 2017/18
3. MFPED, Annual Budget performance Reports from FY 2012/13 to FY 2017/18
4. Uganda Bureau of Statistics (UBOS)- National Population and Housing Census(NPHC) –report 2014
5. The 1996 UN Report - Assessing the Freshwater Resources of the World

**For more information, contact**  
**Budget Monitoring and Accountability Unit**  
**Ministry of Finance, Planning and Economic Development**  
[www.finance.go.ug](http://www.finance.go.ug)