

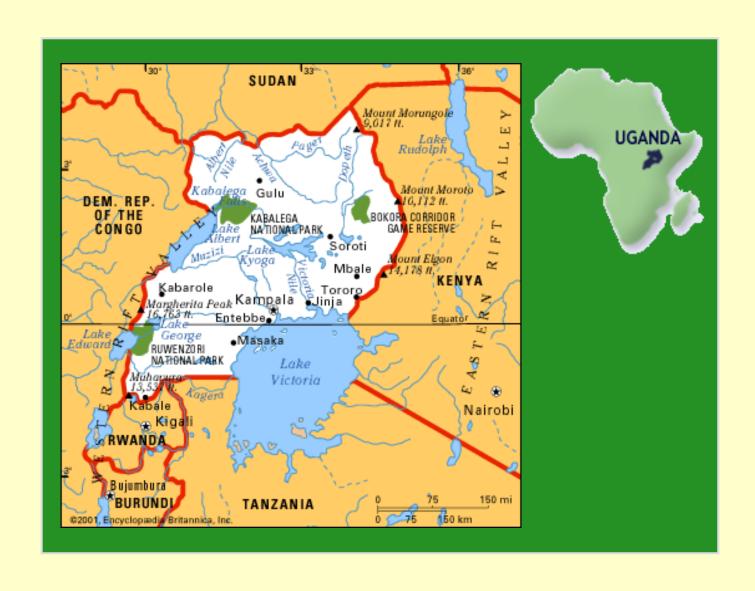
Water and sanitation (SDG 6) and its inter linkages with SDGs under review by HLPF 2019

Integrating SDGs in policy and practice- Uganda case study

16 April 2019, Marrakesh, Morocco

Dr Callist Tindimugaya
Commissioner for Water Resources Planning and Regulation
Ministry of Water and Environment, Uganda

Uganda and its water resources



Implementation of SDG6 in Uganda



- Uganda was the sitting chair of the United Nations as the world made the transition from the Millennium Development Goals in 2015 to Sustainable Development Goals.
- Uganda is therefore one of the first countries to localize the 2030 Agenda for Sustainable Development.
- With respect to SDG6, Uganda was one of the 6 selected countries in the world to pilot test draft indicator monitoring methodologies in 2016.
- Thus, SDG6 monitoring in Uganda started in 2016 and has continued since then through designated task teams for each target
- Significant progress has therefore been made to implement SDG 6 monitoring methodology and integrate the SDGs fully in national level processes.

Sustainable Development Goals: 2030 Agenda



Water is key in meeting most of the SDG targets

Water at the heart of development and key in achieving 2030 agenda: Four water uses

Water for People

Water supply and wastewater treatment and disposal

Water for Food

- Irrigation, livestock watering, post-harvest processing

Water for Nature

Quality, quantity and distribution for healthy ecosystems

Water for Other Uses

 HEP, oil and gas, navigation, fisheries, drainage and flood management, industry



Linkages between SDG6 on water and sanitation and other SDGs under review

- SDG 4 (quality education)
- SDG 8 (decent work and economic growth)
- SDG 10 (reduced inequalities)
- SDG 13 (climate action)
- SDG 16 (peace, justice and strong institutions)
- SDG 17 (partnerships)

Linkages between SDG6 on water and sanitation and other SDGs

- Providing water and sanitation in schools is key to keeping girls and children in school- GOAL 4 (quality education)
- Water facilitates all types of economic activity secure water of proper quality is essential for development- GOAL 8 (decent work and economic growth)
- Water stress and water disasters reduce opportunities for development.- GOAL
 10 (reduced inequalities)
- Climate change affects water availability and sustainable water and sanitation development- GOAL 13 (climate action)
- International agreements and national strategies through programs such as water rights can promote the development of peaceful societies and institutions with meaningful roles- GOAL 16 (peace, justice and strong institutions)
- Without the implementation of sustainable development for water, sustainable development in many other sectors would fail -GOAL 17 (partnerships)

Progress of achievement of SDG6 targets in Uganda

SDG6.1: Water supply

1. Access

- Rural 71% in June 2018 up from 67% as of June 2016
- Urban 71% stagnant

2. Functionality

- Rural: 85% down from 86% recorded for FY 2015/16;
 Overall, 57% of districts with functionality above the nationwide average
- **Urban:** 92% (small towns) referring to hours of water supply, down from 94% in FY 2015/16

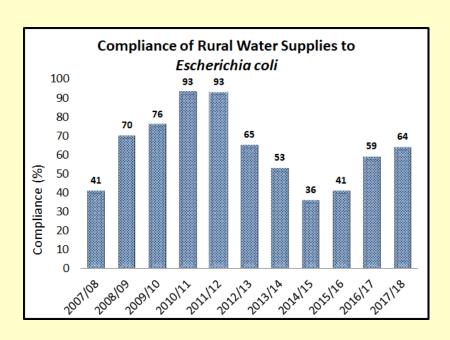
SDG6.2 Sanitation

Household Sanitation:

- Urban: improved from 85% in 2017 to 86% in 2018
- Rural: improved from 79% in 2017 to 80% in 2018
- School sanitation: from 70% in 2017 to 71% in 2018

SDG6.3: Water quality and waste water

Rural Water Supply Trends

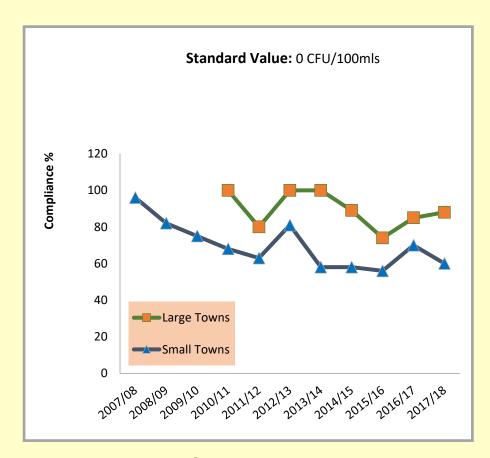


Factors affecting rural water quality

- a. Technologies that supply consistently poor quality water
- b. Poor storage methods
- c. Poor sanitation and Hygiene
- d. Poor Operation and Maintenance
- e. Poor Siting
- f. Poor water quality due to natural factors

SDG6.3: Water quality and waste water

- ☐ A total of 356 samples collected
 - □ 158 Large towns with 87% compliance
 - □ 198 Small towns with 60% compliance
- Deterioration in Small town's water supply quality continued



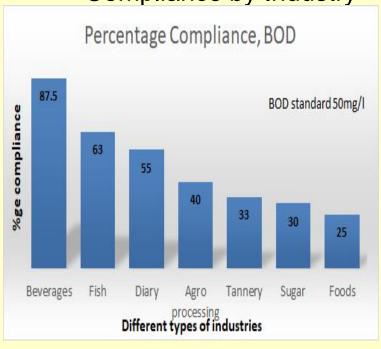
Compliance of Urban Water Supplies to Escherichia coli

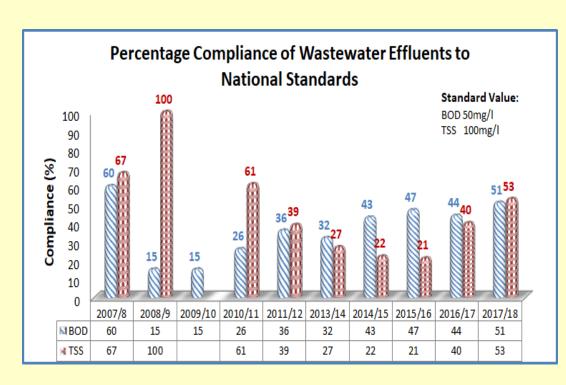
SDG6.3: Water quality and waste water

- □ 66 Industrial and 17 municipal effluent samples taken.
 - BOD compliance at 51%
 - ☐ TSS compliance at 53%



Compliance by Industry





TARGET 6.4 WATER USE AND SCARCITY

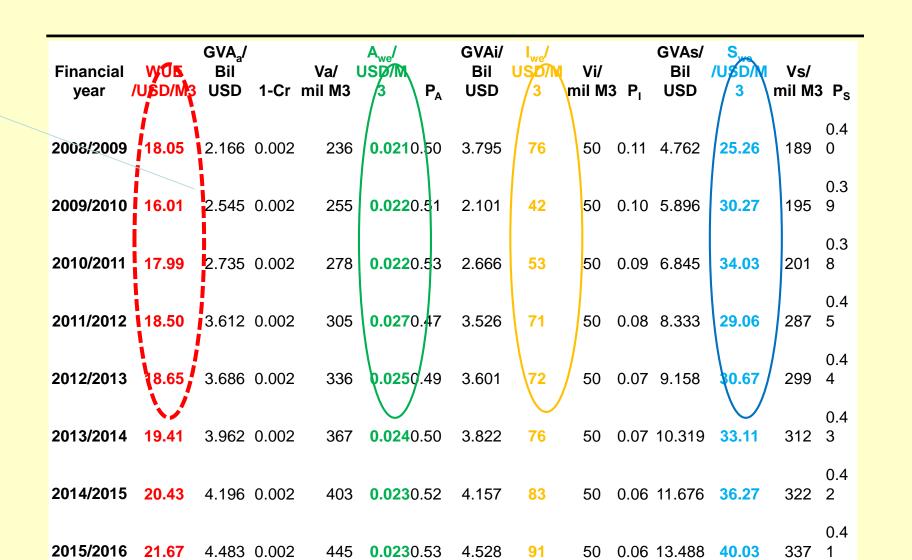
By 2030, substantially increase water use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.

Indicators

- 6.4.1 Change in Water
 Use Efficiency
 over time
- 6.4.2 Level of Water Stress:

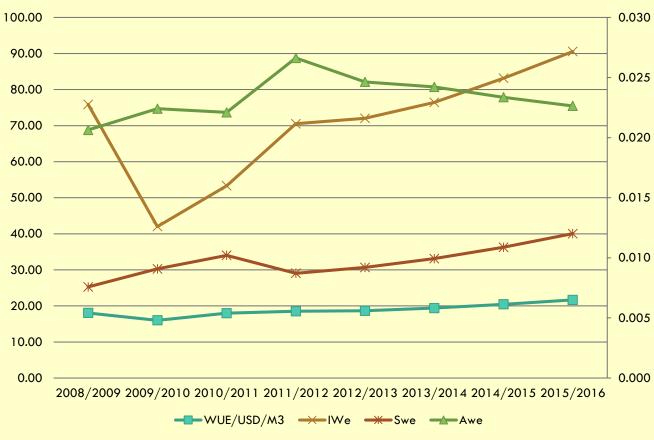
Freshwater withdrawal in percentage of available freshwater.

INDICATOR 6.4.1: Change in Water Use Efficiency



INDICATOR 6.4.1: Change in Water Use Efficiency

Plot of WUE in US\$/M³ of Irrig Agric, Indust., and Services Vs Time



Indicator 6.4.2: Level of Water Stress

Water Stress (%) =
$$\frac{TFWW}{TRWR - Env.} * 100$$

All variables are expressed in km³/year (10⁹ m³/year)

Data required:

- Total Fresh Water Withdrawal (TWW) volume of freshwater extracted from its source (rivers, lakes, aquifers) for agriculture, industries and municipalities.
- Total renewable freshwater resources (TRWR) expressed as the sum of internal and external renewable water resources
- Environmental water requirements (Env.) the quantities of water required to sustain freshwater and estuarine ecosystems.

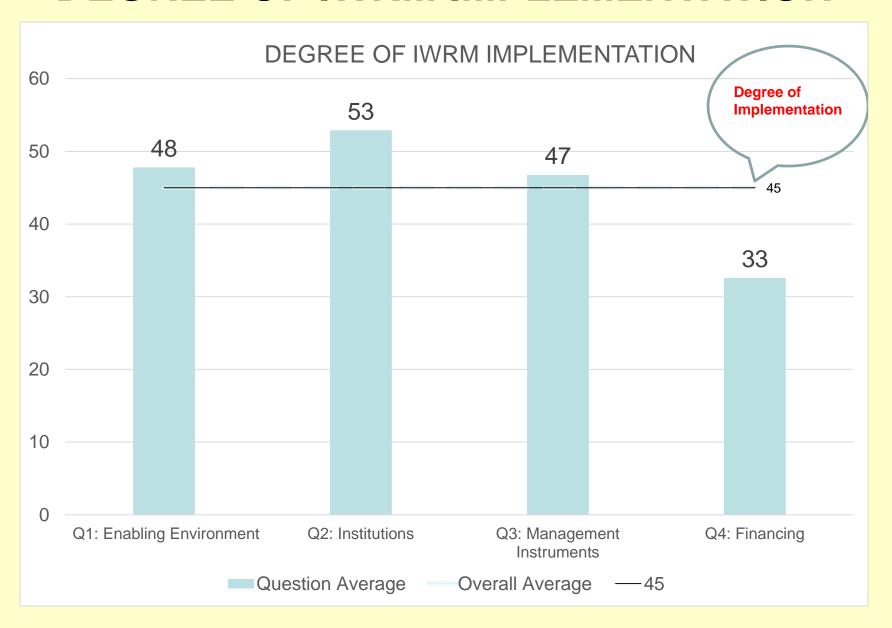
INDICATOR 6.4.2:

Level of Water Stress

Water Stress (%) =
$$\frac{\text{TFWW}}{\text{TRWR} - \text{Env.}} * 100$$

| Fin. year | Water Stress/ | TFWW/ km³/yr | TRWR/ km³/yr | TRWR-Envi. flow/km³/yr |
|-----------|---------------|-----------------|-----------------|------------------------|
| 2008/2009 | 1.221 | 0.363 | 43.3 | 29.691 |
| 2009/2010 | 1.242 | 0.369 | 43.3 | 29.691 |
| 2010/2011 | 1.264 | 0.375 | 43.3 | 29.691 |
| 2011/2012 | 1.552 | 0.461 | 43.3 | 29.691 |
| 2012/2013 | 1.592 | 0.473 | 43.3 | 29.691 |
| 2013/2014 | 1.636 | 0.486 | 43.3 | 29.691 |
| 2014/2015 | 1.670 | 0.496 | 43.3 | 29.691 |
| 2015/2016 | 1.721 | 0.511 | 43.3 | 29.691 |

DEGREE OF IWRM IMPLEMENTATION



SDG6.6 Change in water related ecosystems

| Platinum indicators | Baseline | 2013/ | 2014 /15 | 2015/ 16 | 2016/ 17 | 2017/ 18. |
|--|----------|-------|-------------|-------------|-------------|--------------|
| % national forest cover | 18 | 15 | 11 | 10 | 9.1 | 9.0 |
| % natural forest under strict nature reserve | 12 | 12 | 12 | 12 | 12 | 12 |
| % seedling survival for 3 years | 60 | 75 | 78 | 75 | 75.5 | 61.8 |
| % distance to collect firewood | 2km | ? | ? | 0.7 | ? | ? |
| % forest reserves with Mgmt plans | 32 | 32 | 32 | 35 | 36 | 36 |
| % compliance with EIA certificate conditions | 60 | 70 | 66 | 70 | 70 | 78.5 |
| % safe waste disposal | 50 | ? | 60 | 67 | 75 | 42.5 |
| % rainfall observation network. | 60 | ? | ? | ? | 64 | ? |
| | ? | , | ? | ? | ? | 56 |
| % national wetland coverage | 10.9 | 9.4 | 8.9 | 8.6 | 8.4 | 8.4 |
| % wetland area with Mgmt plans. | 0.9 | 4.4 | 5.9 | 10.3 | 14.4 | 2018.1 |

Key lessons learned during integrated SDG6 monitoring in Uganda

- Indicator monitoring improves collaboration and coordination among various water related agencies and stakeholders
- SDG 6 indicator monitoring assists in decision making, resource mobilization, improving transparency and accountability, etc
- Success in integrated baseline process needs high level support and recognition by key decision makers in various agencies and at various levels
- Integrated baseline process needs to be fully institutionalised within respective sector institutions including national statistics office

Challenges and possible implications for scaling up SDG6 implementation

- Indicator monitoring requires alot of resources in terms of staff time, technical support and financial resources
- Interpretation and reporting on some indicators is rather challenging and continuous capacity building is needed
- Implementing SDG6 requires interactions among various water related agencies and stakeholders (need for strong inter-sectoral and inter agency collaboration and coordination)
- Need for prioritizing and scaling up funding for water and sanitation
- Need for increased capacity building from the lowest level (community) to the highest level (national level)

Efforts taken by Uganda to integrate SDGs in policy and practice

- 1) Updating and revision of the National Water Policy
- Revision of the Water and Environment Sector Performance Monitoring Framework
- 3) Preparation of Annual Sector Performance Report
- 4) Development of 2030 Strategic Sector Investment Plan
- 5) Implementation of catchment based integrated water resources management
- 6) Building capacity for SDG6 implementation including development of Training Manual on SDG6
- 7) Holding of annual Water and Environment Week

1. Updating and revision of the National Water Policy

- The National Water Pollcy adopted in 1999 has been revised and updated to take into consideration new priorities, challenges and international developments including SDGs
- Revised policy fully recognizes the inter linkages between SDG 6 and other SDGs and the role water resources plays in the socioeconomic development of the country.
- Implementation of the revised Policy is seen as a mechanism to achieve water targets under various goals and address some of the systemic barriers to sustainable development.

2. Revision of the Water and Environment Sector Performance Monitoring Framework

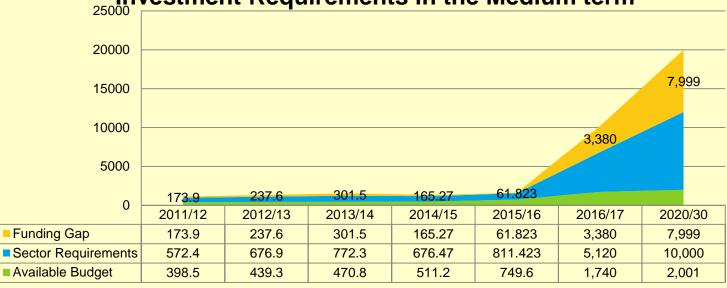
- Uganda developed a Sector Performance Monitoring Framework in late 1990s.
- The framework is based on 11 Golden Indicators (water and sanitation) and 10 Platinum Indicators (environment and natural resources).
- Sector performance monitoring framework recently revised to allow for the integration of the relevant SDG indicators
- Indicator monitoring is fully integrated in national planning, budgeting monitoring and reporting processes and existing institutional frameworks at various levels.

3. Preparation of Annual Sector Performance Report

- Uganda has been producing annual Sector Performance Reports over the last 12 years and these reports are issued out around September every year.
- The 2018 annual Sector Performance Report attempted to establish baseline and progress figures for the various indicators in line with the revised performance monitoring framework that includes SDG6 indicators.
- Thus, SDG6 monitoring results will be reported annually in Sector Performance Reports.

4. Development of 2030 Strategic Sector Investment Plan

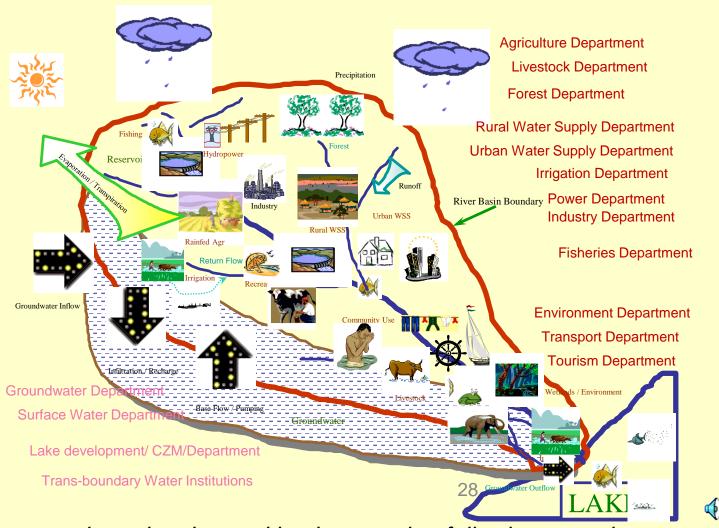
Low allocations against the minimum Sector Investment Requirements in the Medium term



• The Uganda reviewed and update the SIP 15 in 2017 based on the 24 sector indicators. Its estimated that UGX 5.10 trillion is required annually and increasing to 10 trillion by 2030 to serve the population by then and if the sector is to realise its set target measured by these indicators. As reflected above, the sector still has a huge funding requirement to meet her set goals amidst the ever growing population and huge service delivery demands.

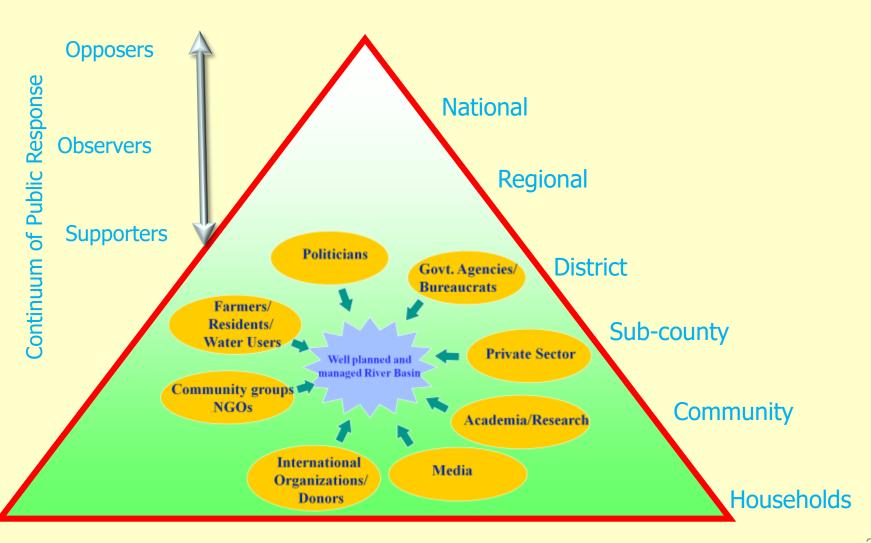
5. CATCHMENT BASED APPROACH: WATER WITHIN A CATCHMENT OR BASIN MANAGEMENT FRAMEWORK

A Typical River Basin

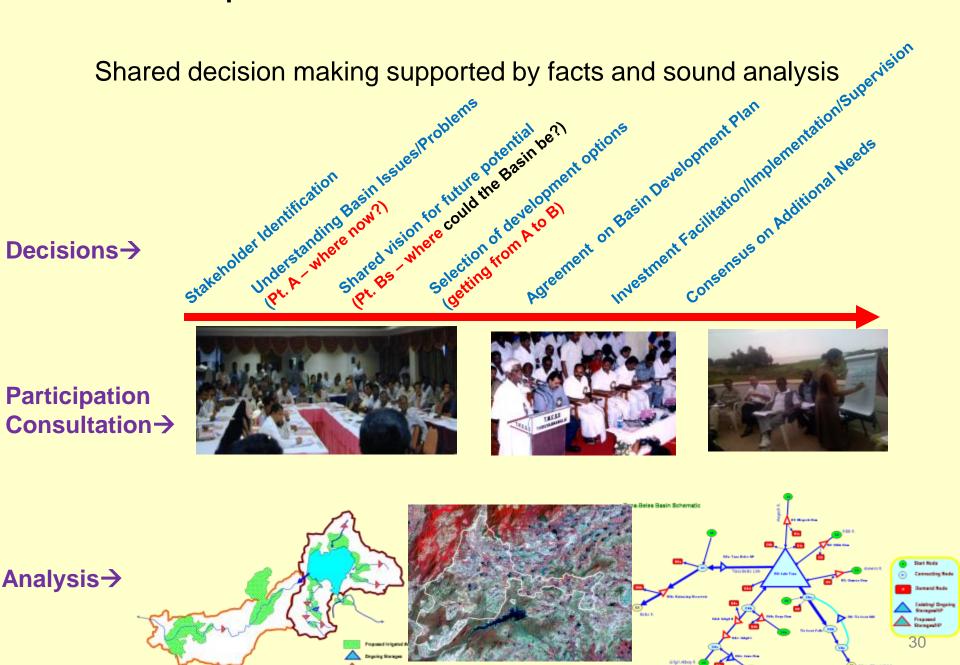


A holistic approach to planning and implementation following a catchment strengthens inter- linkages between SDG6 and other water-related SDGs and should contribute to faster achievement of 2030 Agenda.

CATCHMENT STAKEHOLDERS ARE MANY...



Preparation of a Catchment Plan



6. Building capacity for SDG6 implementation including development of Training Manual on SDG6

- There is very limited understanding among stakeholders on the meaning of the various indicators and targets.
- Capacity to collect, interpret and report on the monitoring data is limited.
- A training manual on implementation of SDG6 indicators is under development
- Focus on the manual is on:
 Understanding of SDGs, Enablers for SDG 6 Implementation, SDG 6 indicators, targets and monitoring methodologies and Case studies





7. Holding of annual Water and Environment Week

- Annual Uganda Water and Environment Week (UWEWK) started in 2018, second held in March 2019
- Aim of UWEWK: provide an interface for sector actors and other stakeholders to exchange knowledge and experiences on the sustainable management and development of water and environment resources
- UWEWK 2019 had a theme: "Water and Environment a strategic driver in attainment of Sustainable Development Goals 2030"
- UWEWK, as an annual event will continue to provide an opportunity for discussing Water and Sanitation (SDG 6) and its Inter linkages with other SDGs





Summing up

Integrating SDGs in policy and practice in Uganda has made it possible to demonstrate the inter-linkages between SDG 6 on Water and sanitation and other SDGs

Employing an integrated approach to implementation of SDG6 is one of the main entry point to eliminating inequalities in access to water and sanitation services so as to make sure that we leave no one behind

Integrated approach to implementation of SDG6 will greatly contribute to achievement of SDGs under review: SDG 4 (quality education), SDG 8 (decent work and economic growth), SDG 10 (reduced inequalities), SDG 13 (climate action), SDG 16 (peace, justice and strong institutions), and SDG 17 (partnerships)

Key recommendations

- National water policies should be reviewed and updated to ensure that all the key principles and priorities of SDGs are fully addressed
- A holistic integrated approach to planning and implementation following a
 catchment should be adopted by all so as to strengthen inter- linkages
 between the SDG6 on water and sanitation, and the various other waterrelated SDGs in order to speed up the achievement of 2030 Agenda.
- An SDG6 monitoring framework should be developed and implemented by all countries to help track progress of achievement of SDG6 targets and also provide guidance on the level of addressing water-related issues when implementing other water related SDGs.
- Capacity for SDG implementation should be built at country level
- Mechanisms for regular engagement of stakeholders should be put in place to ensure that no one is left behind
- Costs for achieving SDG targets by 2030 should be estimated to aid in decision making on resource allocations and prioritization