

REPORT ON

FRAMEWORK FOR HUMAN CAPACITY DEVELOPMENT IN THE WATER AND SANITATION SECTOR FOR UGANDA

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This second phase of NEPAD Centres of Excellence on Water has the aim of supporting the establishment of Human Capacity Development (HCD) Programme in the Water Sector in Africa through the NEPAD African Network of Centres of Excellence in Water Sciences and Technology (CoE)



United Nations
Educational, Scientific and
Cultural Organization



MAKERERE UNIVERSITY

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EXECUTIVE SUMMARY

This revised report presents the national framework for Human Capacity Development (HCD) for junior, technician and senior professionals in the water and sanitation sector in Uganda. The report has been revised with a dedicated attention also given to institutional training mechanisms and frameworks for both the senior and junior categories. We explicitly include new information on institutions dedicated to vocational training for water and sanitation. The sector-wide assessment report addressed the professional and technical level capacity issues and challenges concerning human capacity development in the water sector in Uganda. The task was led by Makerere University, which is part of the AU/NEPAD Central and Eastern Water Center of Excellence (CEANWATCE) at the Uganda NEPAD Water Centre of Excellence (CoE). However, a substantial proportion of the work was undertaken also undertaken by representatives of the Ministry of Water and Environment in Uganda. We identified the actors, defined an implementation framework together with a monitoring and evaluation structure in Uganda's water sector, the sector needs at the national level, and also established priorities with national counterparts through a multi-stakeholder participative approach.

The report is based on;

- a) Synthesized information collected and documented in the “Sector Wide Assessment Desk Study Report for the preparation of a national strategy on HCD addressing junior and senior professional and technician level capacity challenges”
- b) Survey information gathered through semi structured interviews based on a designed tool
- c) Focused group discussions during pre-arranged workshops (4) regional visits to the water management zones and interacting with key stakeholders
- d) Field visits conducted in educational institutions offering water and sanitation courses at degree and diploma levels across the country during the period November 2018 to January 2019. The framework provides guidelines and procedures for implementation of HCD in the water and sanitation sector in Uganda for junior, technician and senior professionals

The Water sector in Uganda falls within the Ministry of Water and Environment and consists of two sub-sectors namely; the Water and Sanitation sub-sector and the Environment and Natural Resources (ENR) sub-sector. The Water and Sanitation Sub-Sector comprises of rural water supply and sanitation, urban water supply and sanitation and water for production.

Besides the ministry, other institutions in the sector include, the National Water and Sewerage Corporation (NWSC) which is a public and state-owned utility currently providing water supply and sewerage services in 225 towns, including Kampala Capital City and its surroundings. The

other agencies directly linked to the ministry include; National Forestry Authority (NFA), the National Environment Management Authority (NEMA), and, the Uganda National Meteorological Authority (UNMA). Other key stakeholders include the Local Government, Donors, Civil Society Organizations (CSOs) and Private Sector. Local Governments are the key implementers in the delivery of services in the sector as well as private sector firms. Similarly, Development Partners (DPs) and CSOs offer requisite interventions in support of government actions for service delivery.

The MWE as the lead line ministry responsible for the coordination of water and sanitation activities in the sector has a sector Capacity Development Strategy since 2012, which provides the framework for implementation and monitoring capacity development at sectoral level. The responsibility for coordination, reporting and control of sector capacity development is anchored under the Sector Capacity Division of the MWE. The Handbook and Toolbox for operationalization of the Sector Capacity Development strategy provides the operational guidelines for implementation of capacity development by sector stakeholders, including the sector institutions/agencies. The Water and Environment capacity development framework are anchored on the existing institutional framework for implementation of capacity development in the public sector.

The concept of Junior and Technical professionals are not commonly used in the water sector in Uganda. However, in the context of the water sector and the Uganda public service, Junior professionals are fresh University graduates with zero to about 3 years of professional work experience in the water sector. On the other hand, technical professionals are those who do not go through the university system but undertake certificate and Diploma courses in vocational training institutions and use it as the entry point into the water service and production sector. There are some ongoing initiatives of capacity development for both Junior professionals and technical professionals, but there are some significant gaps which need to be addressed to ensure efficiency and effectiveness in performance in the service delivery in the water sector. Senior professionals within the industry also undergo routine capacity development but mainly in management related work.

Monitoring, evaluation and risk management are essential supporting activities for the capacity development process. In addition to the established reporting and monitoring processes that are anchored under the Policy and Planning Departments of the MWE, overall monitoring of the progress of the subsector capacity development plans is done annually and reported on in the Annual Water and Environment Sector Performance Reports

Capacity development initiatives in the water sector is being implemented by various stakeholder institutions, and these include the MWE which is the lead sector coordinating institution for CD, the NGOs under the Water Sanitation Umbrella Organization – Uganda Water and Sanitation Network(UWASNET), the Local Governments, the Private sector, Sector Agencies – National Water and Sewerage Corporation and the Academia. Capacity Development in the Water sector is guided by the Water and Environment Sector Capacity Development Strategy (2013/18), which targets three levels: the enabling environment; the Organizational level; and the Individual level.

The priority gaps within the water sector are related to technical skills, leadership management, performance management, Information and knowledge management, catchment management and Communication and stakeholder engagement. The report provided the priority capacity development gaps for junior professionals and technical professionals. But generally, there is gaps have got to do with deficiencies in the required individual skills needs, to being under-staffed, to having management issues. The capacity development challenges in the Water and Environment Sector were discussed into its sub-sectors based on the vote functions: decentralization challenges, incomplete public-sector reforms, oversight weakness and political inconsistency, and cross sectoral coordination.

LIST OF ACRONYMS

ADB	African Development Bank
ATC	Appropriate Technology Centre
BTC	Belgian Technical Cooperation
CBOs	Community-Based Organization
CD	Capacity Development
CDP	Capacity Development Planning
CDPs	Capacity Development Plans
CFRs	Central Forest Reserves
CoE	Center of Excellence
CSOs	Civil Society Organisations
DPs	Development Partners
DWRM	Directorate of Water Resources Management
DWD	Directorate of Water Development
DEA	Directorate of Environmental Affairs
DP's	Development Partners
EIA	Environment Impact Assessment
ENR	Environment & Natural Resources
ENWASS	Enhanced Water Security and Sanitation Programme
FAO	Food and Agricultural Organization
GoU	Government of Uganda
HEIs	Higher Education Institutions
JWESSP	Joint Water and Environment Sector Support Programme
M&E	Monitoring and Evaluation
MDGs	Millennium Development Goals
MoES	Ministry of Education and Sports
MoFPED	Ministry of Finance, Planning and Economic Development
MoH	Ministry of Health
MTC	Ministry Training Committee
MWE	Ministry of Water and Environment
NEPAD	New Partnership for Africa's Development
NFA	National Forestry Authority
NGO	Non-Governmental Organizations
NWSC	National Water and Sewerage Corporation
O+M	Operation and Maintenance
SCD	Sector Capacity Development
SDHR	Skills Development for Human Resources
SPR	Sector Performance Reports
SWOT	Strength, Weaknesses, Opportunities and Threats
TFR	Training for Real

ToR	Terms of Reference
TSU	Technical Support Units
UNDP	United Nations Development Program
UNMA	Uganda National Meteorological Authority
UOs	Umbrella Organizations
UWASNET	Uganda Water and Sanitation Network
WEDC	Water, Engineering, Development Centre
WESWG	Water and Environment Sector Working Group
WfP	Water for Production
WMZ	Water Management Zones
WRI	Water Resources Institute
WSS	Water Sewerage & Sanitation
WSDFs	Water and Sanitation Development Facilities

CHAPTER ONE: INTRODUCTION

1.1 Introduction

The water sector in Uganda is very critical in the development trajectory of the country. Uganda desires for a societal transformative change culminating into a middle-income country. The development desires for the country are enshrined in a series of policy documents but more specifically in the Uganda Vision 2040. To realize this, the water resources at its disposal must be sustainably harnessed cognizant of rapidly changing demographic conditions (annual population growth at 3%), increasing demands and socio-economic changes. Sufficient human capacities in quality and quantity in the water sector are thus required to enable realize and sustain the development goals but also avoid conflict.

The overall objective of the CEANWATCE project is to strengthen the peace and security in African countries through supporting the sustainable development of the water sector, Economic Green Growth and Poverty Reduction. The project's purpose is to foster sustainable capacity development at institutional, higher education, technical, scientific and vocational level in the water sector through the NEPAD/Africa Union Networks of Water Centres of Excellence in Water Science and Technology.

The Sector-Wide Assessment Desk Study report was one of the deliverables under the first subactivity for the establishment of a national Human Capacity Development Programme addressing professional and technical level capacity challenges at the Uganda NEPAD Centre of Excellence (CoE). The Sector-Wide Assessment Study identified actors and sector needs at the national level; defined priorities with national counterparts through a multi-stakeholder participative approach; established an implementation framework together with a monitoring and evaluation structure in Uganda's water and sanitation sector.

1.2 Purpose and objectives

The purpose of the report is to provide operational guidelines and procedures for implementation of HCD for junior and senior technicians and senior professionals in the water and sanitation sector in Uganda. The overall objective of the program is to improve the quality of human resources and service delivery in the industry.

1.3. Program purpose, 5W's -who, what, when, why, how.

Context

The National Human Capacity Development (HCD) and Monitoring and Evaluation (M&E) framework for junior, technician and senior professionals for the Water and Sanitation (WATSAN) Sector in Uganda is one of the key deliverables of the study that was commissioned by UNESCO and implemented under the NEPAD African Network of Centres of Excellence on Water Sciences and Technology (ACEWATER Phase II): Human Capacity Development Component. The framework is derived from the Sector Wide Assessment Desk Study Report that was conducted during August 2018, and subsequent consultative workshops and meetings held with key stakeholders in the Water and Sanitation Sector in Uganda, including review of existing programs for WATSAN Education at Universities and other Higher Education Institutions (HEIs) in Uganda, as well as visits to the mentioned institutions. The activity was implemented jointly by Makerere University and the Ministry of Water and Environment in Uganda. The document presents a National Framework on Human Capacity Development, including Implementation and M&E Framework for junior, technician and senior professionals in the WATSAN Sector in Uganda.

1.4. Background of the Water and Environment Sector in Uganda

The Water and Environment sector consists of two sub-sectors, namely; 1. the Water & Sanitation (WSS) sub-sector and 2. the Environment & Natural Resources (ENR) sub-sector. In Uganda, the entire water sector is called the Water and Sanitation Sub-Sector. The Water and Sanitation Subsector comprises of rural water supply and sanitation, urban water supply and sanitation and water for production.

The Ministry of Water and Environment (MWE) is the lead Government of Uganda line ministry responsible for coordination and management of water and environment resources in the country. Its primary mandate is setting national policies and standards, managing and regulating water and environment resources and determining priorities for water development and management. It also monitors and evaluates sector development programmes to keep track of their performance, efficiency and effectiveness in service delivery.

The stated vision of the Water and Environment Sector encompasses managing water as a resource, establishing water infrastructure for development, harnessing weather and climate and promoting ecosystems and biodiversity resilience. The Ministry is comprised of three (3) Directorates: Directorate of Water Resources Management (DWRM), Directorate of Water Development (DWD) and Directorate of Environmental Affairs (DEA). Also, the Ministry is supported by four (4) stand-alone departments to support the technical departments, and these include: Finance and Administration Department, Water and Environment Sector Liaison Department, Policy and Planning Department responsible for the strategic planning, budgeting and monitoring and Climate Change Department.

To support the implementation of water and sanitation related activities, the MWE introduced deconcentrated structures at the regional level. The structures are;

- a) Technical Support Units (TSUs), responsible for capacity building and provision of technical back up support to the local governments (District Water Offices),
- b) The Water and Sanitation Development Facilities (WSDFs), responsible for provision of piped water supply systems in rural growth centres,
- c) The Water for Production regional centres, responsible for construction of valley tanks and valley dams at community level
- d) Mini irrigation systems, the Umbrella Organizations(UOs) responsible for Operation and Maintenance(O+M) of pipe water supply systems at community level, the Water Management Zones (WMZ), responsible for planning and management of water catchments.

1.5 Water Sector Actors and Stakeholders

Other institutions in the sector include, the National Water and Sewerage Corporation (NWSC) which is a public and state-owned utility currently providing water supply and sewerage services in 225 towns, including Kampala Capital City and its surroundings. The National Forestry Authority (NFA) is mandated to manage the gazetted 506 Central Forest Reserves (CFRs) and supply high quality forestry-related products and services. The CFRs form part of the beautiful and unrivalled advantage Uganda has the world over in tourist attraction. The National Environment Management Authority (NEMA) was set up by an Act of Parliament to ensure sound environmental management practises for sustainable development. The Uganda National Meteorological Authority (UNMA) is responsible for monitoring weather and climate, maintain climate database and provide regular advisories on the state of the weather and climate to government and any other clients including the agriculture sector, transport, disaster preparedness and the public (See detailed sector structure in figure 1.1).

Other key stakeholders include the Local Government, Donors, Civil Society Organisations (CSOs) and Private Sector. Local Governments are the key implementers in the delivery of services in the sector as well as private sector firms. Similarly, Development Partners (DPs) and CSOs offer requisite interventions in support of government actions for service delivery.

The primary source of donor support to the sector originate from bilateral and multilateral financing windows such as the World Bank, the African Development Bank (AfDB), European Investment Bank, European Union, Germany (Kfw/GIZ), as well as direct grants from countries like Denmark, Germany, Austria, France, Japan, FAO, United Nations Development Program(UNDP), Belgium etc.).

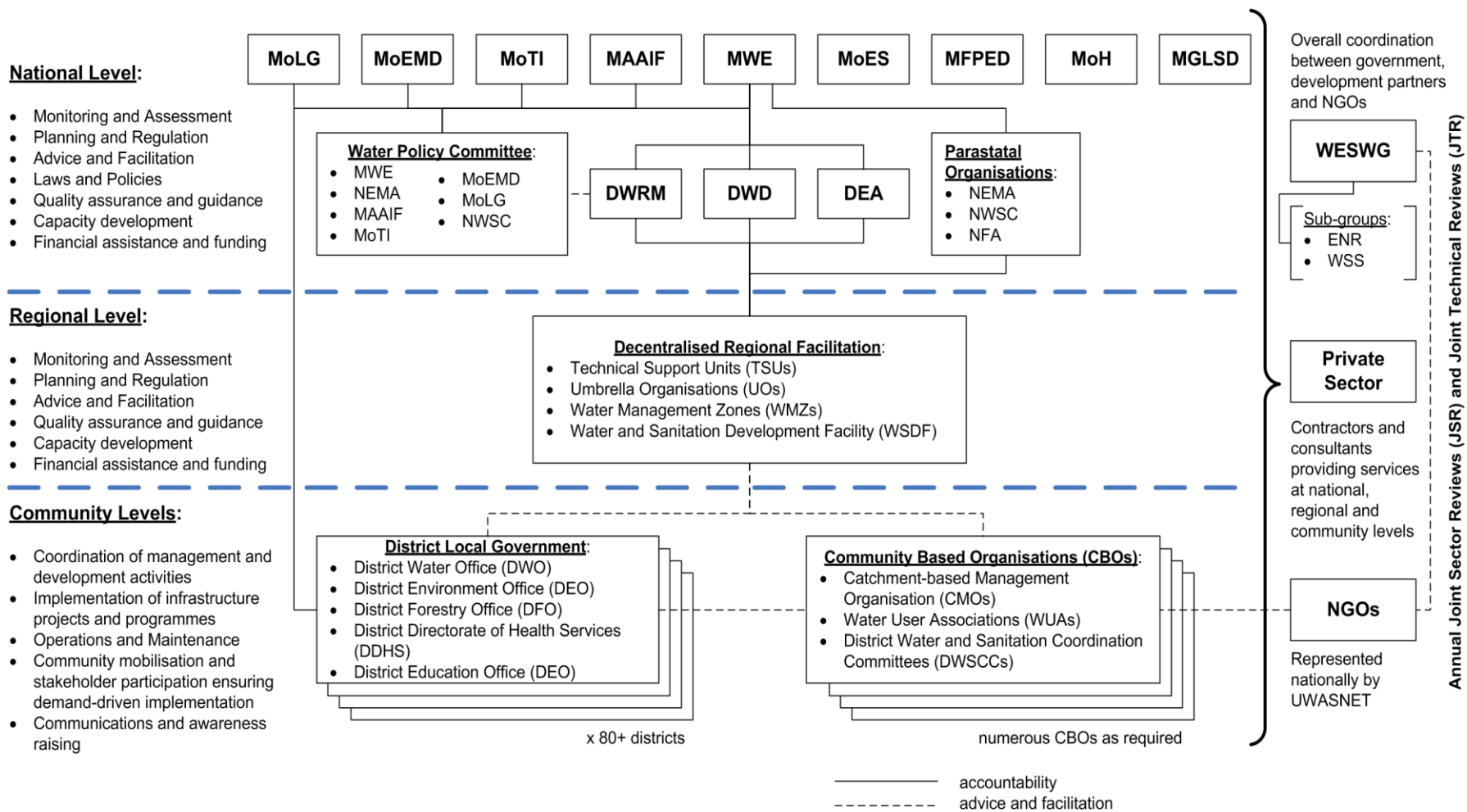


Figure 1. 1 Water and Environment Sector Institutional Framework
Source: Murungi (2013)

CHAPTER TWO: PROCEDURES AND METHODS FOR DEVELOPING HUMAN CAPACITY DEVELOPMENT FRAMEWORK

Procedures and steps

Delivering the national human capacity development framework for the water and sanitation sector in Uganda required a participatory process and engagement of various methods and techniques. The process was systematically implemented in a phased manner, starting with a review at the onset to establish the status quo with respect to the existing gaps and opportunities; and along the way ending up with a validation workshop prioritizing areas of interventions. The development of the human capacity development framework for the water and sanitation sector in Uganda document entailed a detailed process composed of various steps with a mixture of methods as summarized below;

1. Desk review of documents and literature

A desk review of relevant documents and literature was commissioned at the onset of the work. The gist of the literature and document review was to elicit relevant information available with respect of the gist of the work. A range of government documents were consulted and reviewed culminating into understanding of the existing vision, goals, approaches for human capacity development for the water and sanitation sector in Uganda.

2. Consultations including visits to regional centers

The water sector in Uganda is currently managed through a regionalized framework of water management zones. There are four water management zones in Uganda namely; (i) Kyoga Water Management Zone (ii) Upper Nile Water Management Zone (iii) Victoria Water Management Zone (iv) Albert Water Management Zone. Visits to the four water management zones were undertaken to familiarize with the local and ground issues in the respective zone. Beyond the field visits, consultations were also made with a range of actors and stakeholders in the water and sanitation ecosystem of Uganda. These included agencies and organizations covering governmental and nongovernmental; local and international operating in Uganda.

3. Survey

The surveys were administered to training institutions for the higher and lower levels. The gist of the surveys was to elicit information on the existing capacities and infrastructure. The surveys were targeted to relevant individuals in the organizations, capturing the two segments. A copy of the tool administered is enclosed herewith (appendix). The survey was administered to Higher Education institutions (largely universities) and vocational training institutions in Uganda. The instruments consisted largely of open ended questions deriving information on the actors, legal

framework, ongoing initiatives, challenges, opportunities among others in the water and sanitation sector.

4. Workshop for identification of priorities

Regional and national workshops were conducted for consultation of relevant stakeholders in the water and sanitation sector in order to (i) elicit ongoing capacity development activities and efforts in the sector (ii) identify needs and priorities (iii) create buy-in of the framework that was being developed



Some participants at the first national workshop held at Royal Suites Hotel on 30th November 2018



Break away groups considering priority training areas for Uganda.

5. Workshop for validation

A validation workshop was conducted on 30th April 2019 at Imperial Royale Hotel in Kampala. The organization of the validation workshop stemmed from obtaining feedback from UNESCO on the draft human capacity development framework document that had hitherto been submitted for perusal. The workshop was attended by about 60 participants from different organizations as indicated in the appendix. At the validation workshop, results from the earlier workshops and activities were presented for the participants to reflect, understand the planned direction and give further inputs on the priorities. The participants were prior to the validation workshop furnished with reports and drafts generated. Specifically, the results from the first national workshop and the document review reports and presentations were circulated to the participants. A roadmap for implementation of the HCD framework was discussed and the priorities refined during the validation workshop. The validation further created a platform for ownership of the process by the various actors and stakeholders in the water and sanitation sector in Uganda.



Some of the participants in the National Validation Workshop at Imperial Royale Hotel



Proceeding during the National Validation Workshop on 30th April 2019 at Imperial Royale, Kampala



Some of the emerging issues and questions from the validation workshop are;

- Who will be doing what in the implementation of the HCD framework. Mapping of institutions and responsibilities
- Use the annual sector performance reports to prioritize research foci for the universities
- The mindset of young people ought to be changed to realign them properly to the needs of the sector. They do want to get rich quickly and with minimum input
- The linkage between universities and the ministry should be institutionalized
- Research should be applied to benefit the country
- Young professionals should be aligned to contractors, consultants and agencies to enhance their capacities. This should be entailed in the TOR
- Sanitation is not well addressed in the draft report
- It should be clear on who is going to implement the framework
- The report covers water and does not adequately cover sanitation. However, the environment component is not well addressed, yet water cannot be separated from the environment
- Who determines the research agenda for Uganda? How much research has been done? This needs to be clarified.
- Involve multi-sectoral approach. Monitoring system that enables us to look at an effective system to ensure that mentoring is taking place.

CHAPTER THREE: EXISTING IMPLEMENTATION AND M&E FRAMEWORK FOR CAPACITY DEVELOPMENT IN THE SECTOR

3.1 Existing implementation framework for capacity development in the W&E sector

The MWE as the lead line ministry responsible for the coordination of water and sanitation activities in the sector has a sector Capacity Development Strategy since 2012, which provides the framework for implementation and monitoring capacity development at sectoral level. The responsibility for coordination, reporting and control of the sector capacity development is anchored under the Sector Capacity Division of the MWE. The Handbook and Toolbox for operationalization of the sector capacity development strategy provide the operational guidelines for implementation of capacity development by sector stakeholders, including the sector institutions/agencies.

Following the development of the sector capacity development strategy and operational guidelines for implementation of capacity development in the Water and Environment sector, efforts have been made to ensure that Capacity Development interventions in the sector are based on capacity needs assessment leading up to the development of costed capacity development plans. As a requirement, CD plans are expected to address capacity requirements holistically, and addressing capacity gaps at the three levels: individual, organization/institutional and the enabling environment.

Implementation of CD interventions is constrained by allocated limited resources during the budgeting process. Different implementation modalities are currently available for funding of CD activities. These modalities include: (a) On budget finance through the Government of Uganda (GoU) annual budgetary allocations (which are usually meagre and subject to fiscal cuts), (b) On budget finance through donors, Joint Partnership Fund (JPF), (c) Off-budget development partner activities and (d) local revenue generated from the local governments and sector agencies such as National Water and Sewerage Corporation(NWSC) and the Civil Society Organizations(CSOs). Each of the above funding modalities follows specific processes and procedures.

The primary funding for sector capacity development is currently provided through on budget funds from both the GoU and the JPF. The implementation of CD interventions funded from on budget funds follows two processes: (a) The planning process for Human Resources Management and Capacity Development is implemented according to the Public Service Training Policy, while (b) the planning process for sector capacity development is done according to the Sector Capacity Development Strategy. Both methods are initiated at the departmental level (in the case of MWE human resources), while the local governments, sector agencies and CSOs start separately.

The strategic sub-sector capacity development plan serves as a guide to prioritize capacity development activities. For the planning of human resources management at the MWE, a capacity development focal point/desk officer supports the Commissioners (who are the Heads of Departments) in the development of the annual training plan, in collaboration with the Head of

Human Resources Division in the MWE. The training plan is based on the performance gaps identified during the individual Annual Performance Appraisal exercise. The Head HRM consolidates the Departmental annual training plans and submits to the Ministry Training Committee (MTC) for review and submission to the Permanent Secretary (PS) for final approval.

However, for activities addressing sector capacity development beyond the human resources management of the MWE, these are incorporated into general work plans per vote function. The necessary capacity development activities for the respective financial year are defined at departmental level, based on the strategic sub-sector capacity development plan. These are consolidated into sector capacity development plans by the Sector Capacity Development Division of the Policy and Planning Department of the MWE. The consolidated sector CD plans are then presented to the Capacity Development Thematic Working Group for review, approval and mobilization of funds. The Capacity Development Thematic Working Group is a sub-sector of the overall Water and Environment Sector Working Group (which is the policy decision making body for the Water and Environment sector), and is comprised of representatives from critical-sector stakeholders (including development partners, CSOs and private sector).

3.1.1 The pillars, strategy, strategic objectives of the capacity development framework

3.1.1.1 Pillars

The Water and Environment capacity development framework are anchored on the existing institutional framework for implementation of capacity development in the public sector.

Since 2006 the Public Service Training Policy has provided a framework for managing the training functions across the public services. It has established the organizational set-up and procedures for the human resources management within each ministry, department and local government. At its core is the formulation of annual training plans addressing the training needs of public service members as identified in individual yearly performance appraisals. The Public Service Training Policy also established a Framework for Monitoring and Evaluation of Human Resources Management. The framework proposes the continuous evaluation of activities before, during and after the event, where possible.¹

The MWE is the first ministry in Uganda that redefined its understanding of capacity development from human resources management (according to the Public Service Training Policy) to a more holistic approach that addresses capacity development not only within the ministry but for the WES as a whole. This approach is referred to as sector capacity development and has been defined in the Sector Capacity Development (SCD) Strategy. The SCD Strategy responds to the perceived lack of benefit of previous capacity development measures². It emphasizes a result-oriented, integrated capacity development approach starting with the analysis of performance gaps and priorities, and integrating activities on three levels: the individual level, the organizational level and the level of the enabling environment.

As shown in Figure 2.2, the provision of training on the individual level according to the Public Service Training Policy is an essential part of Sector Capacity Development. The alignment of training to the gaps identified in the SCD Strategy is therefore crucial for the success of capacity development in the sector.

¹ GoU/MPS (2006), p. 13

² Please refer to GoU/MWE (2012), Annex A Overview and assessment of past and current CD initiatives.

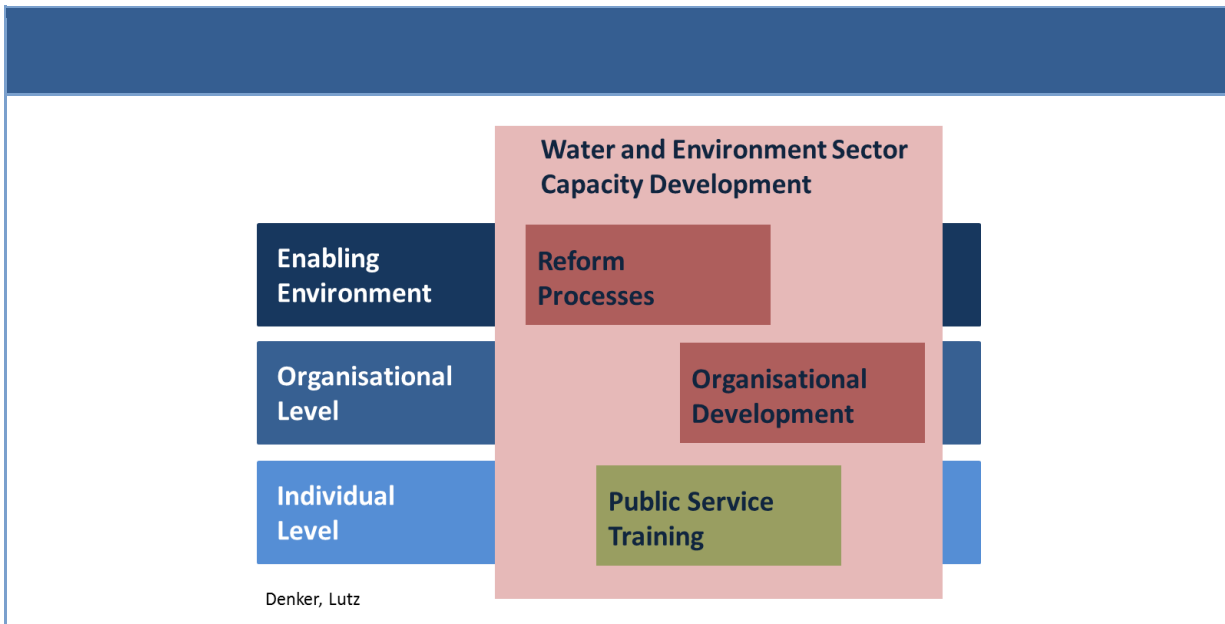


Figure 2. 2 Sector capacity development according to the levels of development.
Source: MWE (2014)

The implementation of capacity development is realised through various channels, namely;

- i. Through the processes and procedures for Human Resources Management according to the Public Service Training Policy.
- ii. Through activities within the general work plans for on-budget businesses.
- iii. Through off-budget activities implemented by DPs and within work plans and budgets held by other sector stakeholders. To create coherence between the individual events, to assign scarce resources to the most relevant and most cost-effective activities as well as to generate synergies between businesses, strategic sector capacity development planning is required. According to the SCD Strategy result-oriented CDPs should be established for

those sub-sectors that follow the vote functions³. The vital sub-sector CDPs address a time horizon of five years.⁴

To strengthen and streamline the management of capacity development interventions in the sector, the strategy introduces a decentralized approach to the management of capacity development, with the individual departments taking on a core role. While the present training committee of the MWE will remain in place, a Sector Capacity Development committee at sector level has been created. The SCD committee will be composed of senior staff nominated from the various sub-sectors of the Ministry, including representatives from local government and the NGOs. The SCD committee will become the advisory body to the Water and Environment Sector Working Group (WESWG) on overall capacity building matters for the sector. The SCD committee will report to the WESWG and thus be answerable on CD issues across the whole industry.

Figure 2.3 illustrates the process cycle of sector capacity development. It starts with the development of strategic sub-sector Capacity Development Plans (CDPs). These consist of different work packages that address specific sector capacity development needs. The work packages are then realised through different implementation channels. Regular monitoring and evaluation provides information on the progress of capacity development and serves as an input for further adjustments of the strategic sub-sector CDPs.



³ (1) Sector Programme Support, (2) Rural Water Supply and Sanitation, (3) Urban Water Supply and Sanitation, (4) Water for Production, (5) Water Resources Management, (6) Environment and (7) Climate Change. To each subsector one JWESSP component is attributed; the sub-sector Water Resources Management is supported by two components (Water Resources Management and Water Management Zones).

⁴ The time horizon will be aligned to the JWESSP, therefore the first set of sub-sector CDPs will have a time horizon until 2018.

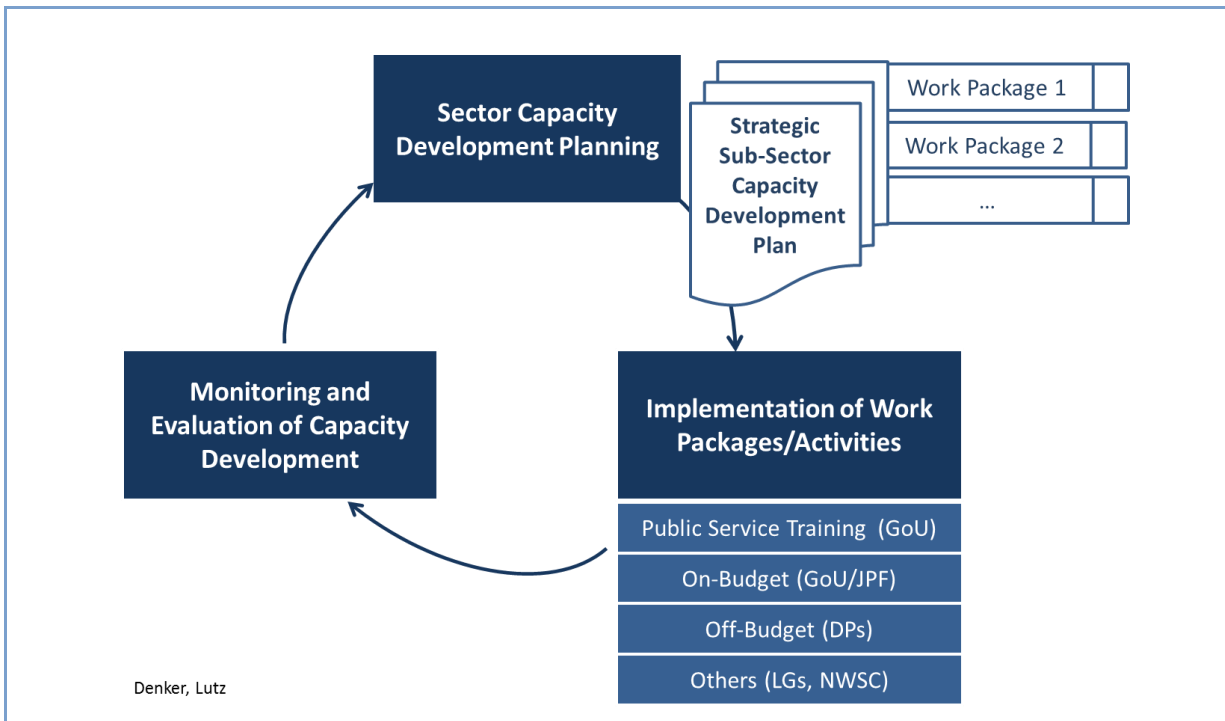


Figure 3. 3. Capacity Development Process in Uganda (Source: MWE, 2014)

Each of these work packages has a specific expected outcome. It lists the required capacity development activities at the individual level, at the organizational level and within the enabling environment.

A Capacity Development Committee/thematic working group was established to serve the sector and Ministry. The committee is composed of senior staff from the different sub-sectors of the ministry, including agencies under the MWE, NGOs/CSOs and the private sector. The committee reports to the Water and Environment Sector Working Group, which is the highest decision making organ at sectoral, responsible for approval of strategic plans, policies and standards. Responsibility for the coordination of capacity development and implementation of this strategy lies with the Policy and Planning Department (MWE, 2017).

3.1.1.2 Strategic Objectives

The strategic objectives of the Capacity Development strategy are that: The Water and Environment sector has the capacity to increasingly meet its targets and undertake its mandate benefiting from a better understanding of its capacity demands, more effective means of delivering capacity in response to the needs and, an increasing ability to positively influence the enabling environment.

The capacity development strategic framework for attaining the strategic objectives defines the approach and delivery mechanisms. It also aspires based on several guiding principles that ensure consensus between national authorities and development partners, anchoring in national

institutions at multi-levels (district, deconcentrated and central levels), broadness in scope (covering the water and environment sectors, including climate change), provision of an enabling environment for capacity development, building on readiness to learn, output and performance orientation rather than focusing on inputs), continual information and adaptation by a participatory bottom-up approach, a wide range of delivery options for capacity development and ensures technical assistance that is partner-owned, demand-led and results oriented.

3.1.2 Capacity building for Junior professionals and technical professionals

The concepts of Junior and Technical professionals are not commonly used in the water sector in Uganda. However, in the context of the water sector and the Uganda public service, Junior professionals are the fresh University graduates with zero to about 3 years of professional work in the water sector while technical professionals are those who do not go through the university system but undertake certificate and Diploma courses in vocational training institutions and use that as the entry point into the water service and production sector. As will be highlighted in subsequent sections of this report, there are some ongoing initiatives of capacity development for both Junior professionals and technical professionals, but there are some significant gaps which need to be addressed to ensure efficiency and effectiveness in performance in the service delivery in the water sector. Senior professionals within the industry also undergo routine capacity development but mainly in management – related work.

3.1.2.1 Capacity building for junior professionals

The demand for competent and skilled professionals within the Water and Environment Sector (WES) is significantly higher than the supply. It is expected to continue to increase as a result of government's commitment to sustainable water resources management and provision of improved access to water for all communities. The Ministry of Water and Environment (MWE) is comprised of personnel with specialized technical backgrounds in the sciences, mainly in engineering, environment and water resources management. However, over recent years, the role of the other social science disciplines in complimenting the sector in achieving its mandate has become apparent. There is a need to up-grade and train practising professionals and technicians to enable them to respond to their changing roles in the decentralized services in the water and environment sector.

Under the current arrangement, capacity development for junior professionals is implemented through the one-year graduate training programme of the MWE, which has been implemented since 1997. The overall objective of the one-year training program is to equip the fresh graduates with practical skills in the relevant subject areas and create a pool of quality man power for the sectors. This program is in line with the Water Sector Capacity building initiatives to strengthen the quality of manpower for the industry implementing institutions. The program mainly targets fresh graduates of not more than two years' field experience, and have pursued courses in core skill areas required for the implementation of sector activities such as Engineering, Geology, Social Sciences, Water Quality and Environmental Health Studies. Once recruited, the graduates are

attached to ongoing sector projects where they are exposed to the world of work and equipped with practical skills through Field attachments, On Job Training Coaching and Mentoring. On average, approximately 20 fresh graduates from different disciplines are recruited annually.

The other capacity development programme for junior professionals is the mandatory induction training that is embedded in the Public Service Training policy. However, this programme is only applicable to junior professionals that are recruited into the mainstream public service. The objective of the induction training programme is to equip the graduates with the knowledge of the operations of the civil service and the conduct of civil servants. Later the graduates are then introduced to short term performance improvement programmes to sharpen their knowledge and skills in the specific areas of their deployment.

3.1.2.2 Capacity building for technicians

The MWE does not have a specific capacity development programme for technicians, although they also benefit from the one-year graduate training programme.

3.2 Monitoring and evaluation framework for capacity development in the W&E sector

Monitoring, evaluation and risk management are essential supporting activities for the capacity development process. Whilst monitoring and evaluation gives an indication of the progress of the capacity development, risk management seeks to prevent, mitigate or react to unexpected events. M&E are two complementary activities. According to GIZ (2013), they are defined as follows: Monitoring is a systematic collection of information that enables stakeholders to check whether an initiative is on track and/or achieving set objectives; and Evaluation is a process for measuring the impact or effectiveness of an intervention in making set targets. Two integral parts of monitoring and evaluation are Reporting is the systematic and timely provision of essential information at periodic intervals⁵ and an indicator is a measurable characteristic or variable which helps to describe a situation that exists and to track changes or trends i.e. progress over some time.⁶

In addition to the established reporting and monitoring processes that are anchored under the Policy and Planning Departments of the MWE, overall monitoring of the progress of the subsector capacity development plans is done annually and reported on in the Annual Water and Environment Sector Performance Reports (SPR). Figure 2.4 shows the different levels of M&E reporting under capacity development in the water and environment sector.

Although at the departmental level, the CD desk officer is supposed to work with the Head HRM to review the training plan and report to the MTC, as well as the On-Budget activities related to training and capacity development, the findings through interactions with the relevant stakeholders in the MWE revealed that this is not being done.

⁵ UNDP (2002), p. 7

⁶ GIZ (2013), p. 6

At the sectoral level, the Sector Capacity Development Division within the Policy and Planning Department of the MWE coordinates the implementation, monitoring and reporting on Sector Capacity Development to the CD Thematic Working Group and subsequently to the WESWG. The Sector Capacity Development Division is responsible for documentation and reporting on sector capacity development activities in the SPR.

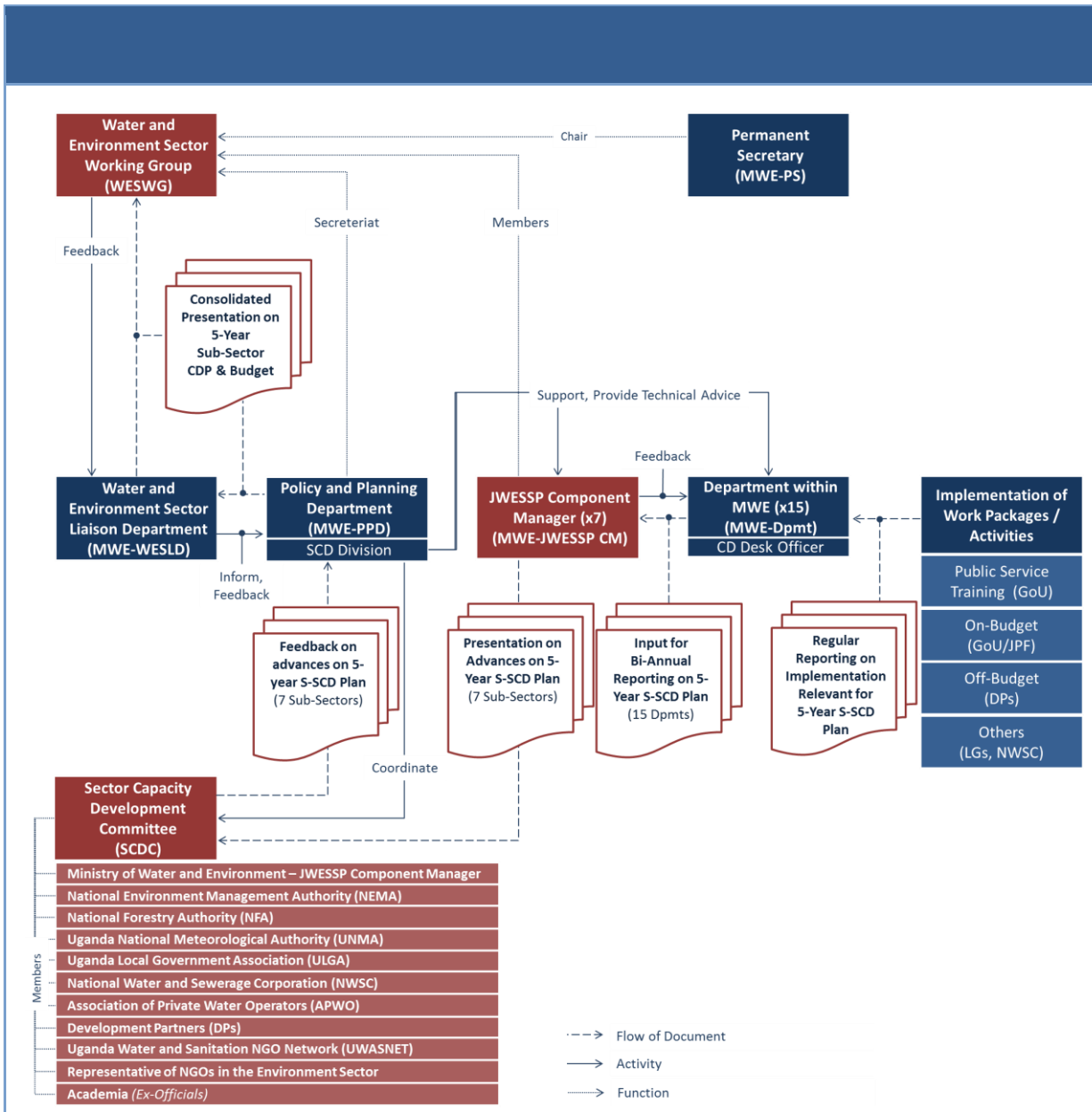


Figure 3. 4. Reporting on Sector Capacity Development processes in Uganda
Source: MWE (2014)

The purpose of M&E within capacity development processes is generally a combination of performance⁷ improvement and accountability.⁸ A general distinction can be made between M&E of capacity development and M&E of capacity. These are strongly interlinked, but respond to different information requirements. The difference is made because the information required for the improvement of capacity development activities differs from the information requested by stakeholders for accountability reasons.

Table 2.1 lists the main characteristics of the two parts of M&E. M&E of capacity development in the water sector, checks the outputs of the capacity development activities, thus the quality and the relevance of capacity development efforts. M&E of capacity is concerned with the outcomes⁸ of the events. A different stakeholder may even request different content or a different structure of the information provided. To design an adequate M&E system, the specific expectations need to be clarified.

Table 3.1 The two Levels of M&E

M&E Type	M&E of Capacity Development	M&E of Capacity
Purpose	- Performance improvement of capacity development	- Steering and accountability of capacity development
Evaluation level	- Operative - Outputs	- Strategic - Outcomes
Key question	- Are we doing things right?	- Are we doing the right things?
Recipient/ Interested party	- Manager of capacity development activities - Provider of capacity development activities	- Governmental institutions - The financier of capacity development activities

Source: MWE, 2014

Figure 2.5 illustrates how the two levels of M&E relate to the impact chain. M&E of capacity development focuses on the improvement of performance at the operational level and includes the monitoring and evaluation of capacity development inputs, activities and outputs. M&E of capacity

⁷ According to FAO (2002, p. 5) performance is understood as the progress towards and achievement of results. ⁸ INTRAC (2010), p. 6; FAO (2012b), p. 72

⁸ Within M&E of capacity, there has been a shift of paradigm within the last decade: 'there is an increased emphasis on measuring outcomes (=changes in behaviour and performance) as a result of public policy, programmes and service delivery. Due to their nature, however, outcomes are typically more difficult to monitor and evaluate, since data is often not readily available and primary data collection is typically required.' (UNDP, 2013: 2)

covers the requirements for steering and accountability of the capacity development, thus focusing on the strategic level. It is monitored and evaluated to ensure that the right capacity development activities are being executed to achieve the desired outcomes, objectives and goals.

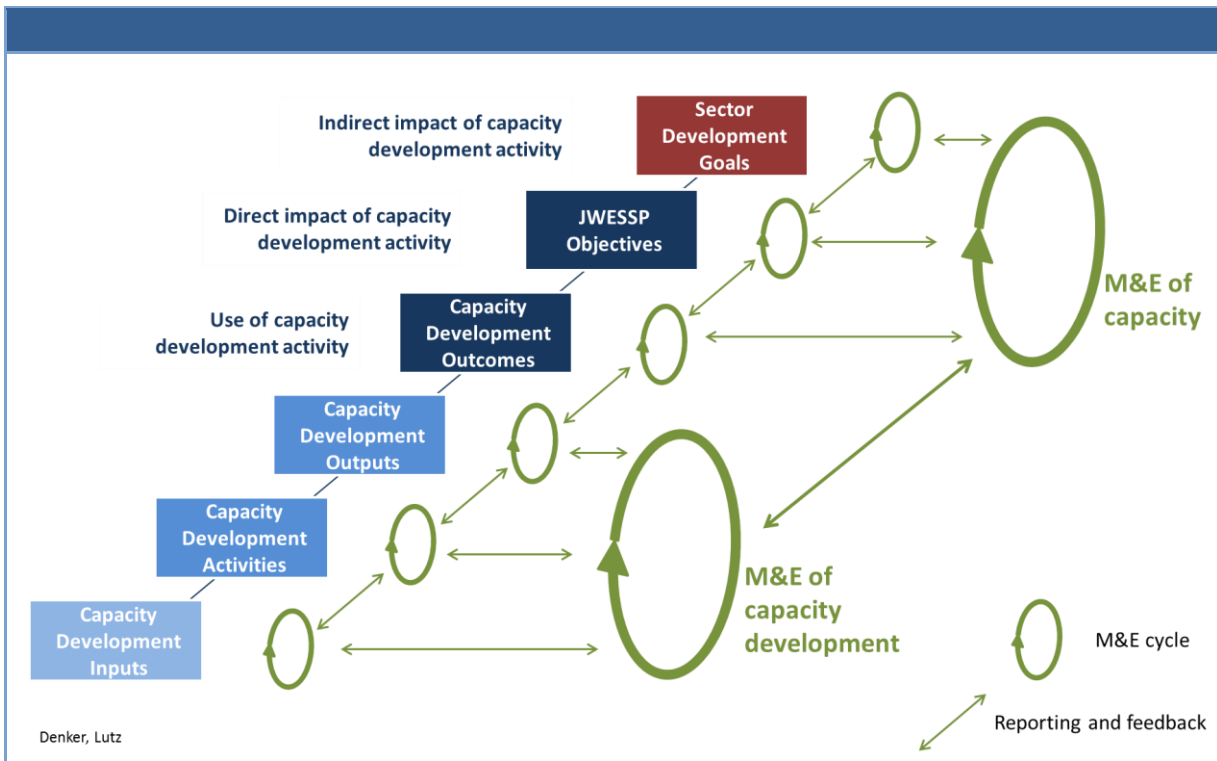


Figure 3. 5. M&E Cycles along the Impact Chain (Source: MWE, 2014)

3.2.1 M&E of Capacity Development (Operative)

Operative M&E provides information to the question, ‘Are we doing things, right?’ Operative monitoring focuses on the timelines of interventions, their costs and outputs. This requires regular (e.g. monthly) control of the progress of the implementation of capacity development activities according to indicators and milestones as established in the CDP. The control is used to ensure that the activities comply with the budget and timeframe. Monitoring also provides crucial information to trigger corrective measures.

Operative evaluation analyses the quality of interventions. It provides essential information which is used to improve the performance of repetitive activities or to appraise suppliers. Table 2.2 shows different evaluation areas and topics for the operative evaluation of capacity development activities. These can vary, depending on the characteristics of the intervention evaluated, for example the level of capacity development addressed.

Table 3.2. Operative Evaluation of Capacity Development Activities

Evaluation area	Topic
Content	- Quality of the need's assessment - Appropriateness of the course length/content
Trainer qualification	- Quality of the training techniques - Quality of the facilitator's/trainer's approach
Techniques and materials	- Appropriateness of the mix of presentations, discussions and activities - Quality of the learning material
Location	- Quality of the facilities
Follow-up support	- Quality and adequacy of the follow-up support
Selection of participants	- Appropriateness of participant selection strategies - Participant mix

Source: FAO (2012b)

Different approaches to the evaluation of capacity development activities include;

- Review of documentation related to the event,
- Observation of events by expert evaluators,
- Satisfaction forms, questionnaires to be filled in by participants or stakeholders,
- Oral feedback from facilitators, trainers and participants, and
- Interviews with relevant stakeholders.⁹

3.2.2 Monitoring and evaluation of Capacity (Strategic)

Strategic M&E provides information to the question, 'Are we doing the right things?' Strategic monitoring observes the use, the direct and indirect impact of capacity development activities. On a regular basis, the strength, weaknesses, opportunities and threats (SWOT) are monitored to adapt overall strategies to a potentially changing environment. This is a very complex process, as different capacity development activities are combined with other interventions to achieve overall sector goals. In many cases it is not possible to attribute outcomes to one specific response. Therefore, the strategic M&E has to be incorporated into the overarching M&E framework used by the JWESSP.

⁹ FAO (2012b), p. 73

CHAPTER FOUR: EXISTING CAPACITY DEVELOPMENT INITIATIVES IN THE WATER SECTOR

Capacity development (CD) is at the heart of sector performance and attainment of the sector goals set out in the National Development Plan II (2016 – 2021, Sector Development Plan (2016 – 21), Sector Investment Plan (2009-2035) and Vision 2040, and supported by a wide-ranging policy and legal frameworks. For the water and environment sector, human resources are as crucial as financial resources. The importance of CD has long been recognized by the industry and considerable resources have been devoted to capacity development since the early 1990s. Much has been achieved as evidenced by a steadily improving sector performance.

Capacity development interventions in the water sector is being implemented by various stakeholder institutions, and these include the MWE which is the lead sector coordinating institution for CD, the NGOs under the Water Sanitation Umbrella Organization – Uganda Water and Sanitation Network(UWASNET), the Local Governments, the Private sector, Sector Agencies – National Water and Sewerage Corporation and the Academia.

Capacity Development in the Water sector is guided by the Water and Environment Sector Capacity Development Strategy (2013/18), which provides the overall framework for the implementation of capacity development in the industry. The stated objective of the Sector Capacity Development Strategy is that: “*The Water and Environment sector has the capacity to increasingly meet its targets and undertake its mandate benefiting from: a better understanding of its capacity demands, more effective means of delivering capacity in response to the needs and, and increasing ability to positively influence the enabling environment*”. The sector capacity development strategy is targeting three levels (Figure 3.1):

- **Enabling environment** (also institutional level): the system within which organizations and individuals function. It sets the scene and the rules for the interaction among organizations.
- **Organizational level:** the structures and processes that allow an organization to fulfil its objective. If these are functional, the capability of an organization will be more significant than the sum of its parts.
- **Individual level:** the skills, knowledge, experience and attitude of the people within an organization. The three levels of capacity development are interlinked and interdependent. Therefore, activities always need to consider all three capacity development levels. Organizational, institutional and even political constraints are often at the root of disappointing capacity development results.



Figure 3. 1. Levels of Capacity Development
Source: MWE, 2014

Below is a summary of ongoing capacity development initiatives being implemented by the various sector stakeholder institutions.

4.1 The Ministry of Water and Environment

Structurally, as earlier mentioned, the MWE has three Directorates, which include the Directorate of Water Development (DWD), Directorate of Water Resources Management (DWRM) and Directorate of Environment Affairs (DEA). Focusing on the water sector, both the DWD and the DWRM have three departments each. DWD comprises of Rural Water and Sanitation, Urban Water Supply and Sanitation (where NWSC comes in) and Water for Production. DWRM is comprised of Water Quality Department, Water Resources Regulation and the Department of Water Resources Monitoring & Assessment. In total, there are fifteen departments within the MWE.

Within the MWE, training of staff is the responsibility of the Human Resources function. The overall responsibility for coordination of strategic capacity development at the sectoral level is handled by the Sector Capacity Development Division of the Ministry and structurally falls under the Policy and Planning Department, which is also responsible for operationalisation of the Sector Capacity Development strategy. The capacity development initiatives have spanned several years. However, in the recent past, important strides have been taken as observed below:

4.1.1 Key undertakings on capacity development from the Water and Environment Sector Joint Reviews

Critical undertakings for Capacity Development in the sector were endorsed by the Water and Environment Joint Sector Reviews that required MWE to develop, by the end of FY2014/15, a costed strategic plan for implementation of the Sector Capacity Development Strategy for the period 2013/14 – 2017/18. This was coupled by the undertaking that took into consideration confirmation of existing CD plans within the sector (including CD plans for the MWE sub-sectors, semi-autonomous institutions, local governments and civil society actors. Finalising the development of costed CD plans for the departments of the MWE as well as agencies and embark on implementation by the end of FY 2016/17 and the subsequent year of 2018. Developing a strategy to systematically build the capacity of middle and lower level sector personnel in leadership and managerial skills to address emerging sector demands by the end of FY 2016/17.

4.1.2 Development of Costed CD plans

The operationalization of the Water and Environment Sector Capacity Development Strategy, involved development of the capacity development plans for sub-sectors within the Water and Environment Sector, including departments of the MWE and agencies. To date, the status of development of CD plans stands as follows:

- Under the Skills Development for Human Resources (SDHR) project that is funded by the Belgian Technical Cooperation (BTC, currently known as Enabel), Organizational/individual capacity needs assessment was conducted and CD plans have been developed for five departments of the MWE and one agency, Uganda National Meteorological Authority (UNMA). Implementation of the CD plans currently ongoing through the delivery of short-term performance training programs based on the identified gaps
- Under the GIZ/ENWASS support to the water and sanitation sector, Capacity Needs Assessment, and CD plans have been developed for the Urban Water Supply and Water Resources Management subsector. Short term performance related training courses were conducted for staff of the DWRM in 2017.
- Development of CD plans for the Rural Water Supply and Sanitation subsector is currently ongoing.

It is important to note that the order of getting the capacity development plans done was based on the priority of the two development partners. Consequently, the creation of the capacity development plans undertook different methodologies with varying levels of analysis. For example, the capacity development plans supported by BTC were geared towards 2 levels of analysis of capacity development namely individual and organizational level while the CD for the

Water resources Management subsector additionally dealt with the enabling environment thus the need to align the capacity development plans developed to the Water and Environment Sector Development strategy that focuses on the three levels of capacity development of Individual, Organisational and Enabling Environment.

To ensure that the Capacity Development plans so far developed are aligned to the Water and Environment Sector Capacity Development strategy, and address the three levels of Capacity Development, a consultant has been engaged to review, harmonize the developed CD plans and attach a cost to the consolidated capacity development plan. The consultant will work in close collaboration with the Sector Capacity Development Division of the MWE.

4.1.3 Other Capacity Development activities coordinated under the MWE

Following the problematic times Uganda went through in the 1970s and 1980s, there was an apparent lack of manpower to implement sector activities by the early 1990s when the development partners resumed active support to the country. This was exacerbated by the fact that there was a big gap between the knowledge and skills the training institutions were providing and the actual requirements of the sector employers, as confirmed by the Training for Real (TFR) study.

Hence, with the support of donors, the MWE developed a one-year training program targeting fresh graduates of engineering, geology, chemistry and other academic disciplines directly required for the implementation of water and sanitation sector activities. Under the programme in question, students who have pursued the above courses are recruited and attached to ongoing projects for one year where they undergo on-the- job training aimed at equipping them with the technical skills required in the sector. After that, they are off loaded to the labour market for sector employers to access quality manpower. To date, the program has run for over twenty (20) years and more students were being enrolled for the training. Some of the sector employers who have benefited from the programme include the MWE itself, Local Governments, development partners, NGOs, private contractors to mention but a few. However, it is essential to note that most of the trainees are taken by the MWE. Noteworthy is that most of the current senior officers in the water sector across the ranks up to commissioner level, benefited from this program. Through this model, knowledge is created and transferred and this is now part of the gap in knowledge and capacity development has been bridged in the sector.

Other capacity development activities that are implemented by the MWE and are aimed at creating knowledge include support to staff in the MWE, and other stakeholder organizations. The aim is to pursue further studies at Masters level and other post degree academic qualifications. There are also specific tailor made short courses aimed at performance improvement. The institutionalization of the preparation of Annual Sector Performance Reports as best practice in the documentation of sector performance has dramatically contributed to the creation and sharing of knowledge in the sector. The process of writing the sector performance report involves all stakeholders and originates from the local governments where primary data is generated.

4.1.4 Capacity Development Initiatives undertaken by Technical Support Units under the Rural Water and Sanitation Subsector

The country has been undergoing structural changes where new districts have been created over time. The creation of new districts followed the post-1993 decentralization program where it was believed that the creation of more local government units provided more room to stimulate development and service delivery at the local level, thereby contributing to closer proximity between communities and local governments (Visser, 2011).

In the water sector, whenever, new districts are created, the MWE takes the lead to ensure that the newly created areas get staff and equipment to perform specific sector related duties and responsibilities. However, much as the MWE tries to provide the required capacity to the newly created units, this comes with some challenges as will be presented in the section addressing factors constraining the capacity development initiatives in the sector.

To address the ever-emerging capacity requirements for the local governments arising from the continued creation of new districts, the MWE established Technical Support Units (TSUs) as decentralized regional structures through the rural water subsector to provide capacity to the local government. The primary responsibility of the TSUs is to build the capabilities of the staff i.e. the district water offices and other relevant district personnel involved in the delivery of water and sanitation services as well as provide technical back up support. Such capacity development support includes the provision of technical support to the District Water Officers in the preparation of work plans, drawing Terms of Reference (ToR), preparation of documents when it comes to construction of water systems and procurement processes, installation of boreholes, protected springs and other water supply systems among other duties. TSUs offer training to water officers, community development staff, health assistants and lower cadres. Majorly, its target group is the district local government. Every quarter, TSUs together with the district staff monitor progress and remind people to give attention to critical areas.

Much as it the duty or role of the District Water Officers to supervise and ensure that the boreholes are maintained according to the set standards by the MWE, it is the responsibility of the TSUs to ensure that these water systems are maintained to the set standards. To meet this demand, the TSUs staffs go to communities and carry out post checks by talking to the members and establishing whether the existing sources have Water User Committees (WUC), whether the community have and can easily access hand pump mechanics and how often and when repairs are done.

4.1.5 Capacity Development Initiatives undertaken by the Appropriate Technology Center (ATC)

The Appropriate Technology Centre (ATC) is a research arm for the Ministry of Water and Environment, operating within five objectives, which include;

- Undertaking innovative applied research and development in appropriate technologies and approaches for water and sanitation.
- Carry out capacity building for sector actors.
- Build up the profile of proper techniques for sustainable water supply and sanitation options by popularizing the applicable technology practices.
- Accelerate public and or private investment through innovative financing mechanisms and demonstration of acceptable innovative practices and
- Continuously identify challenges facing the adaptation of appropriate technology in the water and sanitation sector.

Appropriate Technology Centre is currently structured in the form of a three-year project set up by the Ministry of Water and Environment and is 100% funded by MWE. Besides, the ministry has played a role in attracting external funding, for example acquiring donor support from the World Bank.

ATC offers capacity development to individuals and at the organizational level. For example, training programs offered target technicians who handle construction and installation of water schemes, technocrats for example local and central government engineers, social workers and give training to NGOs with guidance on project planning and implementation.

Much as the ATC was started as a project, there is a possibility to expand it into a National Water Research Institute to address capacity development needs and promotion of appropriate technologies to ensure the sustainability of water schemes. Therefore, it is expected to serve as a training hub for water professionals shortly.

4.1.6 The Water Resources Institute (WRI)

The Ministry of Water and Environment (MWE) has established a Water Resources Institute that was officially launched by the Hon. Prime Minister of the Republic of Uganda in March 2018. It is anticipated that the WRI will address the current and emerging water resources related issues in the country and globally. The institute is earmarked to be center of excellence that will provide cutting edge applied research and training, delivers continuous professional skills development across all levels in water resources management and development, and serves as a neutral place for dialogue and outreach on water resources related issues. It is envisaged that WRI will later evolve into a semi-autonomous entity. When this happens, its primary functions will be to develop policy, legal, social, technological, and scientific expertise in the water resources sector. The others are to plan, facilitate, and conduct research responsive to national and regional needs. WRI will

also promote technology transfer, dissemination and application of research results to appropriate users. In addition, it will provide for education and training of scientists, engineers, and students as water resources professionals through their participation in research, assist public and private interests in the planning, regulation, conservation, development, and utilization of water resources through outreach programs and provide opportunities for research grants to be awarded by organizations under national, bilateral, multilateral, and international arrangements.

The WRI is anchored under four (4) pillars, namely applied training, applied research, dialogue and outreach. Since the official launch in March 2018, the WRI has hosted the first ever Uganda Water Week in March 2018 where eight short training events were conducted, in addition to, 3 dialogue sessions were organised and 4 field visits that were arranged on the side-lines of the game. Seed capital to kick start the WRI has been provided by the World Bank through the Republic South Korea Trust Fund, and already a team from K-Water Institute in South Korea has visited the WRI to provide guidance on the set up and operationalisation of the institute.

4.2 Capacity Development activities implemented by the NGOs

The Uganda Water and Sanitation NGO Network (UWASNET) is the national umbrella organisation for Civil Society Organisations (CSOs) in the Water and Environment sector. UWASNET is crucial in helping the government realise its targets of alleviating poverty and achieving Millennium Development Goals (MDGs) through universal access to safe, sustainable water and improved sanitation. UWASNET plays this vital role in partnership with other key sector players such as the Government of Uganda, Development Partners (DP's) and the private sector.

Over 200 NGOs are working in water supply and sanitation. UWASNET was established in 2000 to strengthen the contribution of NGOs/CBOs in achieving the Water and Sanitation Sector goals. Currently, it has an active membership of over 170 active NGO and CBO. There is a strategic framework for cooperation between local Governments and NGOs for water and sanitation. It guides Local Governments and NGOs on how to jointly plan and implement community mobilization/software activities concerning water supply and sanitation. It also provides guidance to districts on how to procure NGOs to undertake software activities.

UWASNET Network (UWASNET) coordinates Non-Government Organizations (NGOs) and Civil Society Organizations (CSOs)/Community Based Organizations (CBOs) involved in the provision of water and sanitation services and also has the core function of capacity development for sector CBOs. However, the MWE oversees the capacity development activities of all the stakeholders with the water and sanitation sub- sector. The MWE provides financial support to UWASNET to carry out capacity development for the Civil Society Organizations (CSOs).

4.3 The capacity development initiatives in Higher Education Institutions (HEI) in Uganda

The bulk of the manpower that feed into the water and sanitation workforce is produced by the Higher Education Institutions (HEIs) in Uganda. To date there are a total of 16 public institutions

and 40 private universities that offer undergraduate and master's degree courses relevant to the water and sanitation sector, as well as more than 60 vocational technical colleges that offer diploma and certificate for technicians. Not all of these colleges and universities provide water related courses although at the time of the desk review, the exact number of universities and colleges offering technical training in the water-related programs was not known.

The Ministry of Water and Environment was also involved in the Training for Real (TFR) project in 2005, implemented during the period 2005/6 by the Water, Engineering, Development Centre (WEDC) of the University of Loughborough, with support of the Directorate of Water Development. The objective of the TFR project was “to motivate HRD and training providers to be responsive to the demands of employers so that professional development of water and sanitation sector staff is relevant.” The project established as one of its findings that currently there were no formalized links between ‘supply’ and ‘demand’ institutions. Therefore, sector organisations hardly played any role in initiation, development and evaluation of courses offered by HEIs. There were few cases where HEIs had developed tailor-made continuous professional development courses for the sector organisations.

4.4 Capacity development initiatives in the Private Sector

Although the bulk of the construction project works, including design and construction in water supply and sanitation under local and central Government is undertaken by private construction firms, they play a limited role in capacity development of sector personnel. However, there is a new initiative by the African Development Bank requiring the introduction of apprenticeship programs for skilling the youths under projects funded by the Bank. The modalities for implementation of the above capacity building initiative is yet to be finalized. Funds for this program will be embedded in the quotations submitted by the consultants and it will be their responsibility to manage the stipend for the youths engaged under the program. This is another sector which is yet to be maximized in as far as capacity development is concerned.

4.5 Overview of Uganda's education system

Uganda's education system which informs the systematic and overall evolution of human capacity development is illustrated in Figure 4.1. It gives insights on the entry points and niches for the various levels i.e. both vocational and higher level (university).

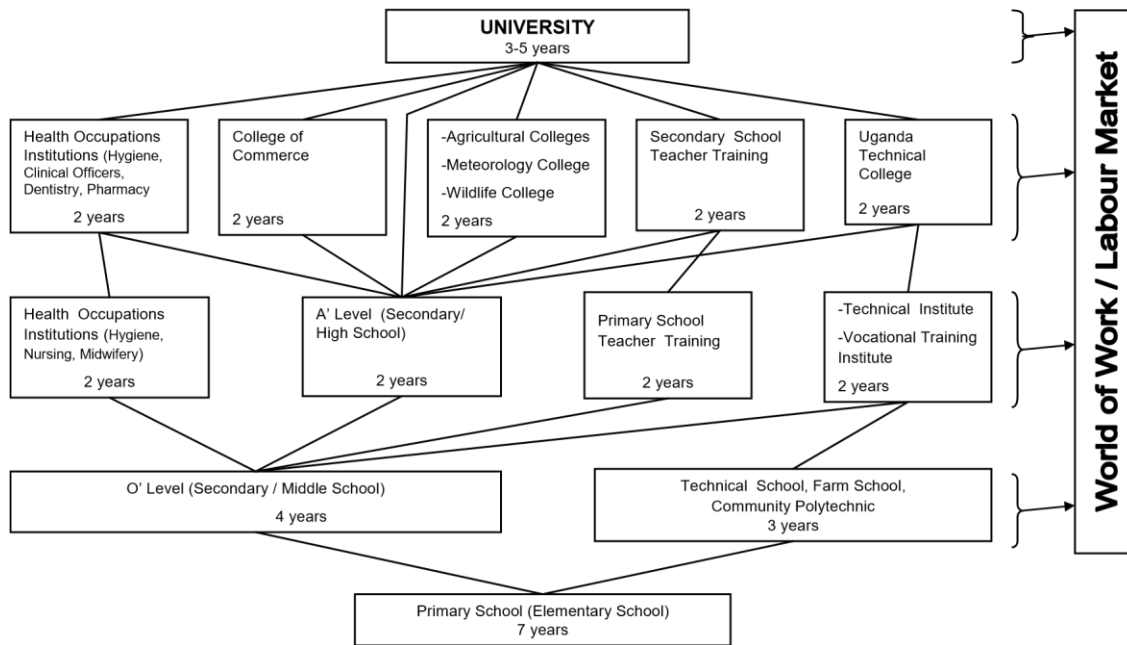


Figure 4.1: Education Pathways in Uganda

4.6 National Framework for Human Capacity Development (HCD) for Junior, Technical and Senior Professionals in the Water and Sanitation Sector in Uganda

4.6.1. The Concept of HCD

Human capacity development has been defined as “The process by which individuals, groups, organizations, institutions, and societies develop their abilities – both individually and collectively – to set and achieve objectives, perform functions, solve problems and to develop the means and conditions required to enable this process”.

A **framework** is a particular set of rules, ideas, or beliefs which you use to deal with problems or to decide what to do. The National Framework for Human Capacity Development for Junior, Technical and Senior Professionals therefore sets out guidelines, rules and ideas for capacity development for the mentioned professionals in the WATSAN sector in Uganda. A system thinking approach to capacity development is proposed. The main innovation from this is that emphasis is placed upon defining the system as a whole, which is made up of interacting parts. It is also about recognizing complexity and knowing that one cannot always predict outcomes so one has to have the capacity to learn and adapt along impact pathways. HCD is hence a multifaceted process combining elements across several dimensions, which themselves are interrelated. Also, HCD is linked with improved governance critical to outcomes. The framework recognizes that Capacity development occurs across multiple levels—individual, organizational and institutional and covers a wider scope than mere transfer of knowledge and skills through training.

The overall goal of this Strategic Framework is to increase the capacity of individuals, groups, organizations, institutions, and societies to develop their abilities, individually and collectively, to

ensure the sustainable development (social, economic and environmental) of the water and sanitation sector.

4.6.2 National Framework for Human Capacity Development (HCD) for Junior and Technical

As earlier indicated, the concept of Junior and Technical professionals is not commonly used in the water sector in Uganda. However, in the context of the water sector and the Uganda public service, Junior professionals are the fresh University graduates with zero to about 3 years of professional work in the water sector. Technical professionals are those who do not go through the university system but undertake certificate and Diploma courses in vocational training institutions and use that as the entry point into the water service and production sector. The proposed framework for the two categories of professionals will build on ongoing initiatives of human capacity development for both Junior and technical professionals, and taking into consideration the significant gaps which need to be addressed to ensure efficiency and effectiveness in performance in service delivery in the water and sanitation sector.

The framework proposes seven critical strategies of HCD, illustrated in Figure 4.2. The MWE desires to work with universities and training institutions to adapt and utilize the elements according to its needs and the particular setting of each learning institution, guided by the requirement to attain the cross-cutting capacity development.



Figure 4.2: Proposed Elements for HCD for junior and technician professionals in the WATSAN sector in Uganda

Capacity Needs Assessment/Gap Analysis

An analysis of the existing capabilities of the technical, junior and senior professionals in the WES sector shall be undertaken and measured against the planned/projected capacities to establish the gaps. Key stakeholders shall be mapped, and a questionnaire shall be developed, tested, approved and then used in the exercise. Participants shall include the sector, development partners, training providers (universities, colleges, public & private), UIPE, ERB, NCHE.

Catalogue of Continuous Capacity Professional Development (CPDs) Programmes.

Against the established skills capacity gaps, a set of continuous CPD programmes / short courses shall be developed and catalogued. This shall be done in consultation with / participation of the employers (and employees), private sector and training providers (Colleges, Universities, private sector) and the professional and regulatory institutions (UIPE, ERB, NCHE), and bench-marked against international standards (UNESCO, ILO etc). The CPD catalogue shall be expanded as new skills challenges emerge as may be occasioned by technological developments so that employers are required to undertake a set of CPDs regularly (e.g. annually) so as to acquire the required points needed in order to remain registered to practice.

In-service Training for Lecturers

Capacities, competences and qualifications of all levels (technicians, lecturers, professors) of existing staff in all training institutions listed in tables in 3.0 above shall be established. Subsequently, identification and selection of potential institutions to conduct the in-service training of these trainers shall be done using a guideline, the capacity gaps established and MoUs signed by these institutions and the project.

Gender parity shall be used as a guideline in the selection of trainees.

Involvement of the private sector and industry

The private sector and industry shall play critical roles including:

- i) Provision of industrial training places for both trainees and trainers (including supervision and evaluation)
- ii) Participation in developing CPD programmes, and assessments
- iii) Identification of competent trainers from their enterprises (especially in specialized skills / experiential areas) to participate in the CDP training programmes
- iv) Providing financial and other support (e.g. donation of training materials, tools, equipment, awards).

- v) Developing the scheme of service for the sector

Involvement of sector employers

The sector employers shall be involved in different activities including:

- i) Policy and legal development and guidance
- ii) Securing and providing appropriate funding
- iii) Release of their employees for CPD programmes (paying their salaries / entitlements, stipends, job securities)
- iv) Providing places and facilities for the conduct of specialised CPD programmes.
- v) Developing the scheme of service for the sector, securing its approval and funding for implementation.
- vi) Participating in lectures in selected topics at the universities

Professional Associations and Regulatory Bodies

The principal association and regulatory body shall be the UIPE and ERB respectively. The two institutions shall continue to work closely in the registration of the technical, junior and senior professionals as provided for in their constitutions and Statutory Instruments respectively. The professional bodies (UIPE and ERB) are involved in the tracking and supporting the Mutual Recognition Agreements (MRAs) for movement of professionals and services within the EAC Partner States. This shall be done in collaboration with Ministries of EAC Affairs (MEACA), and for labor matters (MoGLSD)

Scheme of Service

The MWE sector shall, with support of the MoPS and the Public Service Commission's develop an appropriate Scheme of Service in consultation / participation of the NPA, private sector, professional association, regulatory board, development partners, training providers, and employees. The sector shall also, with support of the Ministry of Justice, lead in ensuring Government approval of the scheme and its implementation.

4.7 National Framework for Human Capacity Development for Senior Professionals in the Water and Sanitation Sector in Uganda

Human Capacity Development for senior professionals within the sector will emphasize performance management. The proposed framework will build on existing initiatives as provided

in the ToolBox and HandBook for Operationalisation of the Water and Environment Sector Capacity Development Strategy. An overarching lesson learned from previous interventions is that capacity needs to be consolidated and strengthened at four levels: in individuals, in organizations/institutions, in sectors and networks, and in the overall enabling environment.

HCD initiatives should take a holistic view of the overall context in which such individuals operate, to enable individuals or institutions to implement and utilize newly acquired capacity. The strategic framework for HCD of senior professionals will be derived from the Systematic Training Approach which contains five key elements to achieve the vision, overall goal and objectives.

These strategies, together with the related actions, are set out in Figure 4.3 below.

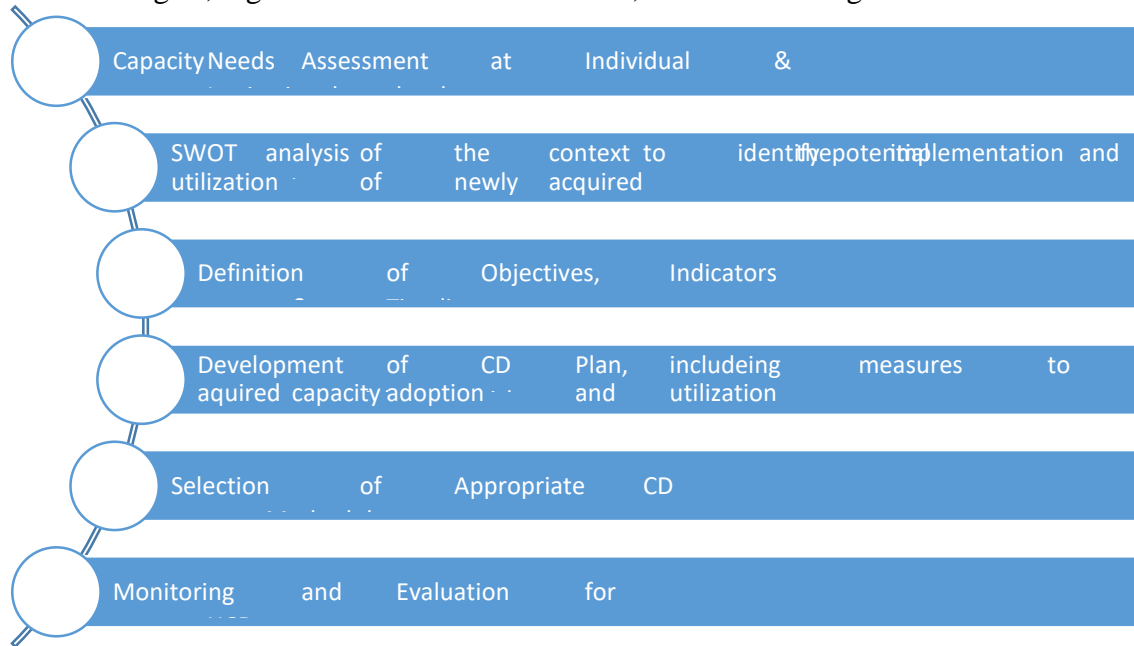


Figure 4.3: Proposed Elements for HCD for the senior professional in the WATSAN sector in Uganda

Capacity Needs Assessment

Capacity development needs will be focused at four levels: (i) individuals, (ii) institutions and organizations, (iii) sector-wide and (iv) enabling environment. Capacity needs will be aligned to the overall water and sanitation sector strategic objectives as well as the Water and Environment Sector Capacity Development Strategy and the Operational Guidelines provided in the Toolbox and Handbook for the Sector Capacity Development Strategy.

SWOT Analysis of context to identify potential risks in the implementation and utilization of newly acquired capacity

The External, internal and comparative analysis provide an understanding of the environment. It is therefore essential that a SWOT analysis is conducted to establish potential risks in the implementation and utilization of newly acquired training, and mitigation measures put in place.

Definition of Objectives

The Capacity Needs Assessment exercise will be followed by definition of objectives to address the identified needs/gaps. The goals will be defined in terms of what the Senior Professionals will know and understand once the capacity development intervention is completed, and will be aimed at contributing to improved performance at the work place.

Development of capacity development plan

The capacity gaps identified during the Capacity Needs Assessment exercise will be analysed, aggregated into priority thematic areas that will form the basis for the development of a capacity development plan to address the gaps at the three levels (individual, organizational and enabling environment). The CD plan will show activities and sets of activities that address the identified capacity needs. To specify and measure the attainment of the desired capacity development outcome, indicators and timelines will be defined. An adequate capacity development methodology will be chosen based on the required outputs and the costs for the capacity development activities will be estimated and implementation programmed in an overall capacity development schedule.

Selection of Appropriate CD Methodology

To ensure that the HCD intervention is effective, appropriate capacity development methodology will be identified and used during the process of transfer of learning. In the case of senior professionals, the following methods are proposed: Mentoring, Coaching, On Job Training, attachments to other organizations implementing “best practices”.

Monitoring and Evaluation Framework for HCD for Junior, Technical and Senior Professionals in the Water and Sanitation Sector in Uganda

Monitoring and evaluation of capacity-development will be based on water and sanitation management indicators in addition to human capacity improvement indicators, both over the short and long term. Monitoring, evaluation and risk management are essential supporting activities for the capacity development process. While monitoring and evaluation (M&E) gives an indication of

the progress of the capacity development, risk management seeks to prevent, mitigate or react to unexpected events. Two integral parts of M&E will be employed to ensure effectiveness and efficiency, namely reporting and indicative measurement of the capacity development variables. The purpose of M&E in the context of HCD is generally a combination of performance improvement and accountability. The full cycle of design, implementation, monitoring and evaluation is shown in Figure 4.4 below.

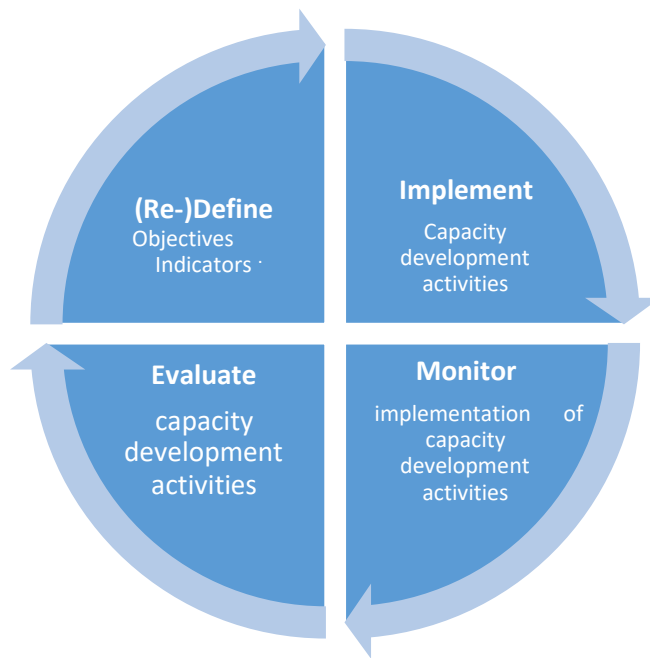


Figure 4.4: Monitoring and Evaluation Cycle

CHAPTER FIVE: PRIORITY CAPACITY DEVELOPMENT GAPS AND CHALLENGES IN THE WATER SECTOR

5.1. Priority capacity development gaps

The water sector in Uganda is comprised of two sub-sector: the Water & Sanitation sub-sector; and the Water Resources Management sub-sector. In line with the Sector Capacity Development Strategy guidelines, capacity gaps in the water sector have been identified based on where it is situated (anchored) within the 3 levels of capacity development (individual, organizational and enabling environment). In the context of this desk study capacity gaps have further been categorized according to the two professional level – either Junior or senior professional. This chapter presents the context of capacity gaps in the water sector and the gaps at sectoral and individual levels.

5.1.1 The Context of Capacity Development in the Water Sector

As indicated in the earlier chapters, the water sector comprises of various categories of staff who occupy different levels in the organogram, and play different roles depending on their position in the hierarchy. The junior professionals fill lower ranks in the hierarchy, and are primarily responsible for operational activities. Hence their capacity gaps relate to technical skills, while the senior professionals occupy higher positions in the hierarchy. Therefore, their capacity gaps relate to managerial and leadership competencies. A description of the capacity gaps is given in the table below;

Table 4. 1 Description of the Capacity gaps

Capacity gap	Description of the Capacity gap	Affected staff
Technical skills	<p>The gap relates to the professional competences the MWE staff have and how these skill sets are complete, up to date and enable personnel to perform their assigned duties. Essential to the consideration of this gap is the fast changing environment in which the MWE operates and new and urgent challenges that continuously emerge. These changes not only relate to water resource issues on the ground but also to technological developments, communication tools and others.</p> <p>The technical skills are referring to theoretical knowledge as well as the practical experience.</p>	<p>Technical staff located at the regional structures</p> <p>Support Staff</p>
Leadership and management	<p>The gap relates to the specific personal skills to execute management roles in an effective way (mentoring, coaching, team building, communication, contract management, and others).</p> <p>The skills can be based on theoretical knowledge as well as practical experience.</p>	<p>Senior leadership team (Senior leadership located at the centre as well as team leaders at the regional structures).</p>

<p>Performance Management</p>	<p>The gap relates to the ability of the organization to ensure that its Vision and Mission are clear, aligned and well communicated and known.</p> <p>Based on the Vision and Mission a full and complementary set of indicators needs to be identified that will assure performance monitoring.</p> <p>The organization requires a set of well established procedures and processes and detailed scoping of the expectations it has for each member of staff (including up to date job descriptions). These procedures and processes need to be focussed and quality assurance on service delivery and needs to offer guarantee of continuous progress.</p> <p>The support processes need to be recognised as a part of the overall functioning of the organization and care must be taken to ensure they are performing.</p>	<p>Senior leadership team (Senior leadership located at the centre as well as team leaders at regional structures).</p> <p>Professional staff located at the regional structures and the centre.</p> <p>Support staff</p>
<p>Information and knowledge management</p>	<p>The organization continuously gathers information and manages it in such a way that it serves learning and communication purposes. This relates to the way data is collected, stored, availed and disseminated.</p> <p>The organization needs to safeguard its institutional memory and create a space for reflection, sharing, debate, anticipation and knowledge building.</p>	<p>Senior leadership team (Senior leadership located at the centre as well as team leaders at the regional structures).</p> <p>Professional staff located at the regional structures and the centre.</p>

<p>Catchment Management</p>	<p>The gap is related to the provision of support (methodological, technical and others) to CMC members to ensure they can successfully drive the Catchment Based WRM processes. This includes the capability of mobilizing the necessary funds.</p> <p>The CMP is harmonised with other plans and remain an up to date basis for interventions within the catchment.</p> <p>The MWE can identify and monitor the impact from its CMP efforts and ensures they are used into tools capable of convincing partners within (and outside) the catchment.</p>	<p>Senior leadership team</p> <p>Professional staff located at the regional centres and the centre.</p>
<p>Communication and stakeholder engagement</p>	<p>The MWE shares information (strategy, tools, impact and others) with internal and external stakeholders to ensure a “buy-in” into its own Vision and Mission.</p> <p>Effective coordination and collaboration is stimulated and strong synergies are created in between sectors and other deconcentrated and decentralised government structures.</p> <p>The convincing output is generated to build a case for IWRM in Uganda and to ensure strong partnerships (including funding).</p>	<p>Senior leadership team (Senior leadership located at the centre as well as team leaders at the regional centres).</p> <p>Professional staff located at the regional centres and the centre.</p>

Source: MWE (2011)

5.1.2 Capacity Gaps at Organisational/Sectoral level

The capacity development priorities at the organizational level also reflect sub-sector priorities but differentiated depending on the particular role and status of the organization in question; for

example some districts will have more significant needs than others or a department at head office will have different needs than a de-concentrated unit. The use of Results Orientated Management helps to reveal the organizational level priorities. These priorities will be reflected in Capacity Development Plans prepared at corporate level.

During the process of developing the Sector Capacity Development Strategy, stakeholders discussed the priority capacity gaps at the sectoral level. Table 4.2 gives a summary of the gaps identified;

Sub Sector	Performance Gaps	Priority CD Outcomes
Rural Water Supply and Sanitation	<ul style="list-style-type: none"> - The functionality of water facilities - Low coverage of water and sanitation facilities - Increased unit costs for service delivery at the district level - Low levels of sanitation and hygiene 	<ul style="list-style-type: none"> - Rural Water supply users capable and empowered to maintain their systems - The supply chain for spare parts meeting demand - Sector effectively regulates the quality of materials on the market - Sector player, especially in sanitation cooperates and coordinate activities - District water offices are fully operational
Urban Water supply and Sewerage	<ul style="list-style-type: none"> - Limited supervision capacities of WSSBs - Weak regulation of urban water and sewerage services - Increasing costs of production per/m³ - Absence of an integrated approach to ensure the functionality of sanitation services 	<ul style="list-style-type: none"> - Performance contracts are effectively regulated with rewards for performers and sanctions for non-compliance - Management contracts are adequately supervised by competent WSSBs - Business operation areas for small scale operators facilitate the attainment of economies of scale - Functional public sanitation facilities, storm water and solid waste management in place - Enforced sewerage and waste water discharge regulations - A coherent asset Management System in place, dry zone is limited and NRW controlled

		<ul style="list-style-type: none"> - Improved water quality monitoring
Water for Production	<ul style="list-style-type: none"> - Low functionality of Water for Production facilities - Little coverage of Water for Production facilities 	<ul style="list-style-type: none"> - Well-functioning WfP facilities operated by an appropriate management organization
	<ul style="list-style-type: none"> - Increasing unit costs for service delivery - Feasibility studies that don't optimize economic and social use of water resources 	<ul style="list-style-type: none"> - Local Government authorities fulfilling their water for Production sub sector mandate - National level institutions effectively cooperating in fulfilling their order for WfP sub sector - Private sector effective in planning, implementation and management of WfP services delivery
Water Resources Management	<ul style="list-style-type: none"> - Deteriorating water quality - Water Resources not managed under an integrated framework - Low compliance with water abstraction and discharged permit conditions - Inadequate water resource monitoring and assessment 	<ul style="list-style-type: none"> - Awareness of WRM enhanced at all levels - Stakeholders at all levels collaborate using catchment based IWRM - Active network and capacity to monitor and assess water resources quantity and quality - Water Resources regulations (including reservoir and dam safety) are enhanced.

Table 5. 2 Capacity development gaps at the organizational/sectoral level. Source: MWE, 2012

The capacity development priorities at the individual level centre on the individual, their qualifications and experience compared to the requirements of their job. These priorities will generally be expressed as the skills, knowledge and attitudes expected of the individual compared to what they deliver. Annual performance appraisal will be the primary tool through which the CD priorities at individual level will be identified and addressed.

5.1.3 Priority capacity development gaps for junior level professionals

The junior level professionals are the “foot soldiers” in the water sector, and therefore responsible for the operational and practical implementation of sector activities such as supervision of construction of water infrastructure, catchment protection etc. The new capacity needs assessment exercise conducted in the sector to reveal that their capacity gaps are mostly in technical skills related areas, as highlighted below.

Table 5. 3 Capacity gaps at individual level – Junior Professionals

Directorate	Baseline Competencies Required	Critical Skills Gaps
The Directorate of Water Development (DWD)	<ul style="list-style-type: none"> - Operation and Maintenance of water infrastructure - Mobilisation of communities for water and sanitation services - Negotiation and Diplomacy - Design of low cost water technologies for service delivery at the district level - Design of bulk water supply infrastructure - Design of water for production/irrigation systems - Development Communication - Project planning and management - Quality Control and Standardisation - Report Writing and documentation - Local Government Operations 	<ul style="list-style-type: none"> - Design of bulk water supply infrastructure - Design of low cost water technologies for service delivery at the district level - Design of solar water pumping systems - Design of borehole and water well pumping systems - Borehole Drilling and supervision - Borehole construction and Pump testing - Leadership skills - Funding proposal writing/preparation

<p>The Directorate of Water Resources Management (DWRM)</p>	<ul style="list-style-type: none"> - Mobilisation of communities for water resources management - Water Quality Management - Integrated Water Resources Management - Participatory Assessment and Planning - Micro Catchment Planning - Low compliance with water abstraction and discharge permit conditions - Water resource monitoring and assessment - Public Relations and Advocacy - Water Catchment Based Planning and Management 	<ul style="list-style-type: none"> - Integrated Water Resources Management - Water Catchment Based Planning and Management - Stakeholder Analysis - Community mobilisation/Engagement - Laboratory quality systems - Dispute/Conflict resolution - Environmental law - Water Law - Report writing - Catchment based planning for the Local Government personnel
	<ul style="list-style-type: none"> - Communication and Stakeholder Engagement 	<ul style="list-style-type: none"> - Enforcement of Water abstraction and discharge - Micro Catchment planning - Participatory catchment planning - Water Resources Planning and Allocation - Mainstreaming Climate Change - Modelling and Forecasting - Water Information Management - Environment Impact Assessment(EIA) - Environment and Social Safeguards - Monitoring and Evaluation

Source: MWE (2012)

5.1.4 Priority capacity development gaps for senior level professionals

In the context of the water sector in Uganda, senior professionals refer to sector personnel who have served in various job positions and have acquired work experience for at least over five years after graduation in their respective job functions. These categories of professionals are usually responsible for the supervision of the junior professionals and they require managerial and leadership skills. The recent CNA identified the following capacity gaps for the senior professionals in the sector as outlined in the table below:

Table 5.4 Capacity gaps at the individual level – Senior Professionals

Key Functions	Baseline Competencies Required	Critical Skills Gaps
<p>The Directorate of Water Development (DWD)</p>	<ul style="list-style-type: none"> - Leadership and Management - Negotiation and Diplomacy - Stakeholder Analysis - Advocacy and lobbying - Development Communication - Project planning and management 	<ul style="list-style-type: none"> - Resources mobilization, - Negotiation skills, - Networking skills, - Advocacy, community mobilization skills, - Report Writing and documentation - Procurement and Contract Management - Succession Planning

	<ul style="list-style-type: none"> - Financial Management The density of demand and economy of scale Private Public Partnership(PPP) - Quality Control and Standardisation Report - Writing and documentation - Procurement and Contract Management - Water Regulation - Business Planning/Tariff Management - Asset Management - Development of sector policies, strategies, Policy formulation and analysis - Strategic Planning - Strategic HRM - Succession planning - Coaching & Mentoring - Output oriented budgeting - Team building - Performance Management - Speech writing and presentation skills - Communication and public relations - Change management skills - Strategic planning and coordination 	<ul style="list-style-type: none"> - Preparation of bankable project proposals - Policy formulation and analysis - Monitoring and evaluation - Budgeting and Budgetary control - Managerial skills - Communication skills - Financial management skills - Motivational skills - Administrative law - Leadership skills - Funding proposal writing/preparation
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<p>The Directorate of Water Resources Management (DWRM)</p>	<ul style="list-style-type: none"> - Leadership and Management - Negotiation and Diplomacy - Water Quality Management - Development of National Water Quality Standards and guidelines Integrated - Water Resources Management - Trans boundary Water Resources Management 	<ul style="list-style-type: none"> - Negotiation and Diplomacy - Integrated Water Resources Management - Trans boundary Water Resources Management - Leadership and Management - Water Catchment Based Planning and Management - Stakeholder Analysis - Speech writing and presentation skills - Communication and public relations
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	<ul style="list-style-type: none"> - Low compliance with water abstraction and discharge permit conditions - Public Relations and Advocacy - Resource Mobilisation - Stakeholder Analysis - Advocacy and lobbying - Development Communication - Project planning and management - Communication and Stakeholder Engagement - Financial Management - Development of sector policies, strategies, - Policy formulation and analysis - Strategic Planning - Strategic HRM - Succession planning - Coaching & Mentoring - Output oriented budgeting - Team building - Performance Management - Speech writing and presentation skills - Communication and public relations - Change management skills - Strategic planning and coordination 	<ul style="list-style-type: none"> - Change management skills - Strategic planning and coordination - Financial Management - Community mobilisation/Engagement - Laboratory quality systems - Preparation of bankable project proposals - Lobbying and advocacy - Dispute/Conflict resolution - Environmental law - Water Law - Report writing - Management of meetings - General Management - Change management - Development communication - Catchment based planning for the Local Government personnel - Enforcement of Water abstraction and discharge Micro Catchment planning - Participatory catchment planning - Water Resources Planning and Allocation - Mainstreaming Climate Change - Modelling and Forecasting - Water Information Management - Environment Impact Assessment(EIA) - Environment and Social Safeguards - Monitoring and Evaluation
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Source: MWE (2018)

5.2 Capacity Development challenges for junior professionals and technical professionals

Experience has also shown that delivery of capacity is not a quick fix and that long term programmes have tended to produce better results (MWE, 2017). Whereas capacity development at the individual level has often been impressive through projects, once the projects stopped the

organizational capacity built up was dispersed. Under plans, there has sometimes been a duplication of efforts and as a consequence for capacity development to be unevenly distributed.

The technical and vocational education sector is in crisis and has suffered from a chronic shortage of resources. The focus has been on university level qualifications leaving the technician and artisan levels with inadequate training. Although excellent training material has been built up in the sector, this is dispersed and not easily found or accessed.

The capacity development challenges in the Water and Environment Sector were discussed into its sub-sectors based on the vote functions:

- Decentralization challenges
 - Creation of new districts in Uganda led to the fragmentation of existing capacity and therefore created a new deficient in the ability to perform the required tasks in the water sector.
 - District authorities do not prioritize the water and environment sector.
- Incomplete public-sector reforms
 - Public service conditions which are characterized with low pay and high allowances distort the development priorities of the sector.
 - Vacancies are not generally not filled-in on time due to delays and freeze on staff hiring.
 - Slow administrative routines affecting core tasks such as procurement.
- Oversight weakness and political inconsistency
 - Inconsistent messages on cost recovery and enforcement of regulations.
 - Interference in contract tendering and supervision.
 - Weak governance, oversight and tolerance of corruption.
- Cross-sectoral coordination
 - Institutional dispute over mandates and resources (which affect cooperation).
 - Inadequate mechanisms for coordination across institutions.
- Civil society
 - Watch dog role of civil society is underfunded.
 - Information flow to civil society is inadequate.

5.3 Challenges related to training local training institutions for sector man power

The TFR project that was implemented during the period 2005/6 by the Water, Engineering, Development Centre (WEDC) of the University of Loughborough, with support of the Directorate

of Water Development, and whose objective was “to motivate HRD and training providers to be responsive to the demands of employers so that professional development of water and sanitation sector staff is relevant.”, established as one of its findings that currently there are no formalized links between ‘supply’ and ‘demand’ institutions. Therefore, sector organisations hardly play any role in initiation, development and evaluation of courses offered by HEIs. There have been few cases where HEIs have developed tailor-made continuous professional development courses for the sector organisations. Academics in the HEIs identified the barriers to being responsive to the needs of the sector as mainly inadequate resources, a high student/lecturer ratio, and poor enabling environment. As a result, the stakeholders in the industry reported many training topics in which they are deficient.

The report on the base line study on Water Education in Uganda that was conducted in 2009 amongst sector HEIs providing man power to the industry, established among others that the quality of the graduates was more theoretical and as a result, these lacked the technical capacity to operate and manage the traditional water schemes. One of the reasons behind this gap in capacity development is limited communication between the sector agencies and the academic institutions on the sector requirements, which, would possibly help in the structuring of the courses to address some of the technical specifications.

Among the technical institutions visited during the baseline study mentioned above, included the Elgon technical Institute, Bushenyi and Lira. In these institutions the capacity of the lecturers and the institutions themselves was found to be mostly inadequate to create and transfer knowledge. The teachers themselves do not have enough ability to teach the students, as the majority of them are products of the communities where the technical institutions are located. In a scenario where a lecturer is born in the same village, attends all the formal education institutions right from primary and secondary, graduates from the technical institution located in his town and remains to lecture at the same training institute, the global outlook becomes very limited and grossly inhibits knowledge creation and transfer.

Besides, the equipment used for training in High Education Institutions(HEIs) is outdated, obsolete and run down, as evidenced by such facilities in Elgon Technical Institute, where training equipment that was procured in the 70s had even broken down. Although recently, a project under MoES provided some materials to technical institutions, in the absence of functional professional capacity to operate them, these were not being used. These among other challenges have dragged the progress of capacity development in the sector.

Shockingly, from one of the interviews, it was found out that some of the students have not been exposed to the working world. Sometimes a student of engineering expected to graduate the following year does not know what a gravity flow scheme is, has never seen a borehole, does not know what a spring is yet this is the person expected to technically run the construction and management of such water schemes say at the district level. This level of inefficiency has created capacity development gaps in the water sector.

That aside, it had been evidenced that of recent, many students getting first class degrees compared to the past. Anxious to find out what was the reason behind this, it was observed that one of the possible reasons could be that the lecturers use the same notes over and over again and as such, there is limited room to create new challenging concepts and ideologies that would trigger the students' thinking beyond their imagination. This has left the students with the option of being exposed to the same knowledge over and over again thus limiting their ability to meet the increasing professional demands in the water industry.

The lack of formalized links with the water sector organisations limits the academic institutions to explore the skills required by the sector and thus design courses that address actual sector requirements. Because of this, most higher education institutions provide their students with theoretical knowledge. As a result, the graduates lack the technical capacities required to manage and operate water schemes. Besides, given the fact that most lecturers are not encouraged to regularly renew their lecturing materials, these materials rarely provide new concepts and insights. This is exacerbated by the fact that very few lecturers engage in applied research that is relevant in addressing water sector challenges. This lack of encouragement and interaction of staff with the water sector is reflected in the limited ability of graduates to meet the increasing professional demands of the sector.

In some of the technical institutions, the teachers are faced with inadequate capacity to teach the students, as the majority of them stem from the communities where the technical institutions are located. That aside, some of the technical institutions lack the capacity to deliver well-equipped graduates. For instance; some of the facilities used for training in the Elgon Technical Institute were procured in the 70s and have since broken down.

Comments were made about extensive abuse of capacity development and training initiatives. Generally, most staff seem to view training and capacity building as an additional source of income. This perspective is encouraged by the poor remuneration of civil servants in Uganda. In most cases, training is supply-driven without a link to a capacity development needs assessment. This negatively affects the effectiveness of such interventions. The absence of an effective coordination mechanism does not provide room for organisations providing capacity development to know what has been done, by whom, how and for whom, thus leading to duplication of efforts and wastage of resources. Moreover, cross-cutting and cross-sectoral issues are also a challenge to capacity development. This is the case where water sector performance depends on inputs from other sectors. However, the responsibility of who should train staff from other, related areas is not defined, even though their contributions are relevant for the overall sector output.

5.4 Challenges related to political economy

From the interview session, the other factor contributing to this is the political economy in the country. The rapid privatization and commercialization of the education sector in Uganda in the last 20 years has mostly inhibited the chances of students from rural and impoverished backgrounds (who constitute the majority of the student population) from accessing professional courses such

as engineering. The majority of the students who make it to these professional courses are therefore children of the rich who have not lived outside the urban areas and therefore rarely appreciate and attach value to the challenges faced by the rural communities in accessing water and sanitation services. As a result, their knowledge of the various water technologies is limited and largely confined to domestic piped water supply, as they may not even have the time and interest to discover what is happening beyond their areas of residence say in the rural and slum areas. As such, when most of them are sent to the field during internship /one-year graduate training programs organized by the MWE, they run away because they are not used to the harsh environments in the country side. This hinders capacity development.

At the individual level, both at the central and local government levels, the MWE organizes specific tailor-made short courses aimed at improving the capacity of the central and local government personnel involved in the implementation of sector activities. At an organizational level within the local governments, the ministry provides resources to help in the implementation of activities and enabling working environment by equipping the offices with tools such as computers, furniture, district vehicles among others. However, when it comes to the implementation of duties, sometimes the DWO is not in a position to undertake their responsibilities. This is sometimes attributed to some politicians making use of sector specific district resources, for example cars for other official activities or personal errands, for example during funerals in villages. This affects performance negatively and as such, as in this particular case, the power the politician has impedes capacity development.

Besides, the ministry provides guidelines for the allocation of water sources but sometimes the politicians interfere with the instructions and allocate water sources according to their own will. To make matters worse, despite the powers the politicians have in influencing some of the sector activities, they are nowhere in the official structures of the sector yet they have a role to play in service delivery.

As previously highlighted, the three key line ministries i.e. MoH, MWE and MoES, are responsible for sanitation related activities in the country. Through an interview, besides the coordination challenge, before the annual sector reviews, the key stakeholders are invited. However, not all stakeholders come on board to share experiences and discuss the way forward. As noted by the interviewee, there used to be technical forums where staff from the three ministries would come together and share experiences. At the time of the research, this arrangement was not working well. Around 2003 (almost ten years ago), the MWE used to have an officer from the MoH seated in the rural water supply department in the Directorate of Water Development. However, at the time of research, there was no representative from the MoH or MoES. This has gradually affected the coordination of these ministries. Besides, it also makes outsourcing for sanitation funds more difficult.

During one of the interview sessions, it was noted that there is massive abuse of capacity development and training initiatives. Most staff see training and capacity building as alternative sources of income, due to the poor remuneration of civil servants in the country generally. In most cases training is haphazard, with no details on the capacity development needs assessment, and

this affects the capacity development methodologies used and thus the output. There are no defined mechanisms to follow up to study the extent of knowledge implementation and identification of gaps in capacity development initiatives.

The absence of effective coordination mechanism for CD in the sector greatly contributes to the duplication of efforts and wastage of resources. Sometimes, the different organizations undertaking capacity development do not communicate or share information on approaches being used and their specific target groups, let alone the local areas of intervention. As a result, the members involved in extending capacity development do not know what has been done, how, by whom and for whom. This has contributed to the duplication of efforts. In most cases, the target groups are the same and as such it becomes difficult to measure which capacity programme has contributed and to what extent. Even then, resources are also wasted. This duplication and lack of coordination in CD interventions also extend to sector donors, who sometimes provide resources for capacity development to different stakeholders within the same sector but targeting the same group.

In the MWE, at the moment the formal systems developed for the transfer of knowledge is still weak. Therefore, most of the capacity development and knowledge transfer take place informally. For example; during an interview a respondent explained that, since he joined the ministry in 2007, he has gained a lot of experiences through informal contacts at workshops, seminars and interacting with advisers, development partners as well as colleagues. As such, it was noted that capacity development sometimes happens spontaneously. Given the fact that it is sometimes more informal and thus a gradual process, this is not usually taken into account by most people. People have fixated minds that if they do not travel for a course or seminar, then there is no capacity built. This limits their ability to search and develop personal knowledge within the working environment. This is worsened by the fact that it is difficult to quantify the contribution of the capacity developed.

Sometimes subordinates are not interested and thus not willing to learn. As noted by the respondent, sometimes when staff are asked to check or read through a particular report and thereafter send it to the concerned members, one thinks it is 'rocket science and this is very dangerous'. Most people do not have a reading culture. This limits knowledge creation and transfer.

Besides, the remuneration in the government is exceptionally very poor. One cannot easily survive on the official monthly income. In some cases, one has to 'water down' and adulterate the quality of services provided. For example, if one has been asked to design a piped water supply system using a particular pipe, much as he may have the individual skills to perform the duty, personal circumstances may force him to buy a lower quality or smaller pipe so that he can save some money for personal gain. This kind of behavior hampers the proper implementation of the knowledge and skills acquired.

Sometimes the government working environment is not conducive for capacity development initiatives because there is limited support provided for knowledge creation and transfer of learning. To boost capacity development in the sector, the government has put focus on Output Oriented Planning and Budgeting, and Open Performance Appraisal approaches. Under these

arrangements, performance targets are agreed upon. When the person is under performing the activities to be done are agreed upon. However, these approaches lack implementation. Also, there are no sanctions (both positive and negative). As the interviewee stated, even when one works well, nothing is given in the form of appreciation for the inputs. As a result, most people do not seriously take performance as per agreed targets, except those that are very keen. This has in a way affected capacity development.

One of the significant challenges highlighted are cross cutting issues where the sector performance depends on the inputs of other sectors. For example, for the district to implement its activities there is need for services to be procured. The staff responsible for the management of the procurement process are not members of the MWE itself, these belong to the MoFPED. Besides, the contract committees, district financial officers, planning units, and health officers among others are also not staff of the MWE but their inputs are needed for the overall performance of the water sector. However, sometimes they are not trained to undertake their responsibilities and this affects the overall output. The challenge is, whose responsibility is it to train staff from other entities that are relevant to the sector? Besides, the MWE centre is also not aware of what their parent ministries are doing for them in terms of capacity development. The cross cutting activities in a way hamper the implementation of the capacity developed.

Bureaucracy! This was highlighted as one of the critical factors limiting the accessibility of resources to implement capacity development interventions. While in the private sector one can come up with an idea and quickly gets support and the resources to implement, this is not the case in the government. The protocols to be followed are too many accompanied with too much questioning. In the end, even if one had good intentions, one loses the morale to pursue such goals.

In most cases, the government does not have the human resources and tools to facilitate the transfer of learning. Some of the staff members have been exposed to modern tools for the implementation of water and sanitation activities, however, on the ground, the means to enable the transfer and utilization of the acquired knowledge at the work place are not available.

5.5 The way forward

To address some of the challenges related to capacity development in the sector, the MWE recently developed a Sector Capacity Development (SCD), Strategy with the support of the Development Partners (DPs). The Sector Capacity Development document provides the guidelines to streamline implementation of SCD activities during the period 2013/ 18. The document is expected to address the challenges related to coordination, standardization of training materials and harmonization of training methodologies as well as donor support.

Although at the moment the system for knowledge transfer in the ministry is not well defined, the SCD provides an opportunity for the development of clear guidelines for knowledge creation and transfer. For example, in cases where a staff member goes for a workshop or any form of training,

one is expected to write a back to office report highlighting the objectives of the training, how it was conducted and benefits and challenges. This is followed by a one-day presentation.

Sometimes there is inadequate capacity at the implementation level. During monitoring and supervision, sometimes it is found out that the districts are not well staffed. This has been worsened by the continuous splitting of districts. The interviewee said, "You train staff today, tomorrow the district is sub-divided. The district staff is divided into half. This creates vacant posts especially where there was one officer for example the District Health Officer (DHO) and the District Health Inspector (DHI). To cater for the vacant posts, you upgrade the person who has been at the lower cadre. A man who served as a sub-county officer becomes the district officer. But the question is, does he have the necessary capacity to perform duties?" As a result, there is need for trainings to equip the staff with the required skills. However, due to limited funds this is not always done.

Staff leaving for greener pastures: You build capacity today and the person goes tomorrow for better opportunities. While this may not necessarily be bad for the overall sector, especially in cases where such staff remains to work within sector organizations, it indeed inhibits CD at the district level. As a way forward, there is need to improve the remuneration - increasing people's salaries. There is also need to create an enabling environment for improved service delivery. People are generally not motivated. For example, at the local level people do not have transport. As stated by the respondent, when a staff in such a state finds an NGO that can give him a motorcycle or a bicycle, he will leave. Therefore, there is need to provide incentives to motivate people.

Inadequate exemplary leadership: Some of the local leaders lack sanitation facilities. As noted by the interviewee, sometimes you go to the Local Council and find out that the local leader does not have a toilet. How do you move around with such a person to mobilize the community for sensitization programs? This hinders knowledge creation and transfer. Besides, it affects the willingness and interest of the community to implement and make use of the knowledge acquired during sanitation social marketing.

Limited participation of politicians in sanitation related activities: Much as the Local Government Act empowers them to participate and provide services to the communities including sanitation, some politicians do not incorporate sanitation in their agendas/manifestos. All they talk about is freedom of speech, freedom of association but rarely talk about hygiene.

Political interference (intervention): This has hindered enforcement of laws. During the interview session, it was found out that sometimes if one is going to enforce the law on ensuring that everyone should have a toilet and a decision is reached that everyone without a latrine should be imprisoned. This sometimes interfered. The politician say the chairman intervenes saying that 'do not imprison them, those are my voters'. As such, for the sake of one's job, the law is not implemented.

Other ways to minimize capacity gaps can include; promotion of people- Usually, people keep in the same position for so long and this affects their motivation to serve and also provide opportunities for people to upgrade.

a) A strategy for HCD will only be effective, cost-efficient and meaningful if the relevant higher education institutions (HEIs) are fully engaged in its formulation and implementation. It is therefore recommended that the collaboration between the relevant higher education institutions (supply) and sector organisations be strengthened. The following actions are specifically advised to strengthen collaborative partnerships:

- The Uganda water/sanitation sector should co-opt representatives of Higher Education Institutions (HEIs) to sit on its Sector Working Group (WSWG), the highest policymaking body in the industry.

b) Coordination of HCD at Sectoral level:

Coordination of HCD activities in the Water and Sanitation sector should be strengthened. The industry should establish and facilitate a coordination body that will work out formalities for a framework for strengthening collaboration between Higher Education Institutions (HEIs) and industry institutions, to encompass various activities such as:

- ✓ More participation by HEIs in Continuous Professional Development (CPD) for sector staff
- ✓ Joint ventures in applied research
- ✓ More involvement of sector staff in the development and assessment of university curricula, and subsequent accreditation of the courses for the sector staff

c) Best practice Guidelines for holding workshops and training/CB indicators should be developed.

d) Information Management (IM) and Knowledge Management (KM) Support to sector institutions should be provided.

e) Continuous Professional Development (CPD) modules should be developed for the junior, Technician and Senior professionals in the water and sanitation sector.

SUMMARY OF EMERGING ISSUES AND PRIORITIES FOR HUMAN CAPACITY DEVELOPMENT

A number of approaches were adopted to collect information regarding the capacity gaps with in the Water and Environment Sector. The avenues include: desk study of the capacity within the water sector based on earlier studies with in the water sector was conducted, a field study where interviews were conducted as well as focus group discussions.

A desk study review revealed that there were excellent policies with in the sector for instance Ministry of Water and Environment has excellent policies which are not adhered to fully thus the overall objective was not being met. Additionally it was observed that there is :- inadequate handson skills among junior professionals, limited specific skills to execute management roles, poor performance management skills, notable gaps in information and knowledge management, limited provisions for support in catchment management, inconsistent communication , stakeholder engagement and management, gaps in water resource management skills as well as challenges related to political economy.

In line with the current situation, field studies were done, at the Ministry of Water and Environment headquarters as well as the different Water Management Zones (WMZ) that is Kyoga, Lira, Mbarara and Fort Portal. Interviews and interactions with personnel at these WMZs were conducted with the aim of identifying their capacity development gaps. The following gaps were identified:

- Inadequate professional skills amongst personnel
- Training in alternative livelihoods is highly needed
- Skills of engaging communities and community involvement
- Leadership skills and refresher training courses
- Low staffing levels in some units
- Training to retool personnel – project management, M&E, information sharing
- Some of the activities at the central level were not harmonized.
- Most of the training was not geared towards demand.
- Need for training in Performance Contract management

It was noted that some limitations existed in addition to the capacity gaps these include: inadequate funding for some projects and delay in contract renewals for staff.

Following inputs from the review, field visits and surveys, Focused Group Discussions (FGDs) were conducted at the national consultative workshop with key stakeholders and actors in the water and sanitation sector of Uganda to elicit priority training fields for the technical/vocational, junior and senior levels. The capacity gaps in line with priority were identified at the lower and upper levels as highlighted in the table below:-

Capacity gaps and levels of need in the water and sanitation sector of Uganda

Capacity Gap	Level
1. Leadership with consideration of succession management.	Upper
2. Performance management which will help focus on the delivery of key indicators.	Upper
3. Integrated water-resources management and Catchment Management	Upper & Lower
4. Technical skills ie maintenance, Water modelling skills, Designing of fecal sludge, Water sampling, testing and analysis as well as Retooling of experts	Upper & Lower
5. Communication and stakeholder engagement/ Stakeholder engagement eg communities , private sector	Upper & Lower
6. Information and knowledge management.	Upper
7. Governance with consideration to water integrity, transparency, accountability and participation.	Upper
8. Project management i.e. proposal writing, data analysis, report writing, monitoring and evaluation.	Upper
9. Procurement with an aim of enhancing quality of construction materials	Upper
10. Interdisciplinary and multidisciplinary approach to issues (holistic approach to handling issues i.e. engineers, sociologists integration of holistic solutions)	Upper
11. Investment financing	Upper
12. Resource sustainability (Policy review and formulation)**	Upper

TOP PRIORITIES FOR UNESCO INTERVENTION

Upper Level - Senior Professionals

<u>Priority</u>	<u>Description</u>	<u>Areas of Focus</u>
Leadership.	The gap relates to the specific personal skills to execute management roles in an effective way (mentoring, coaching, team building, communication, contract management, and others).	<ul style="list-style-type: none"> ✓ Management in a changing environment, ✓ Risk Management ✓ Advocacy and advisory role. ✓ Performance Management, ✓ Leading across generations. ✓ Resource Management and mobilization. ✓ Succession plan – leadership response to retirement. ✓ Negotiation ✓ Stakeholder management ✓ Communication.

Lower Level - Junior and Technician Professionals.

<u>Priority</u>	<u>Description</u>	<u>Areas of Focus</u>
Technical skills	<p>The gap relates to the technical competences within the sector</p> <p>The technical skills are referring to the theoretical knowledge as well as the practical experience.</p> <p>The evolution of the technical skills is highly dependent on the fast changing environment in which the MWE operates and new and urgent challenges that continuously emerge.</p> <p>These changes not only relate to water resource issues on ground but also to</p>	<ul style="list-style-type: none"> ✓ Maintenance ✓ Water modelling skills ✓ Designing of fecal sludge ✓ Water sampling. ✓ Testing and analysis ✓ Integrated water-resources management. ✓ Catchment Management Building capacity of communities to identify alternatives to using wetlands and natural resources water. ✓ Environment and social safe guards. ✓ Retooling of experts
	technological developments, communication tools and others.	

Further issues emerging

- The key players i.e. Ministry of Education and sports, ministry of lands, ministry of labor and ministry of energy need to be engaged
- Sanitation component will be addressed by Engineer Mutono
- Ministry of Water and Environment will take the lead in the implementation of the HCD framework closely working with Makerere University
- There is need to maximize the impact to the sector
- There is need to address the emerging challenges such as climate change, water quality and quantity

Implementation plan for the HCD Framework

The engaging processes undertaken, culminated into a range of HCD priorities identified by the ecosystem of stakeholders in the water and sanitation sector of Uganda as indicated above. In the implementation, the overarching desire is to equitably cover the specified levels including the

junior, technicians, senior in various organization and institutions in the water and sanitation sector of Uganda. In doing so, the implementation desires to capture those who are already working as well as students, who may be in higher institutions or learning or vocational.

The scope of trainings to be given during the implementation plan will be limited within the resource envelope of initial funds provided by UNESCO for the planned pilot phase, but at least four course units are expected to be implemented. However, since the HCD framework was developed in a participatory manner, it is expected that stakeholders will use it to subsequently resource mobilize for implementation of UNESCO unfunded priorities. The targeted priority courses (Table below) will be designed and implemented as modules. The design and configuration of the courses will be undertaken by Makerere University together with the Ministry of Water and Environment. Existing experts within and outside Makerere University and Ministry of Water and Environment will be engaged to implement the prioritized course units. The content for each course unit planned will be full developed. The trainings will be conducted at Makerere University as well as the Water Resources Institute of the Ministry of Water and Environment. It is planned the UNESCO funded course units will be implemented in a period of three months after approval.

Tentative Implementation Plan for the priority courses. Up to four courses considered on the basis of resource availability

No.	Course	Design	Institutions involved	Timeframe
1	Preparation of Bankable Project proposals	Module	MWE & MAK	July 2019
2	Negotiation and Water Diplomacy	Module	MWE & MAK	July 2019
3	Borehole Drilling and Pump Testing Supervision	Module	NWSC	July 2019
4	Geospatial Tools for Water Systems Resilience	Module	MAK	August 2019
5	Environment and social safe guards.	Module	MAK & NEMA	August 2019
6	Catchment Management – Community Capacities	Module	MAK & MWE	August 2019
7	Water modelling skills	Module	MAK	August 2019
8	Risk management	Module	MAK	September 2019
9	Designing of fecal sludge	Module	NWSC, MWE & MAK	September 2019
10	Retooling experts	Module	MAK and MWE	September 2019

Detailed curricular and agenda for implementation of the courses will be developed

CHAPTER SIX: MONITORING AND EVALUATION OF THE HCD FRAMEWORK

6.1. Introduction

The purpose of the monitoring and evaluation during the HCD framework implementation is to enable the confirmation that the capacity for the technical, junior and senior professionals is being developed. With the intervention, it is expected that they will be in a position to better manage the technical, leadership challenges, and consequently improve the service delivery within the water and sanitation sector. Monitoring and evaluation will enable the project managers to have clear measurement of success of the program, the monitoring and evaluation will act as a basis for communication to the stakeholders, outline the roles and responsibility of each party during the project provides for data management during the project, allows for decision making and align the M&E activities that must take place. The Ministry of Water and Environment in Uganda has various M&E tools it uses on various aspects. The M&E framework proposed here is adapted to the needs for the HCD frameworks implementation and follows issues raised during the validation workshop.

6.2 Project Description

The purpose of the project is to provide operational guidelines and procedures for implementation of HCD for junior, technician and senior professionals in the water and environment sector.

Goal: The overall objective of the program is to improve the quality of human resources and service delivery in the sector

Objective: Equip the people in the sector with skills to deal with the various challenges in the sector.

Activities: Capacity building for Junior professionals, technicians and senior professionals.

Sub-activities:

Capacity building for junior professionals

Capacity building for Senior Professionals

6.3. Logical Framework

Goal: The overall objective of the program is to improve the quality of human resources and service delivery in the sector

	Input	Activity	Output	Outcomes	Impact	Risk
Capacity development for junior professionals and technicians and senior professionals	Training materials Trainers University fees Venues Equipment Licenses.	Train the junior professionals in the courses regarding the identified gaps	People trained in the courses to cover the skill gaps	Trained people solving the existing challenges.	Improved service delivery in the sector.	Availability of financial resources to implement the resources in a timely manner. Commitment of the trainees and their organizations. Matching of schedules for the training vis-à-vis the semester calendar at training institutions
Measures/indicators	- # of training manuals - amount of money spent on the training workshop and equipment # licences acquired,	#courses people have been trained in	# of people trained # of trainings conducted # female / male	Issues solved	Speed and ease of services	

The data for M&E will be collected from the institutions where the students will be trained as well as where the learners will be working. The collected data will be analyzed and shared with the various stakeholders. During the collection and processing, the data will be checked to ensure its integrity.

Stakeholder Involvement

Based on the stakeholders involved and outlined above, the various stakeholders will be communicated to through quarterly capacity development meetings regarding the progress of the project, the success areas arising from the beneficiaries learning, the challenges of the HCD program, opportunities to make the project successful and the lessons learnt. Specific information in particular formats will be availed to the stakeholders based on their interest in the project. background and characteristics will better help to meet their information needs and lead to more informed decision making.

Monitoring and Evaluation Team

It is expected that overall leadership will be provided by the Ministry of Water and Environment. Before capacity development project commences the monitoring and evaluation team will be selected and these will be a cross section of people from the sector as well as key stakeholders. The role of the team will include: data collectors, information system personnel, programme managers, directors, etc. This team will meet on a regular basis to check in with progress on planned M&E activities and to use information from the monitoring and evaluation systems to inform decision making within the organizations they represent.

Reporting Plan

Reporting will be guided by a matrix of what will be reported, to whom, and when. In addition, the format in which the information will be disseminated will be outlined based on the users as well as the kind of generated information (eg, reports, bulletins, graphics, newsletters).

REFERENCES

- CSO Response to the 2017 Water and Environment Sector Performance Report.
- CSO, 2018. CSO Response to the 2018 Ministry of Water and Environment Sector Performance Report.
- DWRM and GIZ RUWASS, 2017. Training Report; “Implementation of Short Term Capacity Measures for The Directorate Of Water Resources Management (DWRM) Of The Ministry Of Water And Environment (MWE)”
- FAO (2012a) FAO Capacity Development. Learning Module 2: Approaches to Capacity Development in Programming: Processes and Tools. http://www.fao.org/fileadmin/user_upload/capacity_building/FAO_CD_LM2.pdf, accessed July 2014.
- FAO (2012b) FAO Capacity Development. Learning Module 3: FAO Good Learning Practices for Effective Capacity Development.
- GIZ (2013) Monitoring and Evaluating Adaptation at Aggregated Levels. A comparative Analysis of Ten Systems.
- GIZ (2012a) Capacity Development Needs Diagnostics For Renewable Energy – CaDRE, Wind and Solar Energy. Volume I: The Handbook. http://www.cleanenergyministerial.org/Portals/2/pdfs/Volume1_CaDRE_Handbook_web.pdf, accessed May 2014.
- GIZ (2012b) Capacity Development Needs Diagnostics For Renewable Energy – CaDRE, Wind and Solar Energy. Volume II: The Toolbox. http://www.irena.org/DocumentDownloads/Publications/Volume2_CaDRE_Toolbox.pdf, accessed May 2014.
- GoU/MWE (2013a) Preparation of the Joint Water and Environment Sector Support Programme (JWESSP), 2013-2018, Final Programme Document – Volume 1.
- International NGO Training and Research Centre [INTRAC] (2010) Praxis Paper 23: Monitoring and Evaluating Capacity Building: Is it really that difficult? <http://www.intrac.org/data/files/resources/677/Praxis-Paper-23-Monitoring-and-Evaluating-Capacity-Building-is-it-really-that-difficult.pdf>, accessed April 2014
- Murungi C. 2013. Knowledge and Capacity Development in the Water and Sanitation Sector: Country Case Study on Uganda by UNESCO-IHE, The Netherlands.
- MWE, 2012. Water and Environment Sector Capacity Development Strategy 2013-2018
- MWE, 2017. Capacity Development Strategy and Plan 2017 – 2021. With financial support from the German Development Cooperation and the Department for International Development (DFID), under the Enhancing Resilience in Karamoja Project (ERKP).
- MWE, 2014. Handbook “Operationalisation of Capacity Development in the Uganda Water and Environment Sector”.
- MWE, 2014. Toolbox for “Operationalisation of Capacity Development in the Uganda Water and Environment Sector”.
- MWE, 2015. Capacity Development Plan for the urban subsector. Part of “Operationalization of the MWE Capacity Development Strategy through subsector capacity development plans 2.”
- MWE, 2009. Capacity Building Strategy for Water for Production Subsector.

- MWE, 2015. Handbook and toolbox for operationalisation of the sector capacity development strategy in the Water and Environment Sector.
- MWE, 2009. Strategic Sector Investment Plan for the Water and Sanitation Sector in Uganda. July 2009.
- MWE (2012) Uganda Water and Environment Sector: Capacity Development Strategy 2013- 2015, Volume 1 Strategy and Volume 2 Annexes.
- MWE, 2018. Training Plan for Ministry of Water and Environment – 2018 – 2023.
- United Nations Development Programme [UNDP] (2008) Capacity Development Practice Note, October 2008. http://www.unpcdc.org/media/8651/pn_capacity_development.pdf, accessed August 2014.
- UWASNET, 2017. UWASNET NGO Mini Performance Report FY2017.
- UWASNET, 2018. UWASNET NGO Performance Report 2018.
- UNDP (2013) Capacity Development in Action. Capacity Development Technical Paper Series: Risk Management for Capacity Development Facilities. An output from the Global Review of Capacity Development Facilities.
<http://cdf.capacitydevelopmentcentre.org/media/417789/risk-management-for-capacitydevelopment-facilities-25march2013.pdf>, accessed July 2014
- WFP, 2009. Capacity building strategy for Ministry of Water and Environment under the water for production subsector.

LIST OF APPENDICES

Appendix 1: Situation Analysis of Water Related Courses and Capacity Levels per University

- ✓ Water related programmes in higher education – Universities
 - No. of Universities
 - Courses offered
 - Capacity – Staffing, equipment etc

S/N	University	Water Related Courses	Remarks
1	Busitema University	B.Sc in Water Resource Engineering	ERB & UIPE assessed programmes submitted through NCHE Recommended accreditation after major corrections are done & verification visits
		B.Sc in Agric Mechanization & Irrigation Engineering	
		Dip in Agricultural Engineering	
2	Makerere University	B.Sc in Water & Irrigation Engineering	Reccommended to NCHE by UIPE / ERB for re-accreditation after addressing minor corrections and verification visits
		B. Environmental Health Science B.Sc Environmental Science M.Sc Environmental Sc	
		B.Sc in Civil Engineering	
		<i>Dip in Civil Engineering & Surveying</i>	
3	Kyambogo University	Bachelor of Civil & Building Engineering	
		HD in Civil & Building Engineering	
		Dip in Civil & Building Engineering	
		OD in Water Engineering	
4	Internationa University of East Africa	B.Sc in Civil Engineering	
		Dip in Civil Engineering	
		Dip in Water & Sanitation Engineering	
5	Uganda Martyrs University – Fort Portal Campus	Dip in Water Engineering	
6	Ndejje University	B.Sc in Civil Engineering	
7	Uganda Christian University	B.Sc in Civil & Environmental Engineering	Support to UCU would be effectively & efficiently delivered
		PDG Water & Sanitation	
		M.Sc Water & Sanitation	
8	Gulu University – Constituent Colege Lira	B.Sc in Civil, Building & Environmental Engineering	

9	Kabale University	Bachelor of Civil & Building Engineering	Staffing levels are low More lecture rooms, laboratories and workshop recommended
		Dip in Civil & Building Engineering	Re-accreditation of course awaits NCHE approval after verifying staffing & equipment
10	Muteesa I Royal University	Dip in Civil Engineering	
11	Kampala International University	B.Sc in Civil Engineering	ERB & UIPE assessed programmes submitted through NCHE Recommended accreditation after
			major corrections are done & verification visits
		Dip in Civil Engineering	-do-
S/N	University	Water Related Courses	Remarks
1	Kampala International University	Bachelor of Civil & Building Engineering	It has been in operation since 2010 which has enabled the staff well experienced with the course

NB:

- i) All courses at the Universities are approved by the NCHE.
- ii) However, Universities are required by the same NCHE to apply for re-accreditation of ALL courses offered by them after 5 (five) years. This is not a very popular requirement on the part of the universities (mainly because of the requirements for the same).
- iii) A more in-depth analysis and understanding of the differences in the naming and course contents of the different degree and diploma programmes are essential. This shall facilitate the decisions about which institutions to support and / or collaborate with.
- iv) Examinations & Industrial Training
- v) The staffing levels noted above are those as given by the universities themselves. There is need to go deeper and establish the employment status of each named staff (whether on permanent/temporary/part time basis).
- vi) Understandably, it is tough for training institutions to update and modernise some of their training facilities mainly because of the rapid technological advancements as well as the attendant costs involved/required. Hence evidence, from each training institution, of their strong partnerships and/or collaboration with the private sector should be established.

✓ Water related programmes in higher education – Technical Institutions

- No. of technical institutes
- Courses offered
- Capacity – Staffing, equipment etc

S/N	Name of Institution	Water Related Courses	Remarks
1	UTC Elgon	National Diploma in Civil Engineering (NDCE) Higher National Diploma in Civil Engineering (HNDCE)	More staff required to handle increased enrollment.
2	UTC Lira	National Diploma in Civil Engineering (NDCE) Higher National Diploma in Civil Engineering (HNDCE)	More staff required to handle increased enrollment.
3	UTC Kyema	National Diploma in Civil Engineering (NDCE)	More staff required to handle increased enrollment.
4	UTC Bushenyi	National Diploma in Civil Engineering (NDCE)	More staff required to handle increased enrollment.
5	UTC Kichwamba	National Diploma in Civil Engineering (NDCE)	More staff required to handle increased enrollment.
6	St Benedict Technical College Kisubi	National Diploma in Building & Civil Engineering	More staff required to handle increased enrollment. Conduct of practicals by hiring of equipment or attaching students to NWSC very expensive
7	Buganda Royal Institute of & Technical Education	Dip in Civil Engineering	More staff required to handle increased enrollment.

NB:

- i) Traditionally, the practice of Civil Engineering covers, among others, Water Resource Engineering (which includes Water Supply & Sanitation, Irrigation & Drainage, and Flood Control). Therefore, holders of NDCE and HNDCE should be readily deployable to handle those specific technical areas at those levels.
- ii) However, there is a concern that currently there is little coverage of water related topics at Diploma levels i.e. included in only one course unit on Building Services. Therefore, there is need to include a course on Water Supply & Sanitation which should cover necessary rural water supply technologies, and urban water and sanitation systems.
- iii) The NCHE Regulations require that “Each course shall have at least two permanent or contract members of academic staff”. Given that there are 19 Core Courses and 4 Real Life Projects (i.e. one per semester, and each carrying 4 Credit Units), the Departments of Civil Engineering should each have about 19 staff members to handle 250 students (i.e. assuming an annual intake of 125 students) over an academic year.

- iv) The NCHE also requires that academic staff must possess a qualification which is at least one level higher than the students taught. In all the UTCs, there were no lecturers with HNDCE.
- v) Only UTC Elgon and UTC Lira have introduced HND in Civil Engineering.
- vi) The discovery of oil and gas in Uganda has drawn various attentions including some UTCs which have introduced a course covering those areas. However, NDCE and HNDCE are focussed on producing persons who have the skills to practice within the specific confines of civil engineering. Including a course on oil and gas in the diploma programmes does not make those graduate technicians and technologists professionals in those areas.
- vii) There is a recommendation to the NCHE to the effect that diploma programmes that are run by independent institutions and whose examinations are not by Uganda Business and Technical Examinations Board (UBTEB) should not be named starting with the term “National” as doing so could mislead the public.
- viii) Before the enactment of the BTVET Act in 2008, UNEB was the examining body for all courses conducted by the UTCs because those courses were developed by the National Curriculum Development Centre (NCDC). The Regulations establishing UBTEB, drawn from the BTVET Act 2008, gave it the mandate to conduct examinations for Specialised Institutions (e.g. Agricultural Colleges, Tourism Institute, Meteorology Institute, Survey Institute, Cooperative College etc). Presently, however, UBTEB also conducts examinations for all courses offered by UTCs. There is need to strengthen the examinations / assessments of the WATSAN sector by, among others, collaborating with regulatory and professional institutions (ERB and UIPE).
 - ix)
 - ✓ Water related programmes in higher education – Hygiene and Sanitation
 - No. of Colleges
 - Courses offered
 - Capacity – Staffing, equipment etc
 - ✓ Water related programmes in higher education – Other Initiatives

S/N	Name of Institution	Water Related Courses	Remarks
1	School of Hygiene, Mbale	Diploma in Environmental Health Science Certificate in Environmental Health Science	It's the only public institution High demand for graduates in public & private sector Does not offer outreach programmes presently.

NB:

- x) Only UTC Elgon and UTC Lira have introduced HND in Civil Engineering xi)
 - ✓ Water related programmes in higher education – Hygiene and Sanitation
 - No. of Colleges
 - Courses offered
 - Capacity – Staffing, equipment etc
 - ✓ Water related programmes in higher education – Other Initiatives

Currently, several universities are involved in offering Water related courses at degree level. However, traditionally these courses were offered only in MAK & KYU, which are also the oldest public universities in the country. In the last ten years, other universities (both public and private) have also been accredited to offer similar courses. The results of the findings from engagements with the various universities reveal that the quality of the training and graduates that are churned out vary even though they are awarded the same/similar qualifications. This is attributed to the staffing levels, available training facilities, criteria for selection of the students, conduct and supervision of industrial training, supervision by NCHE, the student/lecturer ratio, staff motivation/remuneration and the role played by professional and regulatory bodies. The common phenomena that run across all the universities offering water-related courses are that the ratio of practical to theory is such that the training is more theoretical, with limited time allotted for practical training. The implication therefore is that there is a deep disconnect between the training offered at universities and the requirement of the labor market.

Given the above, the following HCD framework is proposed for junior professionals in the WATSAN sector.

- More involvement of the private sector and industry in the training of junior water professionals by attaching students for industrial training, participation in course design(content), teaching and presentation of awards to best-performing students as well as offer career guidance.
- The sector should participate in the development of the JDs for people to be recruited to the water sector.

- The professional association and regulatory bodies should play more prominent role in the development of course content, accreditation of universities, monitoring and regulation of practitioners.
- Scheme of service should be developed and adhered to where all junior professionals enter service as pupil engineers for the probationary period of six months (for exposure and mentorship), engineer, senior engineer and principal engineer. In each of these stages the candidates should be subjected to continued professional development programs (CPDs).
- The ERB should develop a catalogue of CPDs and ensure effective implementation by UIPE (the professional body)

Appendix 2: Proceedings from national workshops



NATIONAL STAKEHOLDERS WORKSHOP ON HUMAN CAPACITY DEVELOPMENT IN THE WATER SECTOR

Venue: *Royal Suites Hotel, Bugolobi*

Date: *30th November 2018*

Rapporteur: *Jude Karamura*

Opening Session

1. Arrival/Registration/Introductions

Participants were registered on arrival and their details are here attached as annex 1. As a way of knowing each other, participants were requested to introduce themselves before the beginning of the workshop. The following organizations were represented among others: Austrian Development Agency, GIZ, MWE, MUK, Ndejje University, NWSC, UWASNET, MARS Engineers, Water for People and Amazing Enterprises.

2. Opening remarks

Opening remarks were delivered by two people – Mr Joseph Eritu, Commissioner, Sector Capacity Development, MWE and Prof Bernard Bashaasha, Principal – College of Agricultural and Environmental Sciences, Makerere University.

In his opening remarks, Mr Joseph Eritu welcomed participants to the workshop and apologized for the late start of proceedings but assured members that the organizers will make up for lost time and try to catch up to finish what is on the programme before close of business. He thanked UNESCO for the financial support and Makerere University for accepting to partner with MWE reiterating that cooperation between the Ministry and the academia has been around for a long time. He stated that the ministry through the sector capacity development department values HCD and addresses Capacity development needs at both individual and institutional levels. The intervention by and UNESCO Makerere University will improve Capacity Development in the sector since it comes at a time when Capacity Building Plans are in advanced stages of preparation. The initiative will therefore feed perfectly into these plans. It was expected that the workshop will provide for productive recommendations to help improve on the document being prepared by Makerere University for UNESCO.

On his part (*in remarks read for him by Prof Philip Nyeko*), Prof Bernard Bashaasha expressed gratitude for the commitment and dedication from the participants for the process of identifying the critical areas of Human Capacity development in the water sector. He gave a brief background to the initiative under which the workshop was organized stating that it stems from AU/NEPAD's desire to create Water Centres of Excellence in Africa with support from UNESCO and the EU.

3. Objectives of the workshop and overview of HCD

Overview

Dr Yazidhi Bamutaze (PhD) presented to the participants an overview of the Human Capacity Development Framework for Uganda and a detailed background to the ACEWATER II HCD component which was building from ACEWATER I that saw the establishment of the Water Centre of Excellence for Western and Southern Africa regions. Acewater II seeks to extend the network of Centres of Excellence to include the Central and Eastern Africa region.

He explained that the genesis of all this was the AMCOW declaration of 2013 on Human Capacity Development and subsequent nomination of the NEPAD CoEs to address the sector capacity challenges.

He gave an update on the ACEWATER II HCD project and the progress in the development of the HCD Framework for Uganda and the necessity for the workshop. He also gave the objectives of the workshop thus:

Objectives

- Identify/review the HCD issues in the water sector in Uganda
- Validate the results from the desk study
- Prioritize HCD intervention areas at two levels
 - Junior and senior
 - Vocational and technical

4. Group discussion and Feedback

The participants were grouped in three to discuss issues of concern and far as human capacity development gaps are concerned. Three groups were formed and after discussions feedback was recorded as below:

4.1 Group 1:

Group 1 reported back the following from their discussion:

- Inter-sectorial/interdepartmental coordination is weak or lacking in some instances
- Staffing gaps in the structures of the ministry
- Quality of training is lacking and no necessary tools for service delivery(this affects output
- Retooling of experts – with technological advancement, experienced people are rendered ineffective if they cannot fit in the tech market
- Over reliance on contractors and consultants has lead to limited opportunity for skill development among staff (force on account kind of work would help).
- Maintenance capacities - basic skills for maintenance activities are lacking in a wide range of water actors

4.2 Group 2:

Group 2 presented their discussion on the basis of the capacity gaps and how they present challenges to: access to water, water quality/safety and functionality

Access: -project planning and management skill

 -Investment financing skills

 -Procurement skills

Functionality: - develop a standardised quality assurance manual addressing maintenance and repairs, quality of construction material and workmanship, Safety: -faecal sludge management skills

-environmental and social safeguards skills

-water sampling testing and analysis

-bulk water management skills

-catchment protection skills

4.3 Group 3

Group 3 said that they had focussed their discussion on the Human resource component of the capacity gaps and therefore reported the following:

- Gaps between academia and the sector needs, no balanced representation in current coordination efforts
- Mismatch between available jobs and the qualifications required (job descriptions vs the available training)
- Low prioritisation of HCD; weak strategies for professional development, no succession plans, no mentorship programs, appraisal process has gaps
- Existing orientation program not well structured
- Focus hardware vs software - programmes not well integrated

5. Results from Desk study and Insights from Field Visits

Two presentations were made to highlight findings on the Human Capacity Development gaps as identified by Makerere University from two activities. These activities were the desk study and field visits and interviews with a select sample of personnel and departments in the sector.

6. Desk study review

Findings of the desk study review were presented by Prof. Moses Tenywa. He said that the desk study had identified several capacity development gaps. The ministry has excellent policies as is the case for many institutions in Uganda but they are not followed to achieve their intended goal and objective. The following are highlight from the presentation (*attached in annex 4*)

- Inadequate hands-on skills among junior professionals
- Limited specific skills to execute management roles
- Poor performance management skills
- Gaps in information and knowledge management

- Limited provisions for support in catchment management
- Communication and stakeholder engagement and management • Gaps in water resource management skills
- Challenges related to political economy.

5.1 Insights from fields visits

Field visits were conducted at the ministry headquarters as well as the different Water Management Zones (WMZ) that is Kyoga, Lira, Mbarara and Fort Portal. Interviews and interactions with personnel at these WMZs were conducted with the aim of identifying their capacity development gaps. The following gaps were identified.

- Inadequate professional skills amongst personnel
- Training in alternative livelihoods is highly needed
- Skills of engaging communities and community involvement
- Leadership skills and refresher training courses
- Low staffing levels in all units
- Training to retool personnel – project management, M&E, information sharing

Other capacity development needs identified are to do with communities being able to appreciate water services and identifying alternative use for wetlands that are sustainable. There is need to set up and implement succession plans in administration as well as technical roles.

- Training programs have been determined by the supply side but this should be changed to address the demand side (carry out comprehensive needs assessment)
- Ministry activities should be coordinated across departments and units to harmonise interventions
- Need for training in Performance Contract management
- Some units felt that some positions in the structures are not filled eg Engineer position in Umbrella organisations

Other limitations identified include: inadequate funding, office space, transport provision, tools for work (equipment and instrumentation), low morale/ incentivisation due to delayed contracts for staff.

7. Way forward

The facilitator guided the participants through the prioritisation and ranking of the capacity gaps identified during the group discussions.

It was a tall order to agree on the criteria for ranking and in the end it was agreed that all the gaps were essential to be handled for the capacity development need of the sector to be effectively covered. 18 issues were identified in the first round and after analysing the 18 some were found to

be repetitions or subsets of the other. After analysing the issue the team narrowed them down to 12 issues for ranking.

The issues were grouped into two with the idea that the first six are the most pressing issues. The issues were further sorted according to whether they were appropriate for the higher cadre of professional – junior and senior professional (**U**), and the lower cadre professionals – technicians (**L**) or both (**U,L**).

The issues were identified and ranked as below.

13. Leadership. Succession plan – leadership response to retirement. U, L
14. Performance management and reward of staff nonrevenue water i.e performance indicators U,L
15. Integrated water-resources management. Catchment Management Building capacity of communities to identify alternatives to using wetlands, natural resources, water. Environment and social safe guards – U,L
16. Technical skills ie maintenance - U,L Water modelling skills
 - Designing of fecal sludge
 - Water sampling, testing and analysis
 - Retooling of experts
17. Communication and stakeholder engagement/ Stakeholder engagement eg communities , private sector U
18. Information and knowledge management. U
19. Governance – water integrity, transparency, accountability and participation. U
20. Project management ie proposal writing, data analysis, report writing, monitoring and evaluation. U
21. Procurement – quality of construction materials U
22. interdisciplinary and multidisciplinary approach to issues (holistic approach to handling issues i.e. engineers, sociologists integration of holistic solutions) U
23. Investment financing U
24. Resource sustainability (Policy review and formulation)**

8. Closure

The workshop was ended with closing remarks delivered by Mr Joseph Ebitu. He thanked the participants for having fully dedicated their time for the workshop. He noted that the knowledge gather throughout the workshop would be incorporated in the document that Makerere University is working on and will immensely improve the Human Capacity Development work in progress.

He informed the participants that in future they may be called upon again to help review and finetune the document so that it is representative of the sector capacity gaps. Hopefully the work being done will go a long way in improving the Human Capacity Development need of the sector.

He thanked UNESCO for the support and Makerere University for the work being done under this project.



NATIONAL FRAMEWORK FOR HUMAN CAPACITY DEVELOPMENT IN THE WATER AND SANITATION SECTOR

Validation Workshop

Venue: Imperial Royale Hotel, Kampala

Date: 30th April 2019

Rapporteur: Jude Karamura

1. Session 1 - Opening Session

Participants were registered on arrival and their details are here attached as annex 1. As a way of knowing each other, participants was requested to introduce themselves before the beginning of the workshop. The following organizations were represented among other: DPs - ADA, MWE, MUK, Ndejje University, UIPE UWASNET, Wana Consultants, UNESCO, Youth Coalition Affairs, MUBS, Nakawa VTI, NWSC and Amazing Enterprises.

1.1 Introduction and workshop objectives – Joseph Epitu

This workshop is organized as follow up to the one held on 30th November 2018 at Royal Suites, Bugolobi. It that particular workshop stakeholders reviewed the finding from a desk study and gave feedback that helped Makerere University finalize a draft HCD framework submitted to UNESCO.

The purpose of this workshop is to validate the draft framework by seeking views and input of participants. This will help us finalize the framework which will be used a resources mobilization tool for the implementation of Human Capacity Development program.

A cross section of invited participants include key stakeholders in the water and sanitation sector. Thank you for making the time to attend this workshop. It is expected to generate fruitful deliberations.

1.2 Opening remarks –

The opening remarks were delivered by three (3) people, namely:

1. Dr. Dominic Lali Mondrugo – Ag Secretary General – National Commission of UNESCO;
2. Prof. Fred Babweteera – representing the Principal, CAES and
3. Eng Disan Ssozi representing the Permanent Secretary MWE.

In his remarks, the Ag Secretary General – National Commission of UNESCO welcomed members in their distinguished capacities and expressed pleasure for being a participant in the workshop. He noted that the water and sanitation

sector is unique in the sense that it has a wide range of professionals. This diversity calls for such capacity development interventions to address the various Human Capacity Development needs.

He added that UNESCO@30 years (celebrating 30 years of UNESCO in 1975 started the International Hydrological Program (IHP). IHP has evolved through several strategies and is currently in the 8th Phase (IHP8). He indicated that IHP 9 is currently under preparations and outlined the various proposals the Ugandan team has made to the international community for inclusion in IHP 9.

The opening remarks from Makerere University were delivered by Prof Fred Babweteera on behalf of the Principal of College of Agriculture and Environmental Sciences. He said that MUK was privileged to be part of the process of preparing the HCD framework. The workshop is meant to look at how far we have moved in the process. He thanked UNESCO for the financial support, MUK and MWE for their coordination and various contributions and members present for honoring the invitation. He expressed confidence that the workshop was going to yield fruitful results.

The remarks from the MWE were delivered by Eng. Disan Ssozi on behalf of the Permanent Secretary. He thanked MUK-CAES for the partnership and UNESCO for the financial resources. MWE recognizes the need for HCD framework which he said will contribute to the current Capacity Development strategy developed by the ministry in 2013. He noted that collaborations between the ministry and training institutions will help bridge the existing human capacity gaps and contribute to development of quality human resource.

2. Session 2 – The Framework

Concept of Human Capacity Development Framework – Joice Nakalema

Ms Joice Kalema - The consultant (Contour) presented the concept of the HCD framework giving the background and what is contained in the framework. She mentioned that the framework has four (4) areas of consideration namely:

- Training needs assessment
- Preparation and design of the Capacity Development interventions
- Implementation/actual training

- Monitoring/recheck/reflect/change

This builds a robust framework that does not leave out any section of the intended target

She said that the current workshop is building on the earlier one held at Royal Suites Bugolobi in November 2018 and validates priorities set therein.

She invited Dr Yazidhi Bamutaze to give a brief presentation on developments in the process since the last workshop.

2.1 From Royal Suites to Imperial Royale – Dr. Yazidhi Bamutaze

Dr Yazidhi Bamutaze presented a brief analysis what has taken place in the process of developing the HCD Framework from the time of the workshop at royal suites to date.

- The team has finalized and submitted a draft framework to UNESCO and received feedback of the draft
 - The available information on training programmes and courses offered at institutions both vocational and universities was not adequate.
 - There was need to reflect on the outcomes of the November workshop and the agreed point
 - This workshop therefore is supposed to validate the draft framework by building consensus and ownership. Finally we are expected to craft an acceptable way forward.
 - The outcome of this work will be a HCD framework for the sector. The expected deliverables for today's workshop
- Shortlist of HCD priorities
 - Course development including potential institutions
 - Implementation plan for the HCD framework
 - Demonstrated buy-in by government and stakeholders

2.2 Presentation of the framework - Progress in the development of HCD Framework – Eng. Henry Okinyal

A presentation of the framework was made by Eng Henry Okinyal. In the presentation he outlined the Purpose or objective of the framework as well as its

scope. The sources of information used in the development of the framework were given.

An overall analysis of the sector HCD scenario was presented to the participants along the lines of sector players, observed gaps in HCD, opportunities and challenges.

The proposed framework for HCD for Junior professional and Technicians has seven (7) key strategies in which MWE desires to work with Universities, training institutions and other stakeholder to attain cross cutting capacity development. In the same spirit he presented the strategies for HCD at Senior Professional level and the M & E framework.

2.3 Feedback from Participants/Discussion – Joice Nakalema

Participants gave several responses and feedback following the presentation of the framework. These are outline hereunder:

- i. The M&E framework need to be reviewed and enhanced to handle the required scope of the framework. Additional work to be done in this area
- ii. CPD programs are essential in the formative years of the professional i.e. first 3 or 5 years after graduation. In the same spirit, it was proposed that as part of capacity building strategies, critical assignments that are being sent to consultants most of the time should be left to Ministry staff as a way of building their capacity and encouraging research. The idea of attachment of junior professional to industry – Contractors, Consultants – should be revived and propagated since it serves to ground young professionals before entering the sector.
- iii. There should be a distinction between formal education and experiential training.
- iv. The nomenclature of the professionals and their categorization (technicians, junior, senior professional) should consider including all levels in the sector. Certification of these professional such as plumbers should be considered. For example the Gaba Training facility could be used for the purpose. Stakeholders like Uganda Plumbers Association could be brought on board

- v. Research themes at Universities should be targeted at finding solutions sector problems/challenges. The annual sector performance report should be used as a source of such research themes.
- vi. The sector is Water and sanitation but water seems to be given more attention at the expense of sanitation. There should be a wider reflection of the framework to determine how all the subsectors like environment, forestry, water, sanitation are involved.
- vii. Clarification on who owns or who is responsible for implementing the framework was sought from participants. This was clarified the Ministry of Water and Environment will be charged with the implementation of the framework as this is meant to improve Human Capacity Development in the ministry.
- viii. The categorization of Junior professional assumes that graduates have a certain level of understanding when they leave university. However, this may not be the case as different Universities handle students differently. This call for strict course accreditation processes and harmonization of course content both for bachelors and diploma programs.
- ix. A strong recommendation on distinction of what goes on in universities should be made and courses found to be lacking on content should be stopped. That said, the framework should not be a restructuring document but serve as a guide to institutions, universities to do what they do with the aim of maximizing benefits to the sector.
- x. The framework should serve to propel the sector to another level – *(capture the pain the sector is facing)*

2.4 Taking Stock – Dr Yazidhi Bamutaze

The moderator of the workshop thanked participant for the for the positive feedback noting that judging from the feedback, there is still a lot to be done especially in the area of M&E. He pledged to collect all the information put forward, have it checked and appropriately incorporated in order to arrive at a more relevant document for the sector.

2.5 Closing remarks

In his closing remarks Eng Dr. Charles Wana Etyem thanked NEPAD-AU-UNESCO for the initiative of developing a HCD framework for the water Sector. He said that the private sector has a different perspective from that of the Public sector practitioner and therefore they should be involved to capture their perspective. Key stakeholders that are not represented should be brought on board; for example, MoES, MoFPED, MoLSD and ERB. Working together will help us achieve more.

Appendix 3: Attendance for the validation workshop held on 30th April at Imperial Royale Hotel

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ATTENDANCE

STAKEHOLDERS VALIDATION WORKSHOP FOR THE NATIONAL FRAMEWORK ON HUMAN CAPACITY DEVELOPMENT FOR JUNIOR, TECHNICIAN AND SENIOR PROFESSIONALS IN THE WATER AND SANITATION SUB SECTOR IN UGANDA 30TH APRIL 2019 AT IMPERIAL ROYALE HOTEL, KAMPALA

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Appendix 4: Survey instrument

RESEARCH STUDY ON HCD FOR TECHNICIAN, JUNIOR AND SENIOR PROFESSIONALS IN THE WATER AND SANITATION SECTOR IN UGANDA

Introduction

The Ministry of Water and Environment, in collaboration with Makerere University College of Agricultural and Environmental Sciences (CAES) and with the support from UNESCO program: *NEPAD African Network of Centres of Excellence on Water Sciences and Technology (ACEWATER Phase II): Human Capacity Development (HCD) Component*, is conducting a study on HCD for technical, junior and senior professionals in the water and sanitation sector in Uganda. The findings of the study will contribute to the preparation of the national framework on HCD for the mentioned category of human resources in the sector, including an implementation, monitoring and evaluation framework.

You are therefore requested kindly to contribute to this study by filling this questionnaire depending on the records available in the department and your personal opinion where necessary.

The questionnaire consists of five short sections.

NB: Some questions may not directly apply to your organisation but your own opinion to them will be highly appreciated.

Thank you very much.

SECTION I

DESCRIPTION OF EXISTING HCD ACTORS IN THE WATER AND SANITATION SECTOR IN UGANDA

(i) Who are the main actors involved in HCD for technical professionals in the WATSAN sector in Uganda? (i.e. government, main donors, private sector, NGOs/CSOs?)

.....
.....
.....
.....

(ii) What is the current legal framework for HCD for technical professionals in the WATSAN sector in Uganda (institutional and legal framework)

.....
.....
.....
.....

(iii) Are there any national initiatives you know concerning HCD for technical professionals in the WATSAN sector in Uganda

.....
.....
.....
.....

(iv) What are the major challenges encountered in HCD for technical professionals in the WATSAN sector in Uganda

.....
.....
.....
.....

(v) What are the strengths and weaknesses of the current HCD practices for technical professionals in the WATSAN sector in Uganda?

Strengths

Weaknesses

.....

.....

.....

SECTION II

SHORT DESCRIPTION OF HCD EXISTING CAPACITY FOR HCD FOR TECHNICAL PROFESSIONALS IN THE WATSAN SECTOR IN UGANDA

(i) What are the existing training providers in HCD for technical professionals in the WATSAN sector in Uganda? Give a short description of each training institution.

Sno.	Technical

(ii) What are the existing programmes, number of students, number of teachers and infrastructure for HCD for technical professionals?

Sno.	Category of Professional	Current Programmes	No. of Students	No. of teachers	Available Infrastructure
1.	Technical				

(iii) What are the existing capacity Gaps for HCD for technical professionals in Uganda

Sno.	Technical

(iv) What are the key priority areas in HCD that require further strengthening?

Sno.	Technical

RESEARCH STUDY ON HCD FOR TECHNICIAN, JUNIOR AND SENIOR PROFESSIONALS IN THE WATER AND SANITATION SECTOR IN UGANDA

Introduction

The Ministry of Water and Environment, in collaboration with Makerere University College of Agricultural and Environmental Sciences (CAES) and with the support from UNESCO program: *NEPAD African Network of Centres of Excellence on Water Sciences and Technology (ACEWATER Phase II): Human Capacity Development (HCD) Component*, is conducting a study on HCD for technical, junior and senior professionals in the water and sanitation sector in Uganda. The findings of the study will contribute to the preparation of the national framework on HCD for the mentioned category of human resources in the sector, including an implementation, monitoring and evaluation framework.

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NB: Some questions may not directly apply to your organisation but your own opinion to them will be highly appreciated.

Thank you very much.

SECTION I

DESCRIPTION OF EXISTING HCD ACTORS IN THE WATER AND SANITATION SECTOR IN UGANDA

(vi) Who are the main actors involved in HCD for junior and senior professionals in the WATSAN sector in Uganda? (i.e. government, main donors, private sector, NGOs/CSOs?)

.....
.....

(vii) What is the current legal framework for HCD for junior and senior professionals in the WATSAN sector in Uganda (institutional and legal framework)

.....
.....

(viii) Are there any national initiatives you know concerning HCD for junior and senior professionals in the WATSAN sector in Uganda

.....
.....

(ix) What are the major challenges encountered in HCD for junior and senior professionals in the WATSAN sector in Uganda

.....
.....

(x) What are the strengths and weaknesses of the current HCD practices for junior and senior professionals in the WATSAN sector in Uganda?

SECTION II

SHORT DESCRIPTION OF HCD EXISTING CAPACITY FOR HCD FOR JUNIOR AND SENIOR PROFESSIONALS IN THE WATSAN SECTOR IN UGANDA

(v) What are the existing training providers in HCD for junior and senior professionals in the WATSAN sector in Uganda? Give a short description of each training institution.

Sno.	Junior Professionals	Senior Professionals

(vi) What are the existing programmes, number of students, number of teachers and infrastructure for HCD for junior and senior professionals?

Sno.	Category of Professional	Current Programmes	No. of Students	No. of teachers	Available Infrastructure
2.	Junior Professionals				
3.	Senior Professionals				

(vii) What are the existing capacity Gaps for HCD for junior and senior professionals in Uganda

Sno.	Junior Professionals	Senior Professionals

(viii) What are the key priority areas in HCD that require further strengthening?

Sno.	Junior Professionals	Senior Professionals

Appendix 5 M&E

Indicator Information Sheet Template

Indicator Protocol Reference Sheet Number: I
Name of Indicator:
Result to Which Indicator Responds:
Level of Indicator:
Description
Definition:
Unit of Measurement
Plan for Data Acquisition
Data Collection Method:
Data Source:
Frequency and Timing of Data Acquisition:
Individual Responsible:
Location of Data Storage
Data Quality Issues
Known Data Limitations and Significance:
Actions Taken or Planned to Address this Limitation:
Internal Data Quality Assessments:
Plan for Data Analysis, Review & Reporting
Data Analysis:
Review of Data:
Using Data : <i>Where must the data from this indicator go? Funders? Internal / external decision makers. Who needs this information to make decisions?</i>
This sheet was last updated on:
Other notes / comments:

Target Setting Worksheet

Indicator:	Year One			Year Two			Year Three			Notes:
	Baseline	Target	Actual	Baseline	Target	Actual	Baseline	Target	Actual	

Costing for M&E

Key M&E Activities (Survey, Focus Group, Data Base Development, M&E Plan Development, Dissemination, Data Quality Assessment)	Salaries	Consultant	Travel	Meetings	Documentation	Dissemination	Other Direct Costs e.g. computers software	Activity Subtotal
M&E Activity 1								
M&E Activity 2								
Total								