



MINISTRY OF WATER AND ENVIRONMENT

DIRECTORATE OF WATER RESOURCES MANAGEMENT

UPPER NILE WATER MANAGEMENT ZONE

ALBERT NILE CATCHMENT MANAGEMENT PLAN

POPULAR VERSION



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INTRODUCTION

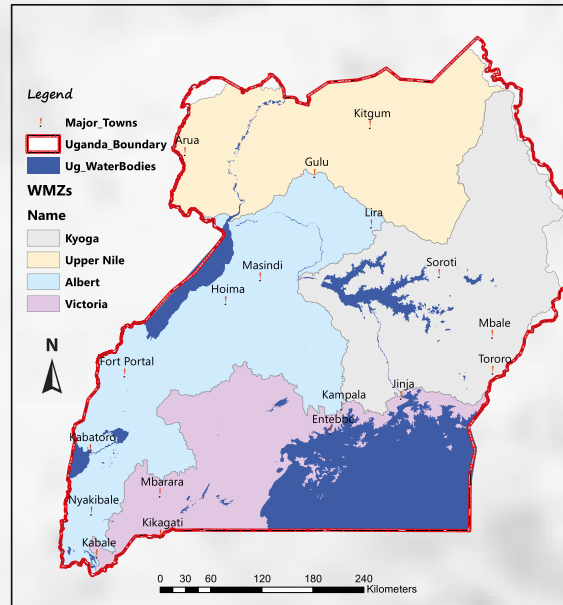


Figure 1: Water Management Zones

Sustainable water resources management and development needs to be informed by the current and projected water demands, challenges, risks, threats, and opportunities in a particular catchment as well as management issues and environmental pressures. This information provides guidance in formulation of development and management activities meant to resolve conflict, conserve and protect the catchment and its natural resources, and ensure equitable access to and sustainable use of water resources; a Catchment Management Plan (CMP). This popular version of the CMP for the Albert Nile Catchment provides a summary of the main CMP and has been prepared for use by various stakeholders.

1.1 Catchment Planning (CbWRM in Uganda)

The Directorate of Water Resources Management (DWRM) is implementing Catchmentbased Water Resources Management (CbWRM) as part of its water resources management reforms. This process deconcentrates management of water resources along hydrological units called catchments; areas that contribute water to a common outlet and are, therefore, independent of administrative boundaries. The CbWRM links the management of land, water, ecosystems,

and socio-economic systems, and allows to plan towards using water resources effectively and efficiently to achieve long-term sustainable development by balancing growing water demands with limited water resources amidst the unique challenges, risks, and threats within the catchment. As part of the CbWRM framework, Uganda has been divided into four Water Management Zones (WMZs): Upper Nile, Albert, Victoria, and Kyoga as shown in Figure 1.

Each of the WMZs contains a number of catchments and the Albert Nile lies within the Upper Nile Water Management Zone. The CbWRM recognises that many water use and management issues are interrelated, and is founded on early, open and inclusive stakeholder involvement. DWRM is the institutional lead for all CbWRM aspects, including stakeholder involvement, at national level. The WMZs coordinate CbWRM at regional level, but most important is the Catchment Management Organisation (CMO) that promotes coordination and integrated planning among stakeholders in the catchment. Thus, the CMO is a platform that brings together stakeholders in the catchment for planning and coordination of the development and implementation the CMP as shown in Figure 2.

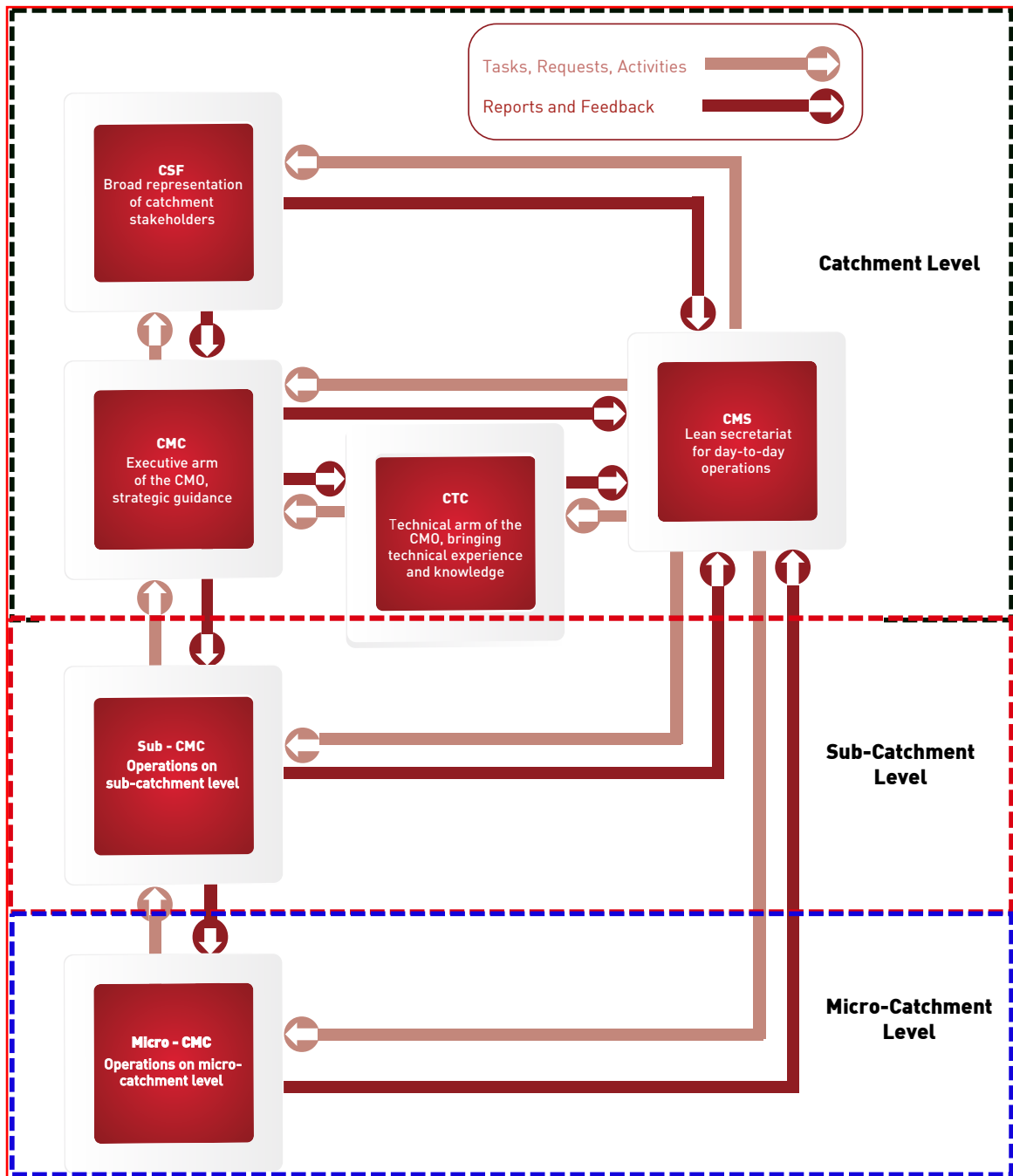


Figure 2: Relation between the different elements of the Catchment Management Organisation

1.2 Purpose and Objective of the CMP

The purpose of this CMP is to provide guidance for the sustainable development and management of the water resources in the catchment by the stakeholders in an integrated manner.

The objective of the CMP is to provide information and shared motivation that will initiate interventions and/or investments, which can be implemented to realise sustainable management and development of water resources within the catchment.

1.3 Approach to Catchment Management Planning

The development of this CMP was based on the guidelines for Uganda's Catchment based Water Resources Planning (MWE, 2014). The process stipulated in these guidelines provides for various steps including development of a knowledge base, water resources planning analysis, stakeholders' participation, and social and environmental context as indicated in Figure 3. From these thematic assessments, major issues/challenges within the catchment, the

available opportunities, potential threats and risks are identified, options for managing the identified issues also identified, and this forms the basis for strategic analysis in order to meet the catchment vision and objective. A set of agreed interventions are then mapped and an implementation plan laid, constituting of the associated timing and costs, to form the main body of a Catchment Management Plan (CMP) and the Implementation Plan.

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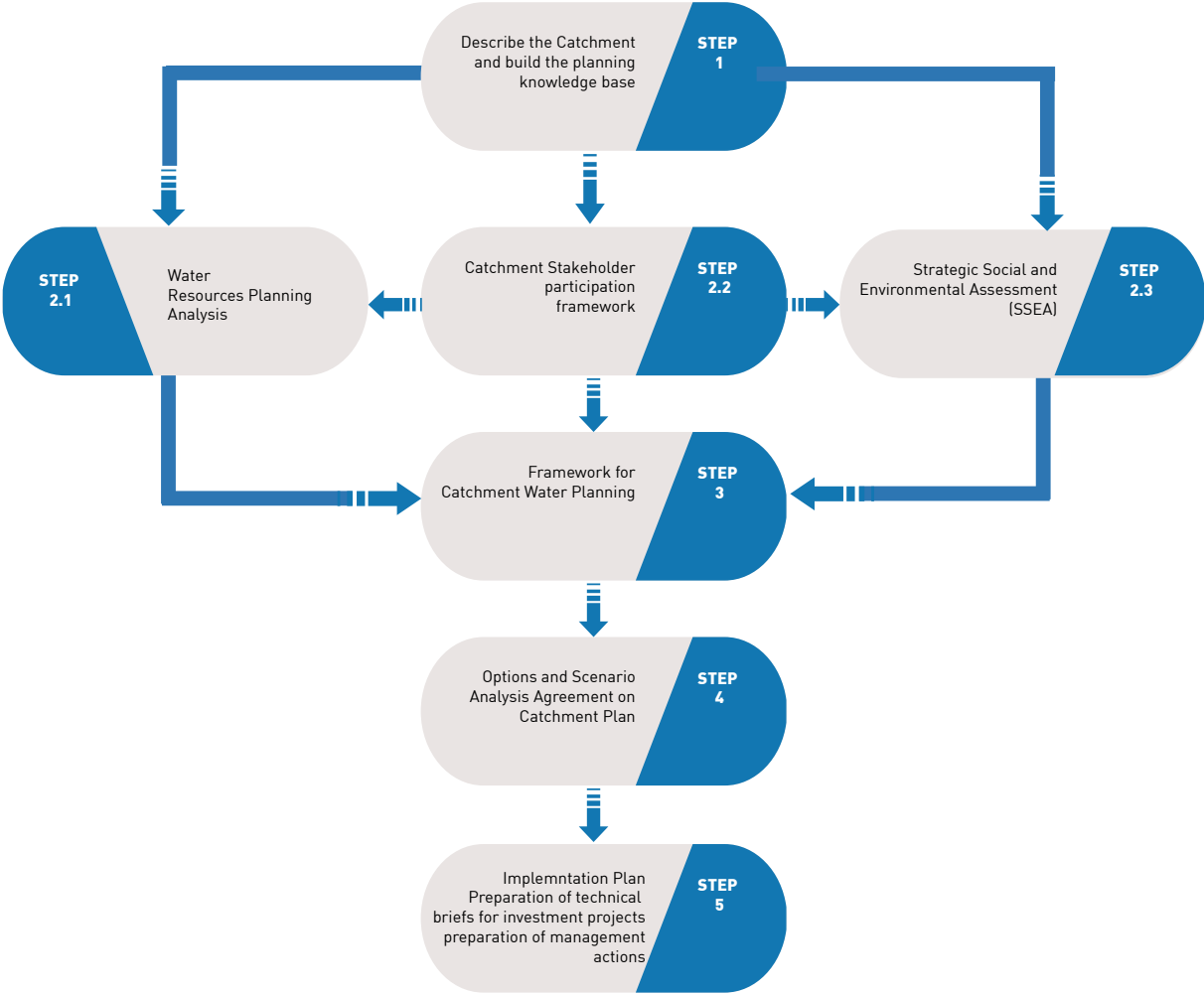


Figure 3: Catchment management planning process (MWE 2014).



White Nile out of Lake Albert

2

STATUS OF THE CATCHMENT

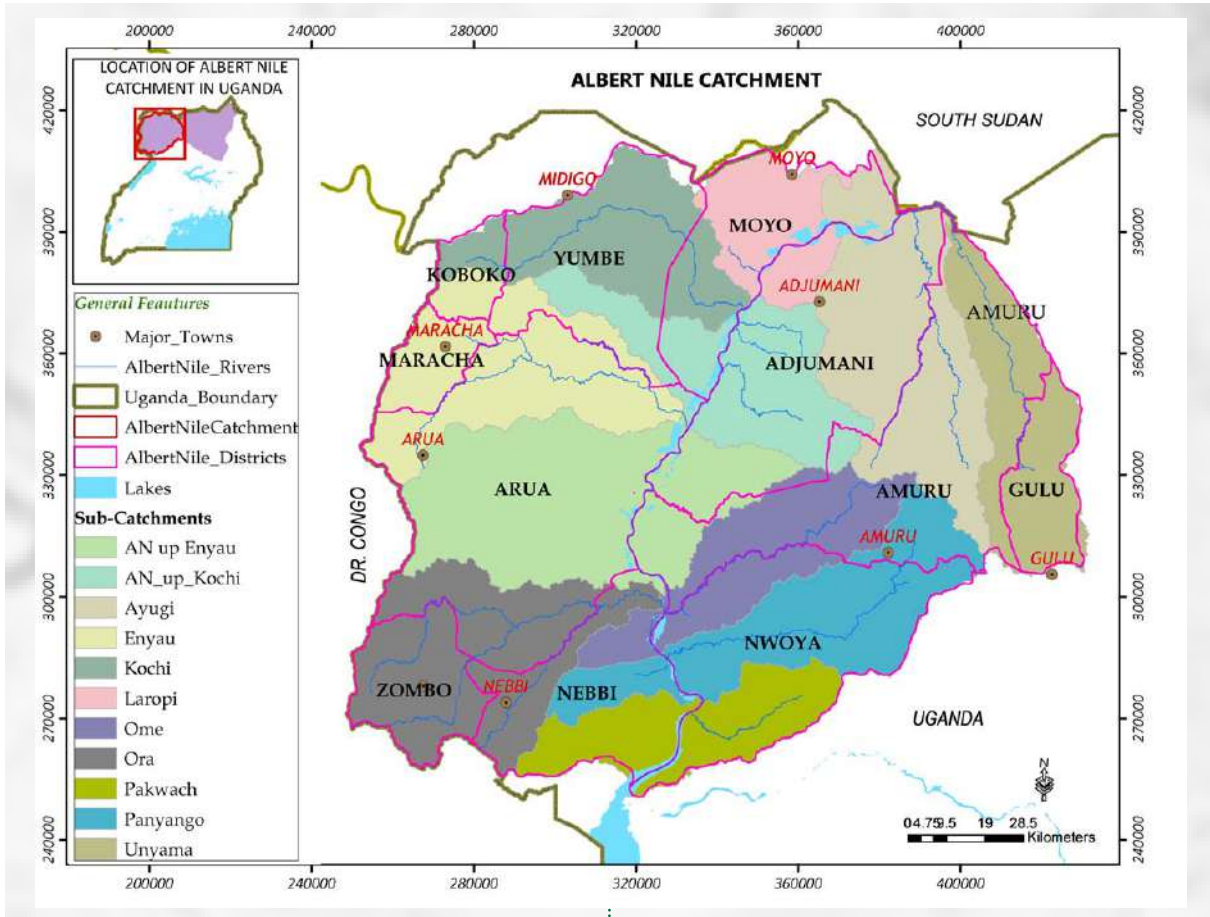


Figure 4: The Albert Administrative areas and sub-catchments

2.1 Catchment Description

The Albert Nile River starts at the outflow of Lake Albert and follows the western arm of the East African Rift Valley into South Sudan, where it joins the Aswa River and becomes the Bahr el Jebel or White Nile River. Thus, the Albert Nile Catchment is located in Upper Nile Water Management Zone (UNWMZ), starting at the outlet of Lake Albert and runs through the northern part of Uganda up to the South Sudan border. It drains an area of 21,234km² from the West Nile and Northern Uganda, covering 11 districts of Adjumani, Amuru, Arua, Gulu, Koboko, Maracha, Moyo, Nebbi, Nwoya, Yumbe and Zombo in part or whole as shown in Figure 4.

The Albert Nile is dominated by subsistence farmland, followed by natural forests (woodlands and tropical high forests) and grasslands. Natural forests (includes the categories of NFA land cover tropical forest and woodlands) in Albert Nile cover

about 5728km² constituting about 26% of the total catchment area. Forest plantations have a very limited coverage, representing 0.2% of the catchment area.

There exists a dense network of wetlands in the Albert Nile, mainly along the river course, covering an area of 1,750km² which is about 8% of the total catchment area, 4.5% of which is permanent wetlands and 3.5% seasonal/temporary wetlands. Vegetation cover along the eastern side of the Albert Nile is dominated by bush land, thickets, and woodland while the western side of the river up to the border with Democratic Republic of Congo (DRC) is dominated by small/subsistence croplands vegetation.

Various protected areas are present along the Albert Nile and in particular on the eastern side, including a Sanctuary (Otzi White Rhino

Sanctuary), Wildlife Reserves (WR), Central Forest Reserves (CFR), and the Murchison Falls National Park to the southern end of the catchment area; the latter is designated a Ramsar site.

The Albert Nile Catchment registers a single rainfall peak with an average annual rainfall of about 1,200mm, the highest single annual amount being slightly more than 1,400mm and the lowest being about 1,100mm. The mean monthly rainfall pattern for the entire catchment is shown in Figure 5. The Maximum temperatures (31-33°C) are registered between January and March while the lowest (27-29°C) are between July and August. The mean temperature during the year within

the entire catchment is about 24°C. This area experiences high rates of evapotranspiration which has a resultant effect on runoff, groundwater recharge and dry season flows, increasing drought risks.

2.2 Water Resources Potential

The water resources assessment conducted provides the water resources availability under the current hydrological conditions, and that under climate change projections for the year 2040. The current annual average overall surface water available is 4,764MCM/Yr while groundwater recharge is estimated to be 2,257MCM/Yr, as shown in Figure 6.

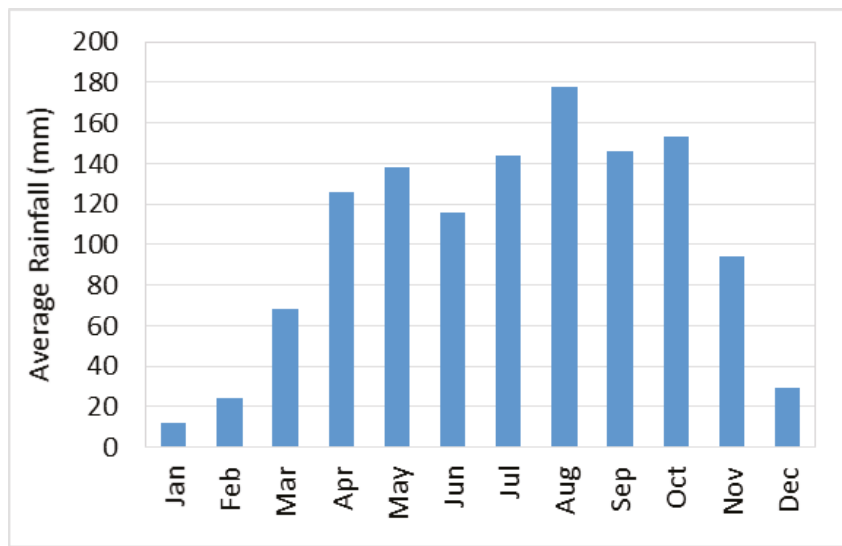


Figure 5: Mean Monthly Rainfall Pattern

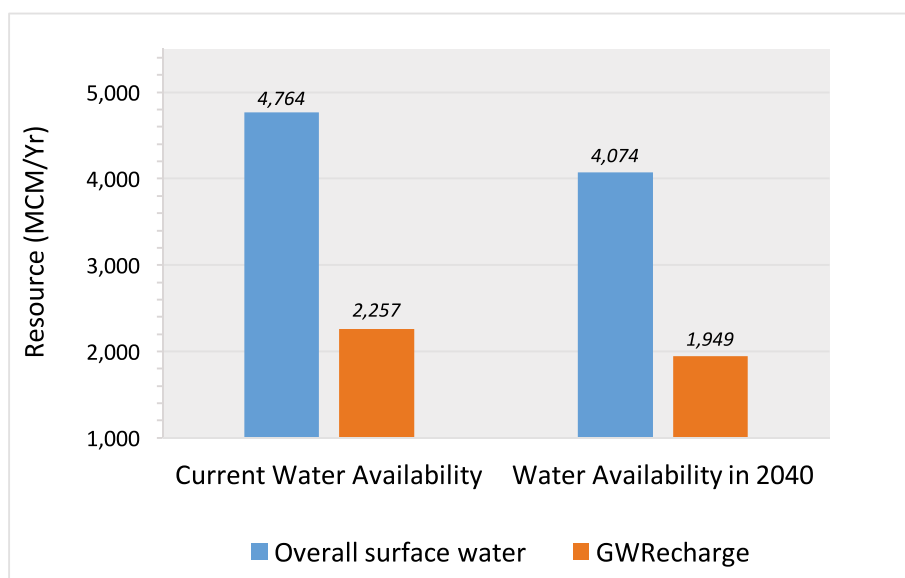


Figure 6: Available Water Resources in Albert Nile

Overall, there is general reduction in water resources available in 2040 (climate change projections) when compared with the current average hydrological conditions.

2.3 Water Demand and Water Balance

The current and projected water demand within the Albert Nile Catchment was categorised based on the user category, with the main categories considered being;

- a) Water for people/Domestic water
- b) Water for production, includes Water for Crops, Livestock, Industry, and Energy.

The gross water demand for each category from surface or groundwater shows that water for production is the highest with Water for crops and Water for Livestock registering the highest

amounts, Figure 7.

Comparing the current annual average water availability (4,764MCM/Yr) with the total water demand (182 MCM/Yr) depicts the fact there is sufficient water within the catchment. The projected water demand (1,808MCM/yr) is 44% of the projected water availability, Figure 8. These water availability figures are inclusive of the River Nile flows and are therefore skewed considering the fact that the Nile waters are trans-boundary in nature

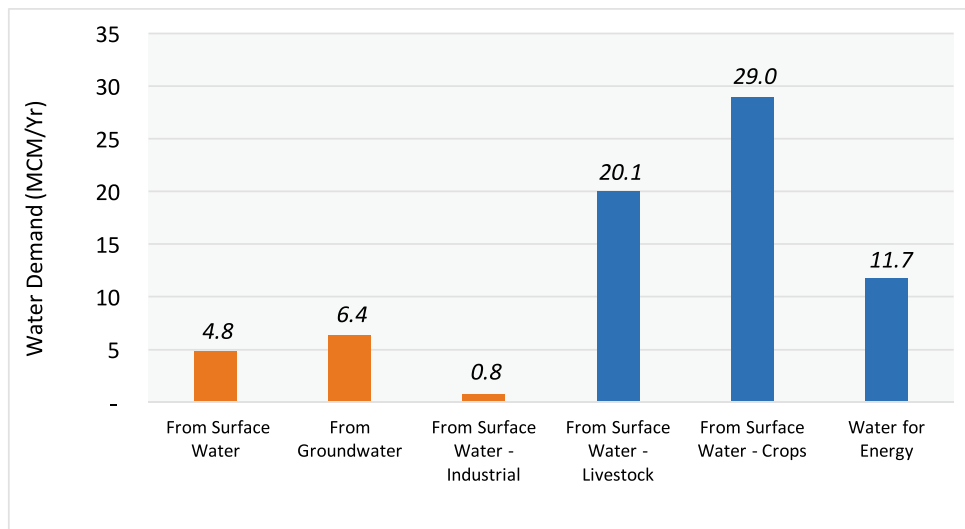


Figure 7: Gross Water Demand

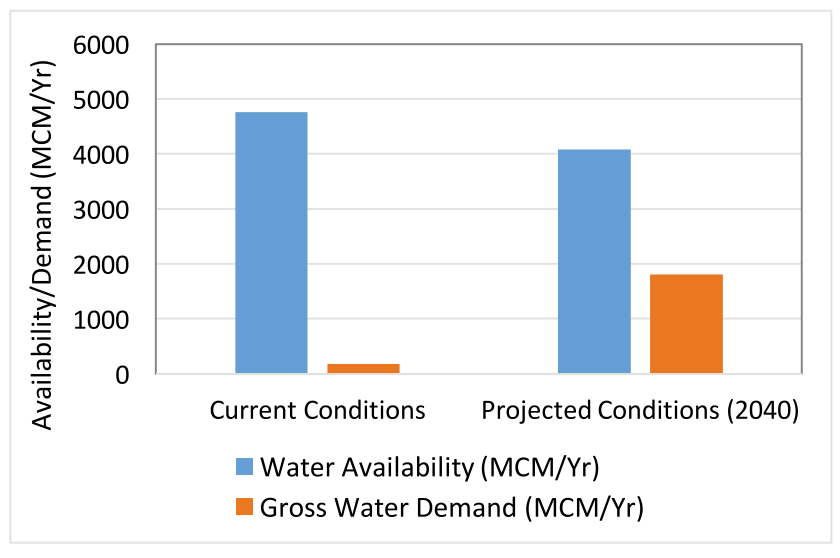


Figure 8: Water Availability Vs. Demand

2.4 Key Stakeholders

During the development of the CMP, various stakeholders were involved through all processes highlighted in Figure 3 mainly through meetings and

field visits. These stakeholders, categorised in Figure 9, will continue to be engaged during the implementation of the CMP. During



Figure 9: Stakeholder Categories



Surface water monitoring station



Water storage in refugee settlements

2.5 Key Catchment Issues

Issues within the Albert Nile catchment have been grouped in four main categories that are part of the four strategic areas (in addition to the governance issues) as shown in Table 1 namely Water for People, Water for Production, Water for Energy, and Water for Environment.

Table 1: Key Catchment Issues

GOVERNANCE ISSUES	WATER RESOURCES ISSUES
<ul style="list-style-type: none"> • Limited enforcement of WRM regulation and lack of compliance with existing standards • Weak operationalisation of IWRM at WMZ and catchment levels • Limited integration of IWRM into sectoral and local planning frameworks • Inadequate hydro-meteorological monitoring network • Inadequate water quality monitoring network and laboratory facilities • Inadequate groundwater monitoring network • Inefficient WR/WQ information management system • Limited harmonisation of institutional mandates between national and local government bodies and agencies • Limited inter-agency cooperation and collaboration • Weak stakeholder engagement • Inadequate institutional capacity • Inadequate technical capacity and lack of tools for water resources allocation • Low level of awareness • Insufficient funding for CBWRM • Limited effective criteria for water resources allocation (high value water use). 	<p>WATER FOR PEOPLE Water Supply and Sanitation</p> <ul style="list-style-type: none"> • Availability, Storage, Infrastructure, Contamination, Insecurity, Facilities, Sludge, WWTP. <p>WATER FOR PRODUCTION Agriculture and Industry</p> <ul style="list-style-type: none"> • Availability, Storage, Irrigation Infrastructure, Contamination, Insecurity. <p>WATER FOR ENERGY</p> <ul style="list-style-type: none"> • Availability, Storage. <p>WATER FOR ENVIRONMENT</p> <ul style="list-style-type: none"> • Ecosystem, Anthropical pollution, Land degradation, Floods, Droughts, Extreme events.



Oyitino dam, Gulu NWSC water source

3

CATCHMENT VISION AND OBJECTIVES

A catchment vision is meant to present a collective, medium-to-long term desired future state of the catchment from which strategies that are realistic and locally attainable can be derived. The vision for the Albert Nile Catchment was adopted from the Upper Nile WMZ Water Resources Development and Management Strategy, which was developed with extensive stakeholder engagement and in response to the main issues and catchment driving factors.








VISION

A sustainable, equitable and effective water resources management and development for socio-economic transformation by 2040 for the Albert Nile Catchment



In order to achieve this vision, nine (9) strategic objectives, arranged in five categories as outlined below were formulated;

SUB-STRATEGY		STRATEGIC OBJECTIVE
Water Governance		1. Equitable, participatory and accountable water governance for sustainable and inclusive growth and development.
Water for People		2. Universal and sustainable access to safe water supply 3. Universal and sustainable access to improved sanitation and hygiene.
Water for Production		4. Sustainable use, development and management of water resources in Agriculture, Livestock production, Fishery and Aquaculture, Forestry 5. Sustainable use, development and management of water resources for Agro-industry, Industrial production, Oil and Gas 6. Sustainable use, development and management of water resources for Other Sectors (tourism, transportation, security).
Water for Energy		7. Sustainable use, development and management of water resources for renewable energy production.
Water for Environment		8. Conservation of ecosystem services and functions 9. Mitigation of effects of extreme climatic events.

4

ANALYSIS OF OPTIONS

4.1 Potential Options

Options are possible measures/interventions used to address (a) given issue(s) in a catchment, and they can be management and development in nature. Potential options were identified, primarily based on the type and criticality of issues identified and they were organised in three main categories to solve/manage issues related to;

- Availability and access to water resources
- Environmental and social sustainability and resilience
- Water governance.

Table 2: Key Options

Category	Key options (others provided in the CMP report)
Availability and access to water resources	Water supply schemes, community water storage facilities, large multipurpose water storage facilities, sewage collection and wastewater treatment plants in urban areas, constructed wetlands, monitoring and control of WWTP discharge, bulk water diversion for large scale irrigation water supply, irrigation technologies for water conservation (sprinklers and drip irrigation), afforestation and agroforestry, groundwater withdrawal, renewable energy from hydropower
Environmental and social sustainability and resilience	Atlas of Water Resources, river restoration, water use efficiency and water conservation, flood/drought preparedness and response, reconstruction, rehabilitation and stabilisation of degraded waterways, pollution prevention and control.
Water governance	Water Resources monitoring network, Water Resources Information System, water use efficiency, affordable technologies for CBWRM, community based management schemes for small water supply schemes and point water sources, community based management schemes for village water storage facilities (valley dams, valley tanks), Stakeholder engagement and involvement of community based organisations.



Bridge washed away by a flood in Unyama subcatchment in the Albert Nile

5

CATCHMENT ACTION PLAN

5.1 Implementation Plan

The implementation plan highlights the agreed investments in infrastructure and various water management interventions and actions meant to help resolve conflict, conserve and protect natural resources, and ensure equitable access to and use of water resources within the catchment. These management and investment actions were organised into 10 programme areas. "A programme being defined as a group of related projects managed in a coordinated way to obtain benefits and control not available from managing them individually. Programmes may include elements of related work outside of the scope of the discrete projects in the programme." These programmes are;

Programme 1: Geo-database and GIS Atlas: Create a GIS infrastructure to support data storage, exchange, and information management of Albert Nile Catchment. Develop technical guidelines, protocols and specifications for GIS-database population and management of spatial information.

Programme 2: Information Management System: Collect, access, analyse and share a wide range of information for the purposes of evaluating water resources and operational management.

Programme 3: Water Resource Monitoring: Collect, access, analyse and share a wide range of information for the purposes of monitoring water resources and operational management. Expand and upgrade the hydro-meteorological monitoring network, hydrogeological monitoring system and WQ monitoring system. Develop an Environmental Monitoring Programme on water bodies (SW and GW) to determine their ecological state.

Programme 4: Water Resource Knowledge Base: Implement and maintain a comprehensive knowledge base on Water Resources and Water Resources management through the archival of reference documents and information (paper and digital document).

Programme 5: Water Resource Planning and Regulation System: Establish and maintain the Upper Nile WMZ Modelling Unit, improve and expand the water permit management system in the WMZ/Albert

Nile Catchment. Develop water source protection plans and promote integrated pollution prevention and control in the Upper Nile WMZ.

Programme 6: Water Sector Infrastructure & Facilities: Expand the water supply infrastructures for full coverage of urban and rural population and increase water storage capacity for domestic water supply in areas with seasonal deficits. Rehabilitate and improve functionality of existing water for production storage facilities and develop underground water storage for production in areas with water deficit. Expand irrigation schemes. Improve sanitation and hygiene facilities and implement WWTP or alternative wastewater treatment method. Develop water supply facilities using groundwater sources in areas with good potentialities for groundwater resources exploitation.

Programme 7: Multipurpose Water Storage Facilities: Define and operationalise a Technical Standard for design, implementation and management of multipurpose water for production storage facilities, storage facilities including recreational functions and including hydropower.

Programme 8: Integrated Water and Land Management: Promote water efficiency practices (water conservation, reuse, recycling), promote irrigation water efficiency and water conservation agricultural practices, and promote optimisation of water for production uses and reuse of treated wastewater for landscaping, green areas and other uses. Ensure appropriate environmental flows in water bodies, establish and maintain a water demand management system, promote integrated land and water management and enforce riverbanks protection zones. Increase preparedness to severe climate events (flood / drought).

Programme 9: Stakeholder engagement and participatory IWRM: Stakeholder engagement mechanism developed and established at the WMZ/Catchment level. Raising awareness on wise use of water resource and on waste management.

Programme 10: Technical Capacity Building: Training activities of Catchment/WMZ technical staff, organisations

¹ Source: Project Management Institute Glossary <http://www.pmgloss.com/about/>

and stakeholder engagement at local/community. The description of each programme shows the general activities for implementation common to

the catchment, while Table 5 shows the specific activities specific to areas within the catchment.

Table 5: Specific Interventions

Sub-program	Action to be implemented	Prioritised area
Water Supply infrastructure and service	Develop a programme for design, construction and operationalisation of new piped water supply schemes to cover 100% of urban population Develop a pre-feasibility study for design, construction and operationalisation of new water storage facilities for drinking water supply in sub-catchments with seasonal water deficit	Large urban centres of Arua, Koboko, Nebbi Albert Nile, AN_up_Enyau and Enyau (main towns Arua), Kochi (main towns Koboko and Yumbe) and Unyama (main town Gulu) Maracha, Arua, Zombo, Gulu, Amuru districts.
Water for Production facilities	Develop and implement a GIS based programme for rehabilitation and management of existing water for production storage facilities and infrastructure Develop a pre-feasibility study for design, construction and operationalisation of new irrigation schemes in suitable areas Define and operationalise a set of technical standards for developing intensive and semi-intensive aquaculture facilities, including provisions for water efficiency, water quality and protection of biodiversity Develop study for detail design, construction and operationalisation of new water for large production storage facilities (multipurpose) in sub-catchments with seasonal deficit Develop and operationalise a technical standard for installation and operation of rainwater harvesting installations at village and household level	Nebbi, Zombo and Arua districts. Ora, Enyau and Kochi sub-catchments in the eastern part of Albert Nile Catchment. Ora, AN_up_Enyau, Enyau, AN_up_Kochi, Kochi sub-catchment. Ora, AN_up_Enyau, Enyau, AN_up_Kochi, Kochi, Pakwach sub-catchment. Ora, AN_up_Enyau, Enyau, AN_up_Kochi, Kochi, Pakwach sub-catchment.
Sanitation infrastructure and service	Improve sanitation and hygiene facilities in rural and urban areas, mainly in the areas with highest population density in Albert Nile Catchment Implementation of WWTP or alternative wastewater treatment method (e.g. lagoon).	Arua and its surroundings, Maracha District, Koboko TC and Yumbe TC and their surroundings, Paidha TC, Nebbi TC, Pakwach, Nebbi TC and Paidha TC, Arua, Koboko TC and Yumbe TC, Gulu, Adjumani.
Multipurpose Water Storage Facilities	Define and operationalise a set of technical standards for developing integrated tourism and fresh fish-processing and market facilities along the Nile river	Areas of Albert Nile Catchment along the Nile river.
Multipurpose Water Storage Facilities	Define and operationalise a set of technical standards for developing eco-tourism facilities	Protected areas of Albert Nile (in AN_up_Kochi, AN_up_Enyau, Laropi sub-catchment) especially along the Albert Nile River.
Water Efficiency	Define and operationalise a set of technical standards for standards for water efficiency (conservation, reuse, recycling) for recreation and other uses based on best practices	Protected wetland area of AN_up_Kochi, Kochi, AN_up_Enyau, Ora, Ome Sub-catchments, impounded area of large multipurpose to be implement.
Integrated Water and Land Management	Based on the updated land cover of NFA, develop and implement a programme for creating a green infrastructure system to protect ecosystems, ecologic corridors and natural landscapes in the water bodies Based on the updated land cover of NFA, develop and implement a programme for creating a green infrastructure system to protect ecosystems, ecologic corridors and natural landscapes and support livelihoods in the cattle corridor	Protected wetland area (Land Cover of NFA) of AN_up_Kochi, Kochi, AN_up_Enyau, Ora, Ome Sub-catchment. Areas of cattle corridor (Land Cover of NFA) in Albert Nile i.e in AN_up_Kochi, Kochi, AN_up_Enyau, Enyau, Ora, Panyango, Pakwach and Laropi sub-catchment.
Water Efficiency	Define and operationalise a set of technical standards for water efficiency (conservation, reuse, recycling) for recreation and other uses based on best practices.	Protected wetland area of AN_up_Kochi, Kochi, AN_up_Enyau, Ora, Ome Sub-catchments, impounded area of large multipurpose to be implement.
Integrated Water and Land Management	Based on the updated land cover of NFA, develop and implement a programme for creating a green infrastructure system to protect ecosystems, ecologic corridors and natural landscapes in the water bodies Based on the updated land cover of NFA, develop and implement a programme for creating a green infrastructure system to protect ecosystems, ecologic corridors and natural landscapes and support livelihoods in the cattle corridor	Protected wetland area (Land Cover of NFA) of AN_up_Kochi, Kochi, AN_up_Enyau, Ora, Ome Sub-catchment. Areas of cattle corridor (Land Cover of NFA) in Albert Nile i.e in AN_up_Kochi, Kochi, AN_up_Enyau, Enyau, Ora, Panyango, Pakwach and Laropi sub-catchment.

5.2 Funding Requirements

A summary budget for implementation of the Albert Nile CMP is presented in the table below:

Table 6: CMP Funding Requirements

Programme/ Sub-programme	2017-2020 US\$ '000	2020-2025 US\$ '000	2025-2040 US\$ '000	Total cost US\$ '000
Programme 1: Geo-database and GIS	310	19	58	388
Programme 2: Information Management System on WR	464	29	87	580
<i>Sub-Programme 1: Information Management System on Water Bodies</i>	69	4	13	86
<i>Sub-Programme 2: Information Management System on Water Supply and Sanitation Facilities</i>	277	17	52	347
<i>Sub-Programme 3: Information Management System on Water for Production Facilities</i>	117	7	22	147
Programme 3: Water Resources Monitoring	4,838	302	907	6,048
Programme 4: Water Resources Knowledge Base	4,330	271	812	5,412
<i>Sub-Programme 1: Improve and Expand the Knowledge Base on Water Resources</i>	1,038	65	195	1,297
<i>Sub-Programme 2: Improve and Expand the Knowledge Base on Water Infrastructures and Facilities</i>	2,640	165	495	3,300
<i>Sub-Programme 3: Integrated Knowledge for Management of Water Resources</i>	526	33	99	657
<i>Sub-Programme 4: Knowledge Management and Exchange</i>	126	8	24	158
Programme 5: Water Resources Planning and Regulation System	1,229	77	230	1,537
Programme 6: Water Sector Infrastructure and Facilities	86,972	528,450	1,585,350	2,200,772
<i>Sub-Programme 1: Water Supply Infrastructure and Service</i>	21,271	127,626	382,877	531,774
<i>Sub-Programme 2: Sanitation Infrastructure and Service</i>	36,754	220,526	661,579	918,860
<i>Sub-Programme 3: Water for Production Facilities</i>	28,946	180,298	540,893	750,138
Programme 7: Multipurpose Water Storage Facilities	7,936	97,215	291,646	396,797
Programme 8: Integrated Water and Land Management	1,351	8,104	24,313	33,769
<i>Sub-Programme 1: Water Efficiency</i>	26	156	469	651
<i>Sub-Programme 2: Environmental Flows and Reserve Management System</i>	19	112	336	467
<i>Sub-Programme 3: Integrated Water and Land Management</i>	1,284	7,704	23,112	32,101
<i>Sub-Programme 4: Resilience to Climate Variability and Change</i>	22	132	396	550
Programme 9: Stakeholder Engagement and Participatory IWRM	50	302	905	1,257
<i>Sub-Programme 1: Stakeholder Engagement and Participatory IWRM</i>	12	69	207	288
<i>Sub-Programme 2: Awareness Raising</i>	39	233	698	970
Programme 10: Technical Capacity Building	69	413	1,240	1,722

5.3 Sources of Funds for Implementing the CMP

The implementation of the CMP plan will require funding from different sources, according to the type of action/intervention and of the relevant sectors involved in the implementation. These include mainly five sources:

1. Water and Environment Sector Budget; with the Ministry of Water and Environment supporting implementation of the CMP programmes and sub-programmes as the lead agency. Other relevant line ministries may also support parts of the CMP.

2. Joint Partnership Fund (JPF); a pooled fund managed by Ministry of Water and Environment that includes both non-earmarked funding and earmarked funding based on the different bilateral agreements between the GoU and sector Development Partners.

3. Sector Budget Support (SBS); is used to channel funds to the local governments for activities to be implemented at the de-concentrated level, through conditional grants, directly from the treasury/MoFPED to the Local Governments, in line with Uganda’s fiscal de-concentration policy.

4. Off budget operations; forms of government operations that are not fully reconciled with the national budget and sector budget. The main forms of off-budget expenditures are off-budget funds, direct loans, guarantees, and public-private partnerships (PPPs).

5. Private sector investments; Private actors might include either international or national, regional and local operators, as well as joint ventures among private operators with public institutions or utilities are considered as an important tool in Uganda’s plan to bridge the infrastructure financing gap. The PPP Act, passed in 2015, provides methods for procurement and the engagement of private partners in PPPs.

The vital role of not-for-profit organisations (CBOs and NGOs) shall be included in the private sector contribution to the implementation of the catchment WRDM plan

5.4 Roles and Responsibilities

The CMP is implemented by the Albert Nile Catchment Management Organization (CMO) in close collaboration with UN-WMZ. UN-WMZ and/or Albert Nile CMC shall take the initiative and provide guidance to CMP implementation. However, project implementation can be done by any stakeholder willing to contribute funding, knowledge, skills or other resources. Hence, stakeholders ranging from water users to development partners and corporate sector, can collaborate or contribute to the implementation of the CMP. Table 7 summarises some of the roles and responsibilities of stakeholder groups in the implementation of the CMP.

Table7: Roles and Responsibilities

Stakeholder	Roles and Responsibilities
MWE/DWRM/UNWMZ	Coordinate in terms of planning, link national and catchment levels, mobilise funds, supervise CMP implementation, build capacity of the CMOs, and provide institutional and technical assistance to the CMOs.
Albert Nile CMO/CMC	Promote and coordinate CMP implementation, review the CMP on a regular basis, mobilise resources, monitor and evaluate implementation of the CMP, including impact monitoring.
District local councils	Facilitate and support CMP implementation, e.g. through incorporation of prioritised interventions in District Development Plans, actively participate in CMO activities, plan/prepare/implement interventions of the CMP, ensure compliance with the CMP, and support mobilisation of funds.
CBOs, CSOs, NGOs	Raise awareness on the CMP implementation activities, mobilise communities, mobilise resources, and implement parts of the CMP.
Development partners	Mobilise resources, conduct research, prepare proposals, build technical and institutional capacity, support stakeholder involvement, link government with primary users.
Private sector	Establish CMP proof businesses, invest in CMP proof interventions, support mobilisation of funds.
Water users	Align user and management practices with the CMP, and implement CMP projects

6

ACKNOWLEDGEMENT

The Albert Nile Catchment Management Plan was developed by Upper Nile Water Management Zone, of the Directorate of Water Resources Management, Ministry of Water and Environment of the Republic of Uganda, with financial support from the World Bank under the Water Management and Development (WMDP) Project.

Valuable contributions were made by the stakeholders of Albert Nile Catchment during fieldwork and workshops.



A tree planting campaign in Pakwach subcatchment

This popular version of the Albert Nile Catchment Management Plan (CMP) summarises the main findings and the key messages. For more details on the approach, the results of the assessments, the interventions to be implemented, where and when how that implementation will take place, please refer to the main Catchment Management Plan, its corresponding Implementation Plan and the technical reports (Stakeholder Engagement Report, Water Resources Assessment Report, Social and Environmental Assessment, and Options Evaluation Report).

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