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## Project Country Report

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# Water Permit Systems, Policy Reforms and Implications for Equity in Uganda

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*By*

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## 1. Brief history and context of water sector

The fresh water resources of Uganda are considered to be an important strategic resource, crucial for sustaining life, advancing development and maintaining the environment. Access to clean and safe water and better sanitation facilities and practices are fundamentals to a healthy population and can directly have an impact on the quality of life and productivity of the people. Water supply and sanitation are part of the key concerns highlighted under the national Poverty Eradication Action Plan (PEAP), which is a key government framework for guaranteeing poverty eradication through creation of supporting conditions for fast economic development and social change.

Apart from domestic needs, water plays a very significant role to the national socio-economic development and poverty eradication as it is also vital for power generation, agriculture, waste discharge and industrial water supply among others. The main goal of the water sector in Uganda is to manage and develop the water resources of Uganda in an integrated and sustainable manner so as to secure and provide water of adequate quantity and quality for all social and economic needs for the present and future generations with the full participation of all stakeholders.

Rivers and lakes in Uganda, including wetlands, cover about 18% of the country's total surface area, with rainfall being the highest contributor. With an entire renewable water resources estimated at 66 km<sup>3</sup>/yr corresponding to about 2,800 m<sup>3</sup>/person/yr, Uganda is considered to be endowed with substantial freshwater resources. Uganda currently has capacity to utilize only 1% of the current renewable freshwater for consumptive uses. Of this 1%, half is used for domestic water supply (IMF, 2010). Total water withdrawal of Uganda rose from 300 million m<sup>3</sup> in 2002 to about 637 million m<sup>3</sup> in 2008. The municipal sector was the highest water user extracting about 328 million m<sup>3</sup>, followed by irrigation and livestock sector withdrawing about 259 million m<sup>3</sup> and industry withdrawing about 50 million m<sup>3</sup> (FAO, 2016). This level of water use is considered sub-optimal. Despite Uganda's being well endowed with significant freshwater resources, the challenges of rapid population growth, increased urbanization and industrialization, uncontrolled environmental degradation and pollution are leading to accelerated depletion and degradation of the available water resources. Uganda is also faced with the challenge of low safe water coverage (NWDR, 2006).

The percentage of water for production facilities with actively functioning water user committees is 78%. This is based on spot checks of 278 facilities under community management with established water user committees, for 711 facilities constructed from 2000 to 2013 in the 54 districts so far covered in the water for production database (MWE, 2013). The major uses of water for production in Uganda currently include irrigation of crops, fish rearing, livestock farming, industrial processing and wildlife conservation. Currently, there are a number of public, private and public-private owned irrigation schemes covering a total of 14,418 ha under the formal sector and 67,000 ha under informal irrigation, mainly for rice production. All this represents only 20.4% of the total national irrigation potential of 567,000 ha (MWE, 2011). Water use for small-scale irrigation schemes is estimated at 10,000 m<sup>3</sup>/ha/year while Government large-scale irrigation and commercial irrigation schemes are estimated at 12,000 m<sup>3</sup>/ha/year (IMF, 2010; NWDR, 2006).

Government initiated reforms in the water sector, in 1997, to ensure that water services are provided and managed with increased efficiency and cost effectiveness. The reforms are closely linked to the government's poverty alleviation plans, and financed largely by debt relief funds. The government has led from the front, building a high level of trust and consensus with its sector development partners and with civil society stakeholders, and initiating progressive and innovative reforms throughout the sector. The reform process has involved an all-inclusive assessment of the water and sanitation sector, as well as studies of the rural and urban sub-sectors, and preparation of action and investment plans (Robinson, 2002). The key strategies to emerge from these assessments include more decentralised delivery of services, increased private-sector participation, and the need for a programmatic, sector-wide approach. Comprehensive sector reform studies had been planned to run 1998 up to 2004 (NWDR, 2006).

## 2. Legislative Status

For many years, legislation for the regulation of the water sector was inadequate, outmoded and scattered under different laws. Since the late 1980s, the policy and legislative framework for the management of the water and sanitation sector in Uganda has evolved tremendously. Efforts to improve water and sanitation have taken place in the context of broad institutional and economic reforms, including a shift from projects to a Sector-Wide Approach (SWAP) to planning; construction, and in some cases management, by the private sector; a shift in the role of government from service provider to policy maker; and decentralized service delivery, particularly of rural water supplies and sanitation. The prominence of water and sanitation was raised with the establishment of the Poverty Eradication Action Plan (PEAP) in 1997, coupled with debt relief and a Poverty Action Fund (PAF). Reform studies led to the development of Strategic Investment Plans (SIPs) with appropriate policies, strategies, action areas, and associated costs (WSP, 2011).

The framework consists of a set of policies and laws which include: The Constitution of Uganda (1995), The Water Statute (1995), The National Water and Sewerage Corporation Statute (1995), the Local Government Act (1997), and the National Water Policy (1999) (Hirn, 2013; NWDR, 2006; WSP, 2011). Though most of the aforementioned policies and legislation have been in force for some time now, a number of provisions are not yet fully operational, particularly at the local government and local community levels. In addition, some of the legislation need to be revised in order to address the emerging issues in the sector such as Private Sector Participation, Decentralization, and the SWAP (NWDR, 2006).

- **The Constitution of the Republic of Uganda, 1995:** The Constitution of the Republic of Uganda lays the foundation for all the laws that have a bearing on the water sector. The Constitution provides for the national goals and principles of State Policy. Generally, the Constitution gives provision for natural resources among which water forms an integral part. It clarifies that the management of water resources is the state's duty unless otherwise decreed by parliament. Government, either local or central, holds natural resources in trust for Ugandans in accordance with the provisions of the Constitution. As trustee, government only has powers to grant concessions, licenses or permits in respect of the natural resources

listed. The specific constitutional requirements with a direct bearing on the water sector include:

- (a) Taking all practical measures to promote good water management systems at all levels;
- (b) Promoting sustainable development and public awareness of the need to manage land, air and water resources in a balanced and sustainable manner for the present and future generations, and utilization of natural resources in such a way as to meet the development and environmental needs of present and future generations.
- **Water Statute, 1995:** This is the principle law for the water sector, which combines legislation for both water resources management and water supply and sanitation. The Water Statute is a modern water law, in that it is flexible, deferring all details to regulations that can more easily be reformed as conditions change and make available for delegation of powers and broad exemptions from regulation. At the beginning, the Statute confirms that water in Uganda is entrusted in the government and that rights to use water; to construct or operate any works; or to pollute water can only be deliberated under the provisions of the Statute. Apart from general rights to use water for domestic purposes, subsistence garden irrigation and fire-fighting, the Statute does not approve allocation of permanent water rights, but rather gives the issuance of time-bound authorisations to abstract water, to construct hydraulic works and to discharge waste. The basic foundation of most of the Statute's provisions is the understanding between protecting the environment and ensuring the availability of sufficient quality and quantity of water to the population. The core objectives of the Statute are:
  - (a) To promote the rational management and use of the waters of Uganda through:
    - ◆ Progressive introduction and application of appropriate standards and techniques for the investigation, use, control, protection, management and administration of water resources;
    - ◆ Co-ordination of all public and private activities which may influence the quality, quantity, distribution, use or management of water resources, and
    - ◆ Co-ordination, allocation and delegation of responsibilities among Ministers and public authorities for the investigation, use, control, protection, management or administration of water resources;
  - (b) To promote the provision of a clean, safe and sufficient supply of water for domestic purposes to all persons;
  - (c) To allow for the orderly development and use of water resources for animals, irrigation, industrial, commercial and mining uses, energy, navigation, fisheries, preservation of flora and fauna and recreation in ways which minimise harmful effects to the environment; and
  - (d) To control pollution and also to promote the safe storage treatment, discharge and disposal of waste which can pollute water or may harm the environment and human health.

The provisions of the Statute is given by the effect of the Water Resources Regulations (1998), Waste Discharge Regulations (1998), Water Supply Regulations (1999) and the Sewerage Regulations (1999).

- **National Water and Sewerage Corporation Statute, 1995:** The Statute institutes the NWSC as a Water and Sewerage Authority and offers it the mandate to function and provide water and sewerage services in areas assigned to it on a sound commercial and feasible basis. The Statute requires the Minister responsible for Water Affairs to enter into a performance contract with NWSC relating to its operations in accordance with the provisions of the Water Statute. The Statute permits the NWSC to own assets in its areas where it gives services without the need of compensation in respect of the transfer of such assets.

- **National Environment Statute, 1995**

This National Environment Statute establishes the National Environment Management Authority (NEMA) as the overall body, charged with responsibility of coordinating, and monitoring all environmental management issues in the country. The Statute empowers NEMA, in consultation with lead agencies, to issue guidelines and prescribe measures and standards for the sustainable management and conservation of natural resources and the environment in general.

- **Water Abstraction and Wastewater Discharge Regulations, 1998:** This provides for the establishment of regulations for controlling water abstraction and wastewater discharge by permits use. The permit system makes sure that the use of water resources is environmentally friendly and encourages sustainable development. These controls also ensure that water is not treated as a free good but as a good with a value to be paid for. The different types of Permits provided for under the Regulations are Surface Water Abstraction Permit, Groundwater Abstraction Permit, Drilling Permit, and Construction Permit.
- **Local Government Act, 1997:** This defines roles for different levels of government in provision and management of water and sanitation related activities. The Act specifies that the role of Local Governments in connection with the Ministry responsible for Water Affairs is the provision of water and maintenance of facilities. The Act empowers the different levels of government to plan and implement development interventions according to identified local priorities.
- **Land Act, 1998:** The Land Act confers all rights to water resources in the hands of the Government. It empowers the Minister responsible for water to control the management and utilization of such water. The Act allows for reasonable use by the occupier or owner of a piece of land, of water for domestic and small-scale agricultural purposes. The Act provides that the government or local government holds land in trust for the people and protects environmentally sensitive areas such as natural lakes, rivers, groundwater, natural ponds, natural streams, wetlands, forest reserves, national parks and any other land reserved for ecological and tourist purposes for a common good of the citizens of Uganda.

### 3. Implementation Status

Depletion, wastage and pollution of water resources of Uganda is on the rise due to rapid population growth, poor land use and management, growing urbanization, growing industrialization, poor environmental sanitation, and poor solid and liquid waste management. Emerging economic

activities such as floriculture, horticulture, fish farming and oil exploration are ventures where the country's water resources may be utilized. With the purpose of controlling water depletion and

pollution along with mitigation of climate change impacts, government has created an enabling legal framework in form of The Water Act, Cap 152, and the supplementary regulations: Water Resources Regulations (1998), Waste Discharge Regulations (1998). The Water Act has been under implementation by the Ministry of Water and Environment since 1998 when the various laws and regulations were operationalised (MWE, 2012; MWLE, 1999). The Water Resources Regulations 33/1998 provides for the procedure to obtain a water permit.

The Directorate of Water Resources Management (DWRM) of the ministry of Water and Environment (MWE) is responsible for the implementation of the provisions of the water act related to regulating water abstraction and discharge of wastewater into the environment. The DWRM does this through water use allocation (abstraction and waste water discharge), water service regulation (drilling, construction, dam safety, easement), compliance monitoring and enforcement of water laws, review of Environmental Impacts Assessment reports (EIAs) related to water and awareness raising and information dissemination.

The DWRM requires that water abstraction and waste discharge is done under a permit that contains the terms and conditions. Water permits are issued for periods not exceeding 5 years with standard and site specific conditions and these must be strictly adhered to by the permit holder. Annual fees for use of water resources and discharge of wastewater have to be paid. Table 1 shows the fees for water use stipulated in the Republic of Uganda water act (Cap. 152), The Water Resources Regulations, 1998.

**Table 1: Fees for use water resources and discharge**

FEES AND CHARGES	AMOUNT (UGANDA SHILLINGS)*
For processing application for:	
(a) registration of existing works or use	100,000
(b) a water permit	450,000
(c) Renewal of a water permit	50,000
(d) An easement	100,000
(e) drilling permit	500,000
(f) a construction permit	500,000
(g) renewing a drilling permit	500,000
ANNUAL CHARGES	AMOUNT (UGANDA SHILLINGS)
1. For taking and using water under a water permit:	
(a) Up to 400 cubic meters per day	200,000
(b) more than 400 cubic meters per day but less than 1000 cubic meters per day	1,000,000
(c) 1000 cubic meters per day or more	3,000,000
2. For operating any works which impound water for non-consumptive uses e.g for hydropower	

(a) 10-50 megawatts	1,000,000
(b) 50-100 megawatts	5,000,000
(c) Over 100 megawatts	20,000,000

\* 1 US Dollar = 3,630 Uganda Shillings (November 30, 2016)

A permit granted always has two sets of conditions; viz.: Standard and Specific Conditions. Standard conditions are selected provisions of the Water Act and Water Resources Regulations while specific conditions to the permit issued vary according to applicant’s data and findings of the Verification Team. All Permit holders are required to adhere to both categories of permit conditions (DWRM, 2010).

The DWRM processes permits to regulate abstraction of water using motorized pumps and canals; discharging wastewater in the environment; drilling for water; construction of dams and also reviews EIAs reports related to water resources. Before a permit for any use is issued the applicant must provide some specific information on their planned operations. This ensures sustainable allocation of the available water resources for the different uses; and collection and storage of knowledge on the available water resources for the present and future use. The Ministry of Water and Environment has provided guidelines for water infrastructures which are categorised into four under which water permits are issued. The four categories are;

- Piped water supplies (groundwater, surface water abstraction from lakes, rivers and reservoirs, gravity flow piped schemes from springs)
- Point water supplies (point source abstractions from wells, boreholes, springs and surface water, generally in rural and peri-urban areas)
- Multipurpose reservoirs and valley tanks (surface water impoundments and abstraction from rivers, lakes, reservoirs and surface runoff)
- Hydroelectric Power Plants (hydroelectric dams, run-of-river hydroelectric power stations)

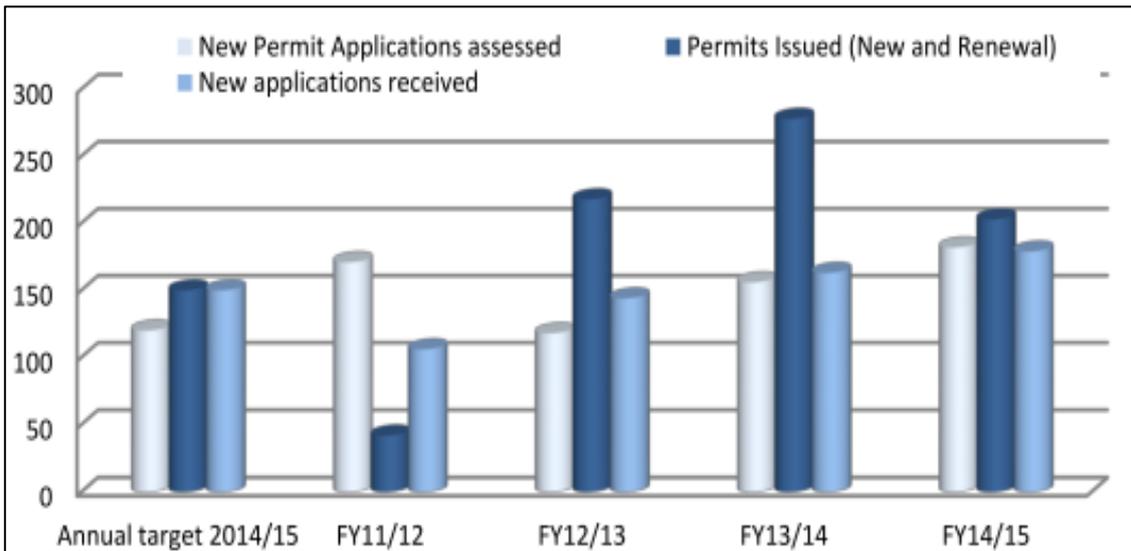
The DWRM of the Ministry of Water and Environment regularly publishes the names of Companies, Organisations and Institutions that have valid permits for abstraction of surface and groundwater, waste water discharge, and borehole drilling. As of October 2010, 366 water users had been issued with water abstraction permits out of which 232 had valid permits. At the same period 89 Companies, Institutions and Organisations had been issued with waste water discharge permits out of which 39 had valid permits while 36 drilling companies had valid drilling permits and could undertake drilling of boreholes for water across the country (DWRM, 2011).

The number of water permits issued has increased since 2010. In the FY 2014/15, a total of 752 water permit holders for waste water discharge, drilling permits, groundwater and surface water abstraction permits were being monitored for compliance to the provisions of the Water Act. There were 203 new permits issued in the FY 2014/15, a decrease from 278 in the previous year with average compliance level of 67%, compared to 64% in the FY 2013/14 (MWE, 2015). The numbers of water permit applications and issuance from FY 2011/12 to FY 2014/15 is shown in Figure 1 while Figure 2 shows the number of permit holders monitored for compliance.

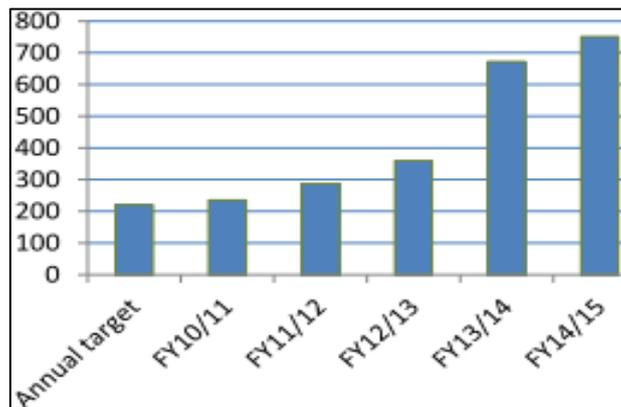
Water drilling permits are issued annually between 1<sup>st</sup> July and 30<sup>th</sup> June following submission of an application to the DWRM and meeting all the requirements for engaging in borehole drilling

activities in Uganda (MWE, 2016b). Table 2 shows a list of 44 drilling companies with valid drilling permits for the period 1<sup>st</sup> July 2016 to 30<sup>th</sup> June 2017.

The number of companies in Table 2 as compared to the number of valid drilling permits in the year 2010 of 36, shows that there has been an addition of 8 more drilling companies between the year 2010 and 2016. The water drilling companies together with other valid water permit water holders are usually assessed for compliance as stipulated in their permits and the water act.



**Figure 1** Numbers of water permit applications and issuance from FY 11/12 to FY 14/25 (MWE, 2015)



**Figure 2** Number of permit holders monitored for compliance from FY 10/11 to FY 14/15 (MWE, 2015)

**Table 2: List of drilling companies with valid permit numbers for the period 1st July to 30th of June 2017**

	<b>Drilling Company Name</b>	<b>Permit Number</b>
1.	Absolom and Brothers Ltd	DP06670/DW 2016
2.	Associazione Centro Aiuti Volontari (ACAV)	DP13268/DW 2016
3.	PMP Holdings Ltd	DP11564/DW 2016
4.	ADT Africa Ltd	DP21355/DW 2016
5.	International Geo Drilling Solutions Ltd	DP11499/DW 2016
6.	Falls Ltd	DP06921/DW 2016
7.	BM Watsan Holdings Ltd	DP13862/DW 2016
8.	Care Mission Water Services	DP06731/DW 2016
9.	China Geo Engineering corporation (U) Ltd	DP06050/DW 2016
10.	Covenant Water (U) Ltd	DP04023/DW 2016
11.	Draco (U) Ltd	DP12175/DW 2016
12.	Drillco Consult Ltd	DP11027/DW 2016
13.	East African Boreholes Ltd	DP10386/DW 2016
14.	East African Ministries Ltd	DP21309/DW 2016
15.	Ebowa Investments Ltd	DP06733/DW 2016
16.	E-Plus General Engineering Services Ltd	DP10386/DW 2016
17.	Equator Waterwell Drilling Ltd	DP09406/DW 2016
18.	Dunia Engineering company	DP02719/DW 2016
19.	Watershed Technical Services	DP01516/DW 2016
20.	Fields Of Life	DP04863/DW 2016
21.	Galaxy Agro Tech (U) Ltd	DP09505/DW 2016
22.	Hippo Technical Services Ltd	DP11205/DW 2016
23.	Icon Projects Ltd	DP03983/DW 2016
24.	IDRICO International Drilling Company Ltd	DP09537/DW2016
25.	KLR Agro Ltd	DP07662/DW 2016
26.	Atiida Enterprises	DP01628/DW 2016
27.	International Lifeline Fund	DP05696/DW 2016
28.	Living Water International (U) Ltd	DP06812/DW 2016
29.	MK Engineering Company Ltd	DP04880/DW 2016
30.	Multech Consults (U) Ltd	DP11345/DW 2016
31.	Maa Technologies (U) Ltd	DP05031/DW 2016
32.	Nile Drilling company (U) Ltd	DP14030/DW 2016
33.	Royal Techno Industries Ltd	DP05189/DW 2016
34.	SRI Balaji Industries (EA) Ltd	DP31217/DW 2016
35.	Sub-Saharan Drilling Company Ltd	DP31139/DW 2016
36.	Sumadhura Technologies Ltd	DP14177/DW 2016
37.	Trans Africana Drillco System and Eng. Works Ltd	DP04266/DW 2016
38.	TGS Water	DP08539/DW 2016
39.	Victoria Pumps Ltd	DP09360/DW 2016

40. Leam International Ltd	DP11542/DW 2016
41. Water Tech Services Ltd	DP07715/DW 2016
42. Geo Drilling Solutions	DP04939/DW 2016
43. TOSCANO Ltd	DP01651/DW 2016
44. J.O.Y Drilling Deliverance Church	DP21376/DW 2016

Source: (MWE, 2016b)

According to a sector performance report of MWE (2016a), there is a total of 1320 water permit holders for waste water discharge, drilling, groundwater and surface water abstraction. However, the report does not break down this total number into the various categories of waste water discharge, drilling, groundwater and surface water abstraction. Among the 1320 water permit holders, 65 % (856 permit holders) were assessed for compliance to the provisions in the water act and permit conditions and the results are shown in Table 3.

**Table 3: Compliance to permit conditions FY 2015/16**

Type of Permit	Permit Condition	Total Number of permits monitored	Number of permits complying	%
Surface water	Abstracting within permitted amount	213	158	74
Ground water	Abstracting within permitted amount	442	328	74
Waste water discharge	Effluent discharge	142	80	56
Drilling	Quarterly submission of Borehole completion reports	59	53	90
<b>Total</b>		<b>856</b>	<b>619</b>	<b>72</b>

Source: (MWE, 2016a)

In general, the average compliance level was greater 50 % with the best compliance being in drilling and the least compliance in waste water discharge. Some of the permit holders were not fully complying with certain permit conditions such as installing facilities for measuring and recording of water levels and water abstraction volumes, submitting water use data on a quarterly basis, recording waste water discharges, installing waste water treatment facilities, payment of annual fees (DWRM, 2010). For instance, out of 27 companies with EIA certificates in the FY 2014/15, only 11 companies were applying various permits (MWE, 2015). This level of compliance is partly due to; a) weaknesses in enforcement systems and procedures e.g., less punitive measures for offenders, b) institutional capacities (limited human, financial and logistical resources), c) weak institutional collaboration between DWRM and other agencies, d) inadequate incentives to compel Permit holders to comply and; e) political involvement (DWRM, 2010).

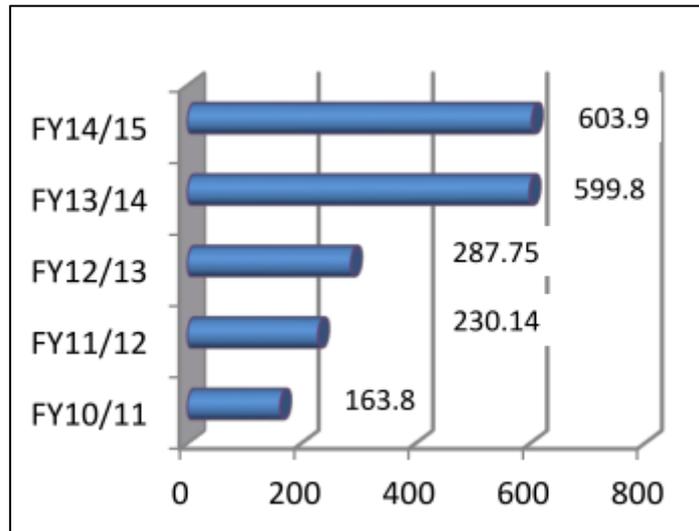
Government considers effective Monitoring, Evaluation and Reporting (ME&R) as a key pre-requisite for the successful and timely achievement of the water sector targets and goals. As part of the water

sector reform process, government has put in place a very elaborate ME&R framework, which aims at ensuring coordinated and periodic reporting on all sector activities by the different stakeholders. This has greatly enhanced transparency and accountability in the water sector through improved information flow between the central government, donors, local governments, NGOs and the private sector. In order to further strengthen the ME&R framework, Government has embarked on the process of defining clear indicators for the water sector against which the performance of the sector will be periodically reviewed (NWDR, 2006). To consolidate the efforts the Ministry has recently developed an Enforcement and Compliance Monitoring Strategy that will guide all efforts related to water resources regulation.

As a way to improve compliance to the Water Act and permit conditions, the Ministry has employed a number of strategies to reach to users. These include awareness raising programs (workshops, newspaper adverts, year planners, flyers and other awareness materials), compliance monitoring and assistance visits, piloting of catchment based water resources management and building of legal capacity (DWRM, 2011). Currently, government functions of water resources management has been restructured to Water Management Zones (WMZ) in order to be more responsive to local issues and to be organized along catchment boundaries. One of the main functions of WMZ is to review project proposals for water development and water use, water use permit applications, proposals for modification of regulations or prior permits, and environmental impact assessments (EIAs) in the zone and catchment. Also, to administer the water abstraction and discharge permit system and thus enforce water allocation, sustainable water use, and infrastructure operations in accordance with the agreed water management plan

#### 4. Fees (or levies, tax)

Over the years, revenue collection from permits has seen a significant increase. During the FY 2014/15, a non-tax revenue collection amounting to UGX million 603.9 was collected from permits application processing fees, annual water use fees and annual wastewater discharge fees. The significant improvement since last financial year is attributed to intensified public awareness raising through newspaper supplements, compliance monitoring visits, scheduled meetings with water use and wastewater permit holders, meetings with drilling permit holders and other non-compliant permit holders and de-concentration of water resources management functions to the WMZs that has enabled close follow up of water users and waste water dischargers (MWE, 2015). Figure 3 shows non-tax revenue collected from permits for FY 2010/11 to 2014/15.



**Figure 3 Total annual non-tax revenue [UGX million] from water use permits collected; FY10/11-14/15 (MWE, 2015)**

The Ministry of Water and Environment (MWE) oversees both the urban and rural water supply sector, and is responsible for sector policy and overall direction. The National Water and Sewerage Corporation (NWSC) is responsible for service provision in all urban areas. The NWSC manages cities, municipalities and towns whose populations are over 5000 persons. As of November 2015, NWSC was managing utility and services in 110 towns including Kampala (MFPED, 2016), while private sector service providers operate in small towns (WaterAid, 2016). In the absence of an independent regulatory body, water services regulation is carried out by the Urban Water Supply Regulation Unit within the Directorate of Water Development.

## 5. Institutional arrangements

The MWE is responsible for policy making, issuing national standards, regulation regarding tariffs, and performance contract management. The technical arm of the Ministry, The Directorate of Water Resources Management (DWRM) is responsible for developing and maintaining national water laws, policies and regulations; managing, monitoring and regulation of water resources through issuing water use, abstraction and wastewater discharge permits; Integrated Water Resources Management (IWRM) activities; coordinating Uganda's participation in joint management of transboundary waters resources and peaceful cooperation with Nile Basin riparian countries. The directorate comprises of the following three departments; Water Resources Monitoring and Assessments, Water Resources Regulation, and Water Quality Management (MWE, 2016).

The main elements of the sector reform process include: reform of the policy framework and adoption of one coherent country approach; strengthening of the institutional framework, including long-term capacity building, notably at district level, and adoption of decentralised service modalities; and increased rural coordination and consultation (through a sector-wide approach (SWAP), including the

establishment of multi-stakeholder Sector Working Groups (SWGs) to strengthen strategic resource allocation and Joint Sector Reviews (JSRs) to monitor progress. These consultative reform and budgeting processes have created incentives for the active engagement of sector stakeholders. Uganda is now considered one of the leaders in terms of sector reform in Africa. Capacity levels differ across districts, however, public service restructuring combined with a rise in the number of districts has spread capacity more thinly (O’Meally, 2011).

In Uganda, applications for water permits at all levels are made through the DWRM. A person who occupies or intends to occupy any land or wishes to construct, own, occupy or control any works on or adjacent to the land may apply to the Director for a water permit. An application referred to under sub-regulation shall be in a form specified and be accompanied by a specified fee payable to the consolidated Fund at the time of submitting the application forms. The Director may, require an applicant to prepare and submit plans or other information to support the application in person or by a person duly authorized by him to enter any land and carry out any investigations that are necessary to enable him process the application. The Director shall, after receipt of any application with all approved information refer such application to any public authority designated by the Committee for consideration and comments. The Director may grant a water permit in the forms specified after considering all factors and regulations regarding the issuance. The eligibility of regulated water use is determined based on the definitions described in the Water Act 152. The majority of regulated water users are City/Municipal and Town Councils, industrial, commercial or large- scale public utilities/facilities (DWRM, 2010). Currently, not all eligible users are regulated due to a number of factors including:

- a) Centralized system of processing water abstraction permits is reported to be expensive for distant users to process applications for regulation; hence, they are reluctant to apply.
- b) Institutional financial and human capacity to carry out nation-wide registration of eligible water users.

The Director may cancel any permit issued where the holder of the permit, fails to comply with any provision of the regulations or any conditions to the permit; fails to provide any information required to be provided to the Director or fails to provide the information in the prescribed form.

#### **Recourse, review, and/or appeal arrangements are in place**

A person who is dissatisfied or aggrieved by a decision of the Director in connection with the grant or renewal of a permit may, within one month from the date on which the Director’s decision is communicated to him, appeal, in writing, to the Minister against the decision of the Director. The Minister shall, within twenty one days of receipt of the appeal, consider and determine the appeal or refer the appeal to the Committee. Where an appeal is referred to the Committee under sub-regulation The Water Resources Regulations, 1998, the Committee shall consider the appeal and make written recommendation to the Minister within one month from the day the matter is referred to it by the Minister. The Minister shall, after receiving the recommendations of the Committee, consider and determine the matter within seven days from the date of receipt of the recommendations.

In the determination under sub-regulation of this regulation, the Minister shall take into account the recommendations of the Committee (WRR, 1998).

## 6. What are the challenges

Despite the significant progress emphasized above, the sector is still confronted with numerous challenges. Challenges going forward include declining sector resource allocation, some fragmentation of sector activities and changing political economy priorities (O’Meally, 2011). The major challenge is establishment of robust system for effective, efficient and sustainable distribution of water and sanitation services to the end users, on the basis of the strategies and funding mechanisms established under the SWAP framework. This challenge, together with the inherent financial and human resources limits both national and local levels pauses the greatest risk for the untimely achievement of the sector targets (NWDR, 2006).

Improving the sector services will need improved capacity of the sector institutions, particularly the DWRM, to take its new role of planning, assisting and supervising water and sanitation programs through improvements in monitoring systems and procedures. Government is now focusing on building capacity of the water sector institutions and Local Governments in addition to promoting increased private sector involvement and effective community participation in all water sector activities. The promotion of community participation policy based on demand-driven method is being highlighted. At a strategic level, government is also actively encouraging the principles of Integrated Water Resources Management (IWRM) as a fundamental part of its strategy to ensure sustainability of water resources (NWDR, 2006).

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