



Study on Demarcation of Catchment Management Areas

Consultation Report





- 1. Introduction; Study on the demarcation of CMAs**
- 2. Objectives; Institutional and community consultation**
- 3. Methodology; Stakeholder engagement approach**
- 4. Key findings; Consultation results**
- 5. Final remarks; Main considerations for next steps**



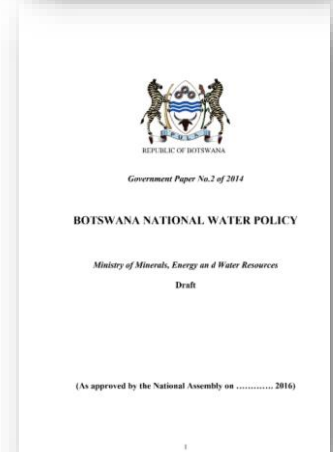
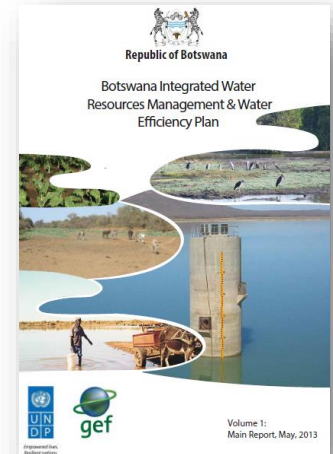
I. INTRODUCTION

BACKGROUND



Botswana Government fosters catchment-based management of water resources, such as in.

- **Integrated Water Resources Management and Water Efficiency (2013) Plan** – strategic outcome to implement a catchment management approach;
 - **Botswana National Water Policy (2016)** - water should be managed at the lowest level through a participatory approach;
 - **Discussion document to inform stakeholder consultation** (SIWI & DWA, 2017);
 - **Study on the Options for Water Resource Management Areas** (CAR & DWA)
- Plans & Policies
- Previous studies





STUDY ON THE DEMARCATION OF CMAs

DWS assigned to NEMUS consulting the consultancy services for the Study on the Demarcation of Catchment Management Areas to:

1. Assess the **best approach and feasibility** of establishing catchment management areas (CMAs) in Botswana.
2. Establishing a **legal and administrative framework** for Catchment Management Committees (CMCs).
3. **Develop a road map** for catchment management areas and define priorities in basin planning and development strategies.



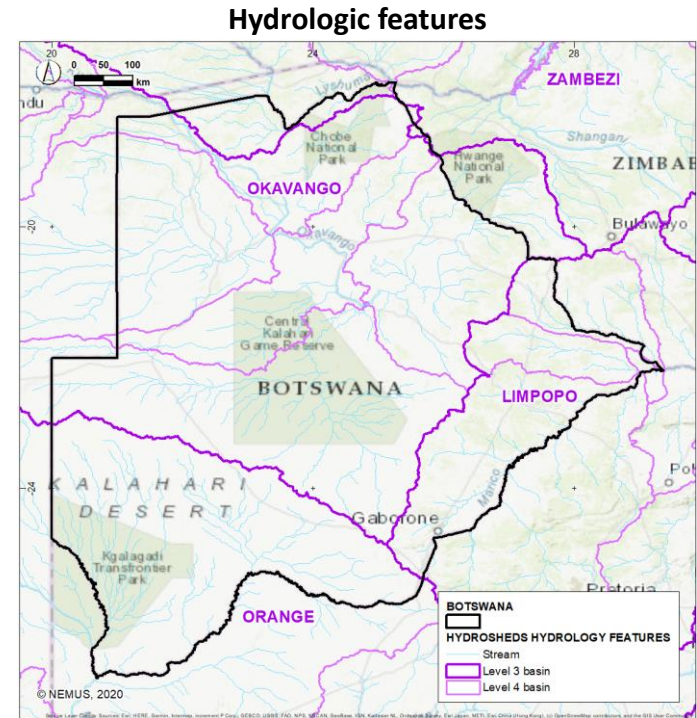
MAIN CONCEPTS

- **Catchment Management Areas (CMAs):**
planning units for managing water resources at the lowest level. The CMAs might be defined upon different criteria considering the physical, administrative and political context;
- **Catchment Management Committees (CMCs):**
decentralised bodies, constituted by representatives of different stakeholders' groups, that will be responsible for local level planning, control and monitoring of the CMAs water resources;

SCOPE OF WORK



- The study will cover the entire country:
 - 582,000 km² of area;
 - 10 administrative districts.
- Wide community and stakeholder consultation.
- Four main components:
 - A. Mapping
 - B. Institutional, public and community consultation
 - C. Institutional/ legal framework
 - D. Communication Strategy





PROJECT OUTCOMES

Deliverables	Main content
Inception Report	Updated work plan and schedule. Extent of and details on the community/ stakeholders consultations to be carried out.
Overlaying of maps	Initial proposed demarcation of the spatial extent of catchments to be up for discussion during the community/ stakeholder consultation.
Stakeholders survey templates	Draft questionnaires and guiding principles to be used in the community/ stakeholders consultation exercises.
Stakeholder/ community consultations	Key findings from the stakeholder and community consultation.
Draft Final Report	Proposed approach for the demarcation of catchment areas with proposed structures of the catchment management committees, implementation roadmap for establishing catchment management areas with financial costing.
Final Report	Stakeholder and client inputs incorporated into the final draft report.



2. OBJECTIVES



CMAs/CMCs CONSULTATION OBJECTIVES

- Essential to fulfill the *Study on the demarcation of CMAs*' specific objectives.
- Ensuring **stakeholders engagement is a key principle** for an effective decentralized water management.
- The institutional and public consultation has 3 main objectives:
 1. **Inquiry the stakeholders' opinion** regarding the proposed catchment management options and identify the best approach;
 2. **Engage different decentralised institutions** and review their capacity for managing water resources;
 3. **Disclose the study** on the demarcation of catchment management areas progress.

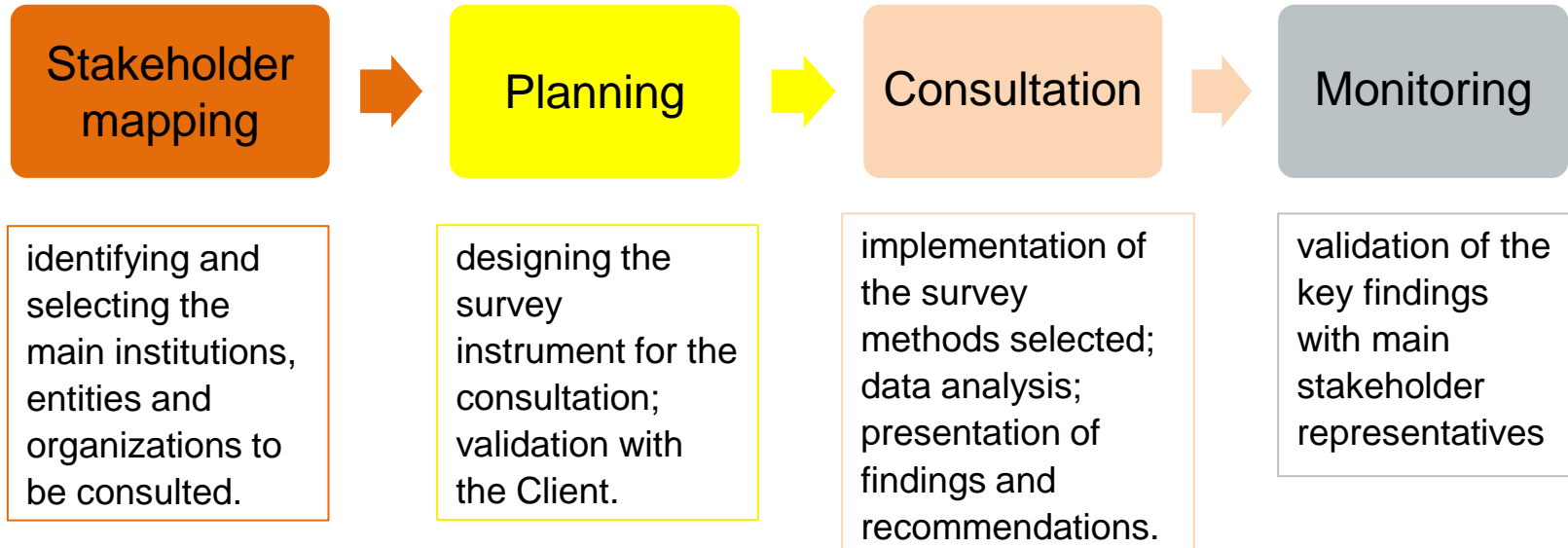


3. METHODOLOGY

CONSULTATION PROCESS



Four step approach:





STAKEHOLDER MAPPING

- Identification (through desk-review; interviews with key stakeholders) and **analysis of the institutions/actors** that are or may be involved in the CMA approach.
- **50 institutions** (which might be represented by one or more specific entity) were identified. This includes:
 - **Government institutions** with relevance for water management at national and regional level;
 - **Water users** private institutions and civil society representatives;
 - Other specific **representatives of civil society** involved in water management.



PLANNING

Includes the groundwork for information disclosure; construction of the consultation plan; creation of a grievance mechanism.



Consultation method selection based on:
geographical dispersal of stakeholders, time constraints, target groups extent, consultation goals.

Methods selected:

- i) key institutional interviews;
- ii) questionnaires;
- iii) regional meetings (forum and kgotla level);
- iv) nation-wide workshops

CONSULTATION



1	Sept-Nov 2019	Initial Stakeholder Engagement
2	May-July 2020	National Stakeholder Survey
3	Aug-Nov 2020	Regional Forums
4	Dec 2020 Jan 2021	Data process; Consultation Report

INITIAL STAKEHOLDER ENGAGEMENT



Meetings with key stakeholders and national inception workshop to **engage stakeholders early on** in the process.

Scale	Local	Institutions present at each meeting
National	Gaborone	Department of Meteorological Services
		Department of Mines
		Department of Environmental Affairs
		Department of Town and Regional Planning
		Department of Surveys and Physical Planning
		Department of Wildlife and National Parks
		Ministry of Agriculture
		Botswana Association of Local Authorities
		Water Utilities Corporation (WUC)
Regional	Tsabong	Land-Board; District Commissioner; Power Utilities; Umbrella Village Development Committee (VDC) East; VDC West; Department of Water and Sanitation
	Ghanzi	Department of Water and Sanitation
		District Commissioner East; House of Chiefs; Land-Board; Prison; Police; Department of Water and Sanitation; Ministry of Communications; Department of Environmental Affairs; Ministry of Agriculture; Ministry of Education; WUC; Umbrella VDC
		Umbrella VDC Township
		Umbrella VDC Township
	Serowe	District Commissioner
		Umbrella VDC
		Department of Water and Sanitation
		Ministry of Agriculture
	Francistown	District Commissioner
		Department of Water and Sanitation
		Ministry of Agriculture
	Mahalapye	Department of Water and Sanitation; District Commissioner; WUC
	Gaborone	Department of Water and Sanitation



NATIONAL STAKEHOLDER SURVEY

- 96 questionnaires were sent to governmental, technical and academic institutions/ entities and to 20 community/ other main users' representatives; Total 116 questionnaires.
- **85 answers**: 67 from group 1 “Governmental, technical and academic institutions/entities” and 18 from group 2 “Community and other main users’ representatives”.
- Participants from **eight districts**: Central, Chobe, Ghanzi, Kgalagadi, North-West, North-East, South-West and Southern.

REGIONAL FORUMS



- Regional forums took place in **11 locations**: Charles hill, Ghanzi, Maun, Mahalapye, Bokspits, Tshabong, Francistown, Kasane, Gumare, Serowe and Gaborone.



Charleshill, 18th August 2020



Bokspits, 9th September 2020

- 304 participants**; Each meeting had 20 to 40 participants.



Francistown, 6th October 2020



Gaborone, 10th November 2020



PARTICIPANTS OF REGIONAL FORUMS

City/ Village	Nº participants registered	Institutions/ entities represented
Charles hill	40	Botswana Defence Force (BDF); Botswana Power Corporation (BPC); Central Transport Organisation (CTO); Department of Gender Affairs; Department of National Museums and Monuments; Department of Social Protection; Department of Veterinary Services (DVS); Department of Water Affairs (DWS); House of Chiefs; Ministry of Youth, Sports and Culture (MYSC); Sub-District Council; Sub-Land Board; Tribal Administration; Village Development Committees (VDCs); Water Utilities Corporation (WUC);
Ghanzi	34	Civil Aviation Authority of Botswana (CAAB); Department of Crop Production; Department of Environmental Affairs (DEA); Department of Meteorological Services (DMS); Department of Water Affairs (DWS); Department of Wildlife and National Parks (DWNP); Department of Tourism (DOT); District Council; Land-Board; San Youth Network; Police; Tshukudu Metals Botswana Village Development Committees (VDCs); Water Utilities Corporation (WUC);



PARTICIPANTS OF REGIONAL FORUMS

City/ Village	Nº participants registered	Institutions/ entities represented
Maun	26	Department of Animal Production; Department of Crop Production; Department of Environmental Affairs (DEA); Department of Surveys and Mapping (DSM); Department of Water Affairs (DWS); Department of Wildlife and National Parks (DWNP); Farmers Association; Land-Board; Ngamiland Council of NGOs (NCongo); Office of the District Commissioner; University of Botswana; Water Utilities Corporation (WUC);
Mahalapye	26	BIUST; Department of Animal Production; Department of Crop Production; Department of Meteorological Services (DMS); Department of Veterinary Services (DVS); Department of Water Affairs (DWS); Department of Wildlife and National Parks (DWNP); Office of the District Commissioner; Sub-Land Boards; Village Development Committees (VDCs);
Bokspits	20	Department of Water Affairs (DWS); Farmer Association; House of Chiefs; Police; Primary School; Office of the District Commissioner; Tribal Administration; Village Development Committees (VDCs);



PARTICIPANTS OF REGIONAL FORUMS

City/ Village	Nº participants registered	Institutions/ entities represented
Tshabong	21	Department of Crop Production; Department of Water Affairs (DWS); Department of Wildlife and National Parks (DWNP); District Council; Farmers Association; Land-Board; Office of the District Commissioner; Office of the Parliament; Tribal Administration; Village Development Committees (VDCs); Water Utilities Corporation (WUC);
Francistown	21	Francistown South MPS Office; Department of Animal Production; Department of Environmental Affairs (DEA); Department of Surveys and Mapping (DSM); Department of Water Affairs (DWS); National Assembly; Tati Farmers Association; Tonoza Constituency; Water Utilities Corporation (WUC);
Kasane	20	Botswana Tourism Organization (BTO); Community-Based Organisation (CBO) Department of Crop Production; Department of Environmental Affairs (DEA); Department of Meteorological Services (DMS); Department of Tourism (DOT) Department of Water Affairs (DWS); Department of Wildlife and National Parks (DWNP); Land-Board; Office of the District Commissioner;



PARTICIPANTS OF REGIONAL FORUMS

City/ Village	Nº participants registered	Institutions/ entities represented
Gumare	25	Botswana Tourism Organization (BTO); Community-Based Organisation (Okavango Community Trust and Okavango Jakotsha Community Trust); Department of National Museums and Monuments; Department of Physical Planning; Department of Water Affairs (DWS); Department of Wildlife and National Parks (DWNP); Farmers Association; Office of the District Commissioner; Police; Sub-District Council; Sub-Land Boards; Tribal Administration;
Gaborone	26	Birdlife Botswana; Community-Based Organisation (CBO); Department of Crop Production; Department of Water Affairs (DWS); Environmental Heritage Foundation of Botswana; Kalahari Conservation Society; Land-Boards; Ministry of Youth, Sports and Culture (MYSC); Tribal Administration; Village Development Committees (VDCs);
Serowe	25	BIUST; Department of Environmental Affairs (DEA); Department of Meteorological Services (DMS); Department of Water Affairs (DWS); Department of Wildlife and National Parks (DWNP); Community Based Organisation [Khana Rhino Sanctuary Trust]; Land-Board; Lucara Diamond Botswana; Ministry of Agriculture; Umbrella VDC; Water Utilities Corporation (WUC);



4. KEY FINDINGS



KEY FINDINGS FROM INITIAL STAKEHOLDER ENGAGEMENT

1. Water management is a core, important topic within institutions; Special focus on water scarcity and conservation.
2. Water policy review towards integrated water resources management widely accepted.
3. Main challenges for the demarcation of CMAs and CMCs addressed.
4. Stakeholder mapping discussed and complemented.



KEY FINDINGS FROM NATIONAL STAKEHOLDER SURVEY

1. Acceptance of a decentralised water management approach as the most beneficial.
2. Greater representativeness of governmental and technical institutions (both central and regional).
3. Less participation of community-level structures.
4. Draft CMAs and CMCs proposal.



KEY FINDINGS FROM REGIONAL FORUMS

1. More decentralised participation with increased engagement of community-level organisations.
2. Direct communication allowed for a more comprehensive information disclosure.
3. Preferred CMAs demarcation outlined.
4. Agreed CMCs set-up option.



Regional forum in Maun



Regional forum in Ghanzi



IMPLEMENTATION OF DECENTRALISED WATER RESOURCES MANAGEMENT

- Stakeholder opinion gathered in key institutional meetings and regional focus groups discussion reveal that the majority considers **decentralised water management more positive** than a centralised approach.
- Most referred advantages:
 - geographical proximity to water resources leading to quicker response, better understanding of emerging issues, easier monitoring and reduced logistic costs.
 - Empowerment of local communities, increased responsibility.
 - Broader identification of challenges and potentialities.



DEMARCATIION OF CMAs; Questionnaires' feedback (1/2)

- Participants selected one of the proposed options they considered most adequate:
 - Option : Maintain current zones (22%)
 - Option 2: Define CMAs based on administrative boundaries (15%)
 - Option 3: Define CMAs based on the major river basins (39%)
 - Option 4: Define CMAs based on spatial planning regions (18%)

The remaining 6% did not select any option.

Most selected.

Arguments in favor:

- river basins correspond to a broad ecosystem according to which water resources are characterised, thus easing management tasks, such as: monitoring, water allocation, inflow determination, accountability, among others.



DEMARCATIION OF CMAs; Questionnaires' feedback (2/2)

Arguments in favor of Option 1, 2 and 4 (based on different political boundaries)

- Administrative and logistics benefits of using existing governmental and institutional structures (Option 1);
- Planning and project implementation is coordinated by district structures (Option 2);
- implementation of spatial planning regions (National Spatial Plan 2036) is expected to ease management of information/ data at local level, while also allowing for alignment with water resources characteristics (Option 4).



DEMARCATON OF CMAs; Inputs from regional meetings (1/2)

- Considering the survey feedback, it was discussed with DWS to propose Option 3 for discussion in regional meetings.
- The majority of the participants, 70% of a total of 43 focus groups, agree with the demarcation of CMAs based on main river basin boundaries.
- In 9 focus group answers (21%) the participants do not consider this the best option.
- The remaining focus group answers were not clear in their opinion (4 groups resulting in 9%).



DEMARCATATION OF CMAs; Inputs from regional meetings (2/2)

- Most arguments in favor are in line with the questionnaires' feedback;
- One comment added that this model “has been adopted in the SADC region to manage transboundary rivers at local levels”;
- Some concerns were highlighted, such as:
 - need to improve the consideration of hydrological components (surveillance, mapping);
 - some CMAs have a very broad extension



“It can be better demarcated into sub-basins due to the vastness of the areas (challenges and distances)”



SET-UP OF CMCs; Questionnaires feedback (1/2)

Stakeholders were asked about the composition, funding and responsibilities to be assigned to the committees.

	Composition of CMCs
Most selected options	District Councils; VDCs; Ministry of Land Management, Water and Sanitation Services; Ministry of Environment, Wildlife and Tourism; Ministry of Agricultural Development and Food Security; WUC; Livestock and Agriculture sector; and Academia or NGOs
Additional suggestions	Transboundary river basin organisations; Community interest groups; Water Apportionment Board



SET-UP OF CMCs; Questionnaires feedback (2/2)

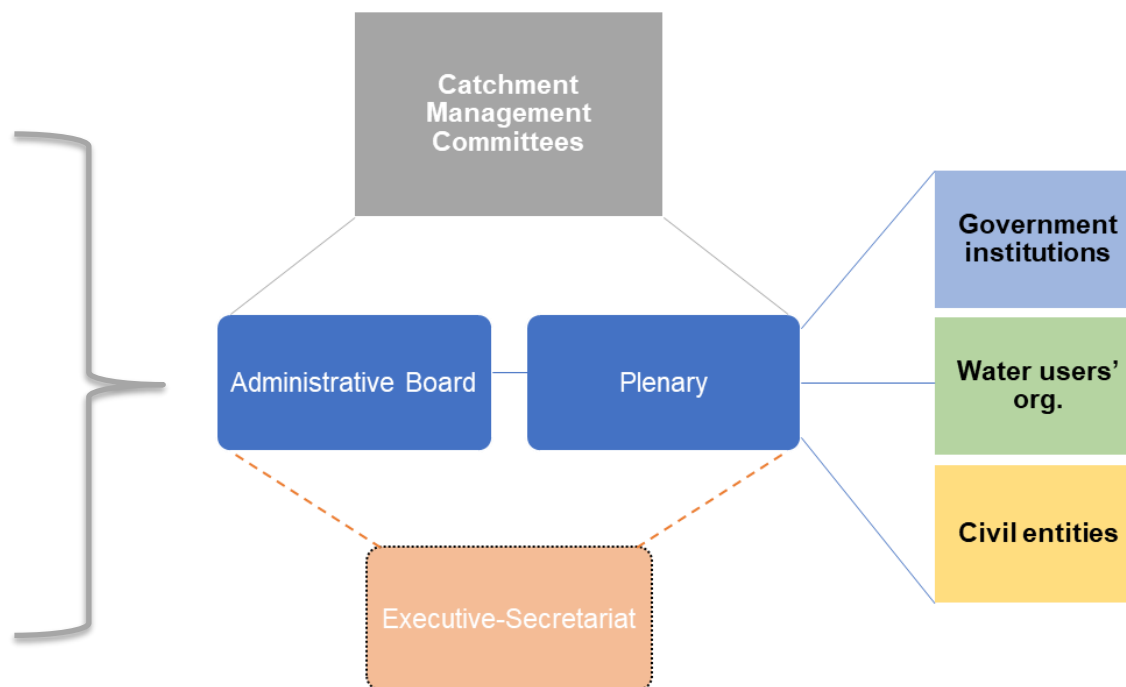
	Funding	Roles and responsibilities
Most referred options	<ul style="list-style-type: none">• fines from polluting activities,• government allowance,• tax applied to main users and main polluting activities• water permits	<ul style="list-style-type: none">• Make recommendations on water allocation;• Oversee and coordinate CMA's;• Advise government on water licensing and monitor licenses issued;• Develop a catchment management area plan;• Regulatory role in issuing water permits and water charges;• Develop capacity-building;• Monitor water quality, water quantity, water abstraction, compliance to water rights use;• Monitor CMCs ecological integrity (habitat loss, encroachment, land uses with negative impact);• Develop and finance CMAs settlements through revenues collected;• Implement protection zones guidelines;• Promote dialogue between water authorities and users;



SET-UP OF CMCs; Inputs from regional meetings (1/2)

Discussion was developed upon a proposed CMC structure draft upon the survey's feedback.

- The large majority agreed with the proposed structure.





SET-UP OF CMCs; Inputs from regional meetings (2/2)

Suggestions were made by the participants:

- Provide incentives for public participation
- Ensure the CMC zone of influence is clear
- Guarantee the committees are legally empowered
- Detail the role of each player and reporting lines
- Additional entities proposed (Department of Environmental Affairs, Departments of Waste Management and Pollution, District Advisory Committees)
- Ensure participation of indigenous knowledge.



INSTITUTIONAL CAPACITY TO PARTICIPATE IN THE CMCs

- Overall perception is that both **public and non-public institutions consider they have the capacity** to contribute for the CMC functioning.
- But most participants did not detail in what extent.
- Despite all stakeholders showing willingness to participate in the committee, some entities in Gumare, Maun and Gaborone, mention they not have the capacity needed to contribute mainly due to lack of staff and other resources.
- Consultation Report provides a comprehensive list of each entity' answers.



CHALLENGES FOR THE IMPLEMENTATION OF CATCHMENT MANAGEMENT

Region	Town/ Village	Challenges
Central	Pahalapye (BIUST)	<ul style="list-style-type: none"> Working in silos
	Mahalapye	<ul style="list-style-type: none"> Water availability, low and unreliable rainfall. Existent infrastructure (eg. dams, pipes, etc.). Water quality. Promptness to respond to emergencies e.g. pipe burst. Water supply through distance areas. Lack of human resources and resources for monitoring. No water source in Mahalapye, reliance from outside. Lack of planning cohesion by local stakeholders/ authorities. Pollution of water. Illegal sand mining leading to destruction of water sources. Lack of integrated approach within industries. Lack of monitoring of water rights. Team work between the committee's members.
	Serowe	<ul style="list-style-type: none"> Community little knowledge about water resources management. Low monitoring of borehole abstraction, quality and quantity in an area with many boreholes. Over abstraction of both surface and groundwater. Weak integration of different water users. Water users (especially the mining sector) adhering to regulations. Entities not regulated take advantage Lack of research in water users and accessibility of data.

Region	Town/ Village	Challenges
Ghanzi	Ghanzi	<ul style="list-style-type: none"> • Contaminations of water due to feedlots farming, waste, use of chemicals etc. (specially in township). • Drying of boreholes due to commercial irrigation farming. • Conflicting water interests between mining and farming. • Ghanzi catchment lies over most of the freehold land which management might be difficult. • Scarcity of water sources especially surface water. • Poor water quality. • Water users not adhering to restrictions/ regulations. • Water pricing very high. • Monopoly of water supply. • Water Act of 1968 is old fashioned and not equitable. • Lack of knowledge about water resources, including on underground hydrological model. • Not everyone has access to water. • District vastness and respective interconnection. • Database on borehole not all available.
	Serowe	<ul style="list-style-type: none"> • Poor distribution of water; Distribution network is a challenge. • Borehole breakdown, depletion of underground water • Groundwater contamination. • Illegal occupation of boreholes, usage of public water stands pipes to supply livestock • Compliance to Water Act (and water rights). • Saline water in some areas, not proper for human consumption. • No dams to harvest remaining water. • Water sources not easily accessible. • Lack of monitoring body, namely on water abstraction. • Conflict between the community and land usage. • Shortage of water in our region. • Illegal pump and disposal of unwanted material.

Region	Town/ Village	Challenges
North-West	Gumare	<ul style="list-style-type: none"> • Insufficient water resources to meet region's demands. • Illegal water abstraction. • Human-wildlife conflict in use of water resources. • Water shortage in villages and settlements. • Water pollution, namely surface water. • Harmonization of land policies and water policies. • Shortage of trained personnel and capacity building on water resources management. • Shortage of equipment/ resources. • Vandalism of infrastructure - both human and wildlife. • Available water infrastructure. • Centralised decision making (Headquarters). • Shortage of resources. • Inconsistent water quality.
	Maun	<ul style="list-style-type: none"> • Distance of some water resources from management centres makes it difficult to monitor. Surface/ river water use monitoring is a challenge. • Invasive species. • Water pollution. • Outdated legislation. • Poor or lack of implementation of set policies and plans. • Clearly outlined schedules to include communities in water management. • Scare water resources to meet competing needs. • Surface water not treated for usage hence lost due to dry. • Human-wildlife conflict due to poor water resources management. • Illegal river sand mining. • Unauthorised river abstraction.

Region	Town/ Village	Challenges
Kgalagadi	Bokspits	<ul style="list-style-type: none"> • Shortage of water. • Underground water is expensive. • Very saline water which requires treatment (process delaying, increasing expenses). • Water scarcity due to low rainfall.
	Tshabong	<ul style="list-style-type: none"> • No rain water collection. • Lack of groundwater monitoring. • Water pollution. • Saline water affecting water quality; Desalinisation is very expensive • Being a semi-arid region, surface water is very scarce, rainfall is minimal. • Very low water table, drilling is a challenge. • Shortage of water. • Water is available only at certain areas leading to congestion and several reticulation lines. • Shortage of information (coordinated planning e.g. Land Board and DWS).
North-East	Francistown	<ul style="list-style-type: none"> • Water scarcity, mostly due to insufficient rainfall, unreliable climate and water salinity. • Water pollution. • Wildlife vandalism (elephants). • Infrastructure costs, namely specialised equipment. • Existence of dams upstream, leads to insufficient water downstream. • Farmers' access to water and policy involved. • Negative environmental impact changing landscape. • Improve bottom-up management approach • Climate change. • Water pollution (wildlife and human interference). • Government initiatives usually do not cater the local problems e.g. LIMID program. • Villages authorities (Kgosi) giving farmers rights to abstract river water. • Some of the policies and acts sections are obsolete e.g. 236 spacing between boreholes, 6km distancing at the communal grazing areas.

Region	Town/ Village	Challenges
North-West	Gumare	<ul style="list-style-type: none"> • Insufficient water resources to meet region's demands. • Illegal water abstraction. • Human-wildlife conflict in use of water resources. • Water shortage in villages and settlements. • Water pollution, namely surface water. • Harmonization of land policies and water policies. • Shortage of trained personnel and capacity building on water resources management. • Shortage of equipment/ resources. • Vandalism of infrastructure - both human and wildlife. • Available water infrastructure. • Centralised decision making (Headquarters). • Shortage of resources. • Inconsistent water quality.
	Maun	<ul style="list-style-type: none"> • Distance of some water resources from management centres makes it difficult to monitor. Surface/ river water use monitoring is a challenge. • Invasive species. • Water pollution. • Outdated legislation. • Poor or lack of implementation of set policies and plans. • Clearly outlined schedules to include communities in water management. • Scare water resources to meet competing needs. • Surface water not treated for usage hence lost due to dry. • Human-wildlife conflict due to poor water resources management. • Illegal river sand mining. • Unauthorised river abstraction.



Region	Town/ Village	Challenges
Chobe	Kasane	<ul style="list-style-type: none"> • Political influence overwriting water management policies/ processes. • No metered water abstractions allow for over exploitation. • River degradation/ exploitation by sand mines. • Water pollution (e.g. from untreated sewage water, litter from boats and jetski). • Aquatic weeds covering the river. • Seasonal flow of the river and scarcity of the water negatively impacts the livelihoods of people and wildlife. • River blocking and re-channelling of the water. • Fragmented policies. • Increased wildlife populations. • Water quality management of drinking water is in question due to the existence of lodges, house boats along the river that provide drinking water to the community. • Improve collection and disposal of its sanitary waste.
South-East	Gaborone	<ul style="list-style-type: none"> • Water quality concern: Pollution due to untreated sewage, littering, industrial pollution, commercial fertilizers and r water contamination essentially due to outside toilets. • Monitoring problems of private boreholes as they turn to misuse the water. • Review of standard/ lack of quality assurance of water. • Lack of access to water. • Illegal water abstractions: water rights, over usage • Lack of land use adequate regulating. • Rationing water use due to shortage. • Unattended water leakages and breakages.



STRATEGIES FOR THE IMPLEMENTATION OF CATCHMENT MANAGEMENT (1/2)

A. Infrastructure	B. Governance
<ul style="list-style-type: none">• Invest in agricultural irrigation mechanisms.• Build underground water reservoirs.• Install water meters, in both private and governmental boreholes, to regulate water abstraction.• Procuring water usage metering devices to check regular compliance.• Create infrastructures, such as reservoirs, for collecting rainy season water and redesign storm water drainage system to adequately harvest and re-direct rainwater;• Create strategic watering points for livestock and wild animals.	<ul style="list-style-type: none">• Reinforce compulsory requirement of EIA on developments with potential of water pollution.• Introduction of water saving incentives.• Develop raising-awareness campaigns on water resources importance and management.• Reformulate legislation, including the requirements for boreholes drilling.• Implement a strategy on flood risk areas.• Have sub-river basin based catchment management area for large river basins.• Prioritise collaboration in water management, ensuring all stakeholders have meaningful engagement on the project.• Institutionalize water resources management committees.• Develop local water management plans.



STRATEGIES FOR THE IMPLEMENTATION OF CATCHMENT MANAGEMENT (2/2)

C. Process	D. Maintenance
<ul style="list-style-type: none">• Develop database management (spatial and non-spatial).• Promote small scale water supply schemes, for instance through private entities.• Develop re-cycling water strategies, namely using waste water treated for irrigation.• Review water permits/ water taxes/ water levies.• Deliberate on wellfields protection buffer zones.• Develop water sources assessment, including mapping resources' distribution, potential etc..	<ul style="list-style-type: none">• Improve maintenance of water pipes, water tanks and other infrastructures.• Monitor water rights and adherence to them.• Monitor waste water quality and quantity release from treatment plants and industry.• Procurement of real time data dissemination instruments to be used in collection of water resource data at strategic monitoring sites.



5. FINAL REMARKS



STAKEHOLDER ENGAGEMENT ACCOMPLISHED

- Successful stakeholder engagement from an early stage (Phase 1 – Inception);
- In Phase 3, two complementary participatory moments were carried out: individual surveys and regional meetings. 85 surveys and 43 focus groups inquiries were analysed;
- Representation of: Ghanzi, Charles hill, Gumare, Maun, Mahalapye, Serowe, Bokspits, Tshabong, Francistown, Kasane, Gaborone and Jwaneng.



Covering the respective administrative regions: Ghanzi, North-West, Central, Kgalagadi, North-East, Chobe, South-East and Southern.

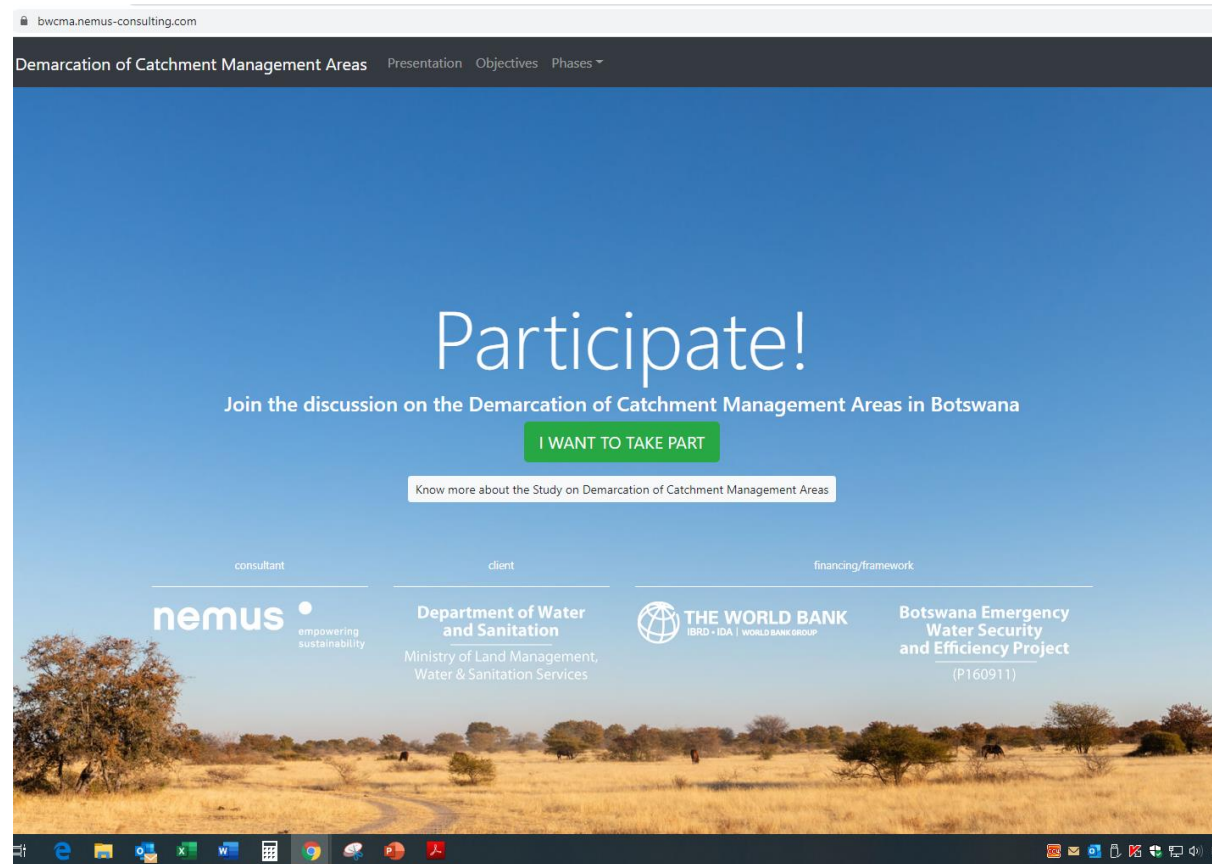
CONSULTATION SUPPORT



- Consultation process was constantly supported by the Project Website.



- Information disclosure;
- Open participation to the public





REPRESENTATIVITY

- Considering the number of questionnaires submitted and focus group discussions held, as well as the regions covered by the consultation, a **fair representativeness** of institutional and community level stakeholders was ensured.
- **Governmental institutions** constituted the larger group of participants, but most were representants of **regional and local** institutions.
- Engagement of **community-level organisations** ensured in the **focus groups discussions** in which participated 47 entities from 7 districts.



Regional meeting in Gumele



Focus group discussions in Tshabong



KEY FINDINGS TO BE CONSIDERED IN THE FINAL PROPOSAL

- Consultations results outline a **preferred option** for the demarcation of CMAs - **CMAs based on major river basin boundaries** – and indicate a common agreement on the CMCs structure (model proposed).
- **Suggestions for improvement** were made regarding the CMA demarcation option and the CMC's proposed layout. Includes subdividing the vastest CMAs in to sub-CMAs, and guarantee the committees are legally empowered with clear mandates.

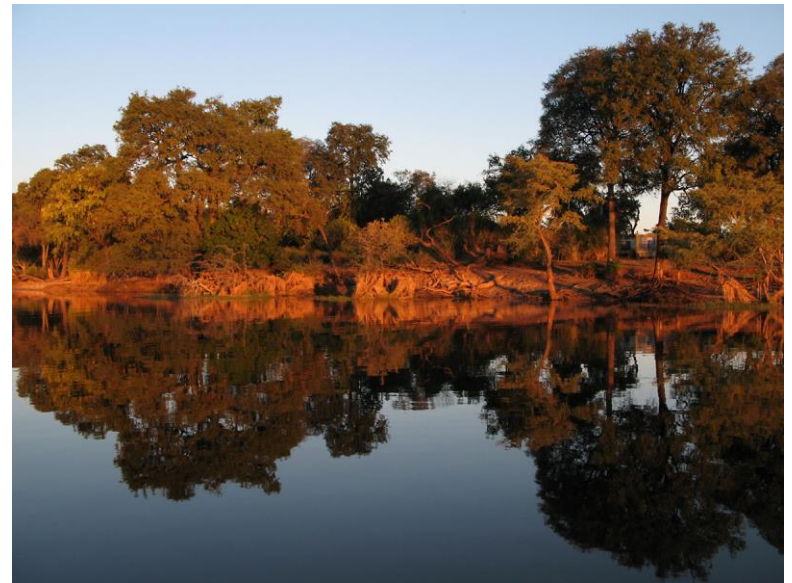


To be considered
in the final
approach
proposal.

FINAL REMARKS



- Participants feedback clearly showed that both institutions and the community are **willing to participate** in the implementation of a decentralised water management approach.
- Insights provided (technical and social dimension) indicate the public has an interesting level of knowledge on water resources management and their importance for their livelihoods.



Thank you

PORTUGAL

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