Strengthening institutional capacity and operational governance in Catchment Management Agencies (CMA) for ecological infrastructure

A report to the Water Research Commission

by

Centre for Local Capacity Building

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ACRONYMS AND ABBREVIATIONS

BGCMA	Breede-Gouritz Catchment Management Agency
CEO	Chief Executive Officer
CLCB	Centre for Local capacity Building
CMA	Catchment Management Agency
CME	Compliance Monitoring and Enforcement
CMS	Catchment Management Strategy
DWS	Department of Water and Sanitation
EI4WS	Ecological Infrastructure for Water Security
ELU	Existing Lawful Use
GWS	Government Water Schemes
IB	Irrigation Board
IUCMA	Inkomati Usuthu Catchment Management Agency
IWRM	Integrated Water Resource Management
LED	Local Economic Development
LWRM	Local Water Resource Management
LWRMI	Local Water Resource Management Institution
NW&SMP	National Water and Sanitation Master Plan
NWA	National Water Act
Proto-CMA	Proto Catchment Management Agency
SDI	Subsurface Drip Irrigation
WMA	Water Management Area
WRM	Water Resource Management
WRMI	Water Resource Management Institution
WUA	Water User Association

1. INTRODUCTION

In 2018, a project called 'unlocking biodiversity benefits through development finance in critical catchments' was officially approved by the Global Environment Facility (GEF 6). The project is now known as the Ecological Infrastructure and Water Security (EI4WS) Project. Its primary objectives are to aid in development and planning, to improve water service delivery and to focus on investments in infrastructure as a lever for development. The long-term goal is to integrate biodiversity and ecosystem services into planning, finance, and development in the water sector in order to improve water security. The project's Executing Agency is the Water Research Commission (WRC) with the Centre for Local Capacity Building (CLCB) contracted as an implementing partner of component 3 of the project. Component 3's objective is to support a conducive means for which targeted public and private sector stakeholders and decision-makers engage with, think about, and therefore integrate biodiversity and ecosystem services into water sector development planning and finance. The component seeks to learn from the good practices and lessons learned from other activities in the project to support and contribute to the effectiveness of project interventions.

The EI4WS project intends to ensure that there is effective and sustainable water resource management for improved application of policies and financial mechanisms to improve water security and integrate biodiversity in the selected pilot catchments (the Berg-Breede and the Greater uMngeni). The institutional capacity and continued development of CMAs are an important aspect of these project goals. Not only do project sites fall within the jurisdiction of CMAs but, when established, CMAs are the primary bodies responsible for the coordination of water management related activities. The effective running of CMAs is, therefore, a crucial aspect of the EI4WS project since some functional responsibilities covered in the project can only be implemented by CMAs for example, the development and enforcement of Catchment Management Strategies. To ensure that the project has meaningful results, CMAs, particularly those in the pilot catchments will need to be involved.

In recent years there has been uncertainty around the development and establishment of CMAs environment. For some time, there has been debate and contention around the specific number of CMAs that should be established in South Africa and the model that should be adopted. As a result, the process of establishing 9 CMAs experienced substantial delays such as the declaration by DWS that there would only be one CMA established in South Africa. This CMA would have satellite offices in the rest of the catchment areas in South Africa. This was not operationalised and to date, only two CMAs are fully operational, these are Inkomati-Usuthu CMA in Mpumalanga and Breede-Gouritz CMA in Western Cape. In 2018, it was subsequently announced by the newly appointed minister of the Department of Water and Sanitation, Mr Gugile Nkwinti, that nine CMAs would once again be established. The Department of Water and Sanitation is now taking up its plans of establishing the six, instead of the 9 envisioned CMAs.

This document will provide an overview, analysis and recommendations on the current national status of CMAs and way forward thereof. Furthermore, the document will provide an analysis of Local Water Resource Management Institutions operating in the demonstration catchments of the EI4WS Project.

2. ASSIGNMENT OUTLINE

Through the experience gained from the Kingfisher Programme, CLCB's involvement in the EI4WS is to "Strengthen institutional capacity and operational governance in Water Management Areas (WMA) for ecological infrastructure." It will provide insight into the current CMA environment and the best way forward for the institutional development and operational governance of the CMAs by completing the following activities:

- Compiling a national status assessment on CMA establishment.
- Identifying areas of overlap between the mandates and future plans of CMAs that are operational and the focal areas of the EI4WS project. Investigate the arrangements for water research management in Water Management Areas where CMAs are not yet established.
- Exploring how the EI4WS project can be of assistance in the operations of CMAs and/or DWS within the two EI4WS demonstration catchments.
- Compiling an inventory and analysis of local water resource management institutions active in the demonstration catchments.

Effective water management is an important aspect for the success of the EI4WS project. Research into these challenges will provide valuable insight into what steps can be taken to ensure effective water management in South Africa. Certainty over what actions to take could contribute to sustainable development and management of water resources in South Africa. This research activity will benefit the learning and planning processes of the EI4WS project.

Seven chapters of this report seek to provide answers and insights into the finding of the engagements conducted with key stakeholders. Chapter three provides context on CMAs and the status quo. Chapter four provides a breakdown of the methodology that was used for this assignment. Chapters five, six and seven are a discussion of the key findings, gap analysis and recommendations, respectively.

3. DESKTOP STUDY

3.1. BACKGROUND

South Africa is classified as a water scarce country and only receives an average annual rainfall of 450 mm. Additionally, rainfall is unevenly distributed across South Africa, with the Eastern side of the country receiving the majority of the rain (Figure 1). As such, there need to be effective strategies to preserve and take care of water resources, especially in drier areas.

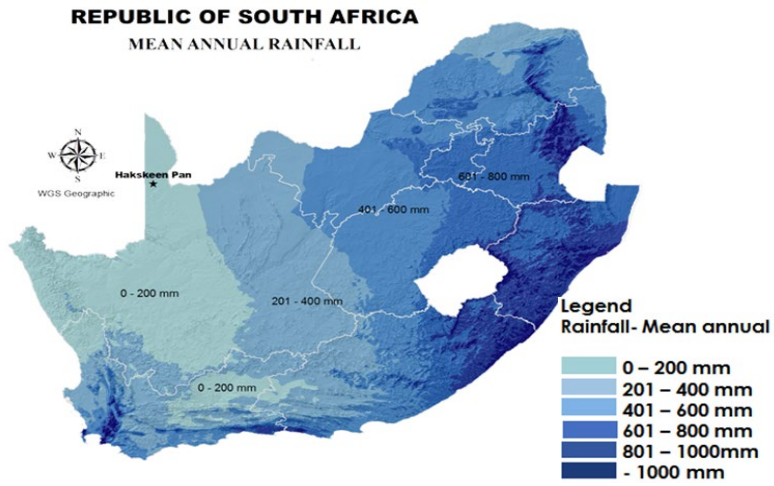

Figure 1: Rainfall distribution in South Africa (https://edctanks.co.za/)

The equitable and sustainable use and protection of water resources in South Africa is a matter that has been a priority for South African government since 1994 after the inception of the dispensation in 1994 (WWF-SA, 2016, p. 7). A new vision for a non-discriminatory South Africa was developed to ensure that all citizens had equal access to resources and services (Meissner et al., 2016, p. 16). This also meant that legislation on water management had to be reformed to facilitate this vision. With these developments, the new South African government undertook the journey to transform its water legislation. The process was facilitated by the agency of the 1996 White Paper on Water and Sanitation. The White paper was drafted through an inclusive process that encouraged public participation and cooperation. The result was the promulgation of the National Water Act (NWA) (Act no. 36 of 1998). The NWA specifically laid down the mandate to establish CMAs, including the relevant parties required to be involved in the process and the required management structure (among others) (RSA, 1998). The establishment of CMAs was to ensure the secure, effective, equitable access and sustainable decentralised management of water resources across the country.

The National Water Resource Strategy (2004) proposed to establish 19 CMAs to manage all the catchments in South Africa, i.e. one CMA per WMA (Figure 2). However, throughout the years, the number of CMAs to be established has

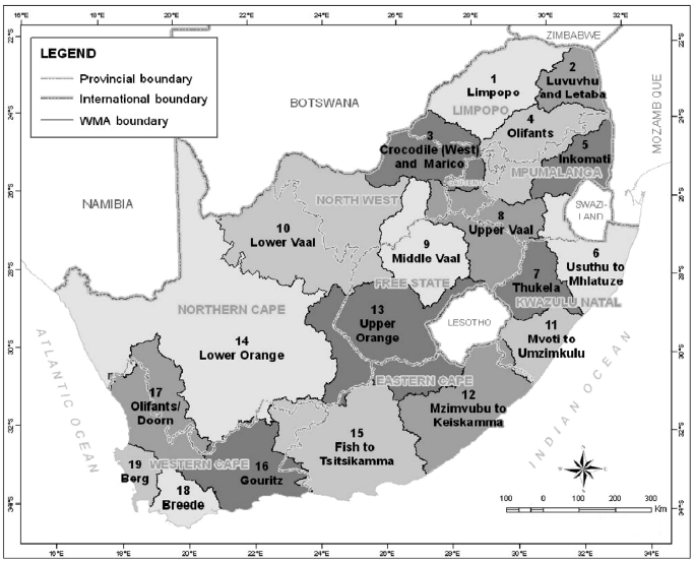

Figure 2: Figure 2: Water management areas in South Africa (Nomquphu et al., 2007)

been a point of contention and many a debate. The number was later reduced from 19 to 9 in 2013 (Figure 3).

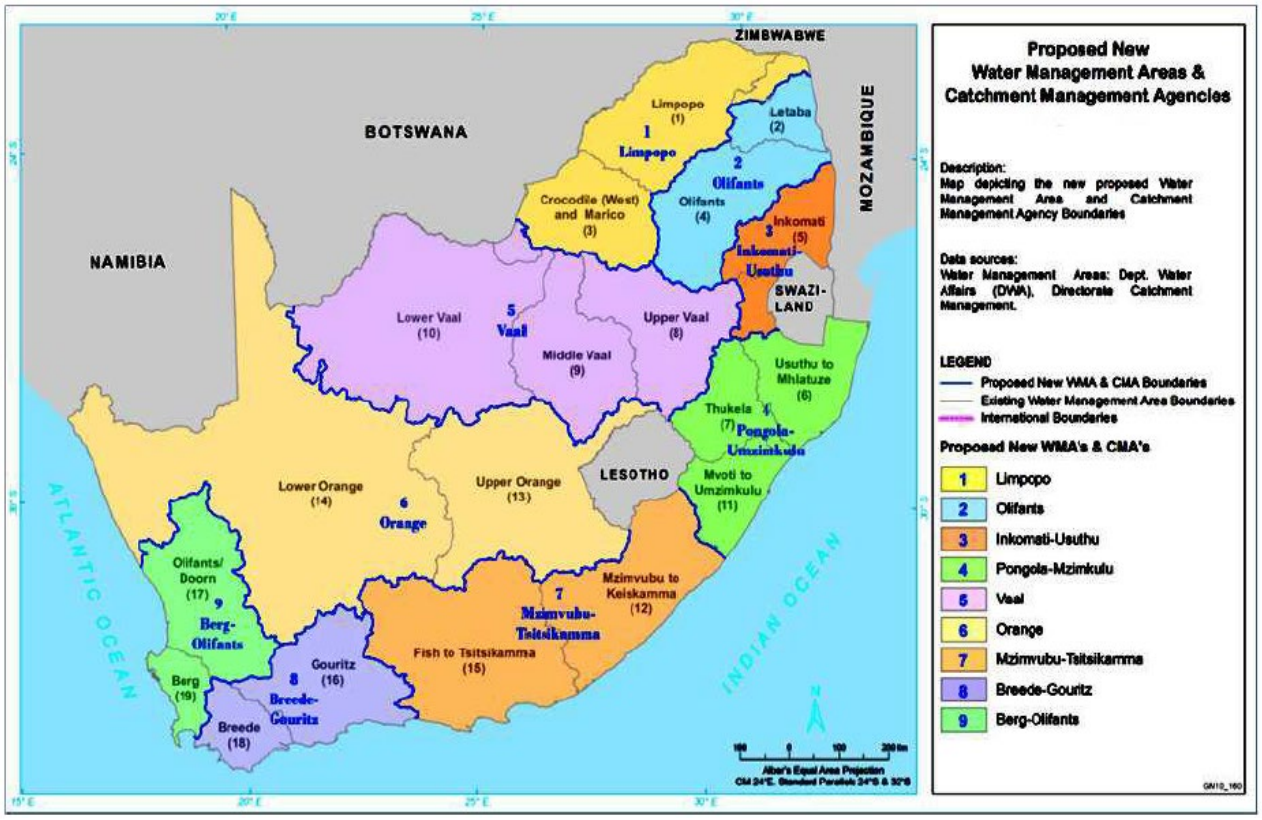

Figure 3: Map of proposed 9 water management areas of South Africa (Thomas and Chingombe, 2013)

> ***"…After assessment of the viability of the envisaged CMAs in respect of the availability and allocation of funding, capacity, skills and expertise for these water institutions, it is now intended to consolidate the 19 CMAs into nine CMAs…To expedite the establishment of the nine CMAs, the intended adjustment of the boundaries of the Water Management Areas was published in Government Gazette number 35517 of 27 July 2012."***
>
> (Department of Water Affairs, 2013, p. 64)

Despite the debate around the number of CMAs, the vision of CMA establishment remained the same. The goal was to create a decentralised system of catchment level management of South Africa's water resources. The focus was placed on ensuring equal access as well as inclusive management and participation in water resource management. Emphasis was placed on enabling previously disadvantaged populations access to this precious resource. As such, stakeholder engagement and cooperation (at all levels) were strategic areas of consideration in the operation of the CMAs. To achieve meaningful change, the CMA was supposed to be the vehicle that would promote the integration of both water users and water use/management (Stuart-Hill & Meissner, 2018, p. 4) (Meissner et al., 2016, p. 16).

3.2. LOCAL WATER RESOURCE MANAGEMENT INSTITUTIONS

The integrated and inclusive nature of post-1994 water management requires that CMA and LWMIs engage. Therefore, a literature review was conducted on the current operational status of Local Water Resource Management Institutions (LWRMIs), specifically Water User Associations (WUAs) and Irrigation Boards (IBs). This was done to analyse the number of WUAs and IBs that are operational in the EI4WS Project demonstration catchments. The NWA (Act no 36 of 1998) affirms that even though WUAs are water management institutions, they are not like CMAs in that their primary purpose is not water management.

> ***"They operate at a restricted localised level and are, in effect, co-operative associations of individual water users who wish to undertake water-related activities for their mutual benefit. A water user association may exercise management powers and duties only if and to the extent these have been assigned or delegated to it. The Minister establishes and disestablishes water user associations according to procedures set out in the Chapter"***
>
> (RSA, 1998)

The NWA (Act no 36 of 1998) mandates that, within six months of this Act, a Board must prepare and submit a proposal to the Minister, in accordance to section 91, to transform the Board into a Water User Association.

> ***"All irrigation boards should have been transformed into WUAs by 1999. A policy position that all WUAs and IBs will cease to exist in future was approved by Cabinet in 2013. A roadmap has been developed to transform all IBs and WUAs into local water resource management institutions"***
>
> (Department of Water & Sanitation, 2018, p. 41).

However, very little progress has been made to transform IBs to WUAs as there are still 177 Irrigation Boards and about 90 Water User Associations operating across South Africa (National Water and Sanitation Master Plan (2018, p. 39). They manage common water resources, and in certain cases also manage irrigation infrastructure, some of which they do on behalf of government water schemes (GWS).

For CMAs to fulfil their duties of ensuring equal access to water for all users, especially those classified as previously disadvantaged people, they are required to work alongside the WUAs and IBs. An understanding of the WUA and IB operations would provide valuable insight into this assignment and recommendations thereof. Information on the operations of LWRMIs in the demonstration catchments of the EI4WS Project was supplemented through face to face engagements with several WUAs and IBs.

3.3. CURRENT STATUS OF CMAS AND CHALLENGES FACED

The establishment of the CMAs has been a long, slow and arduous process. As such only two of the nine planned CMAS have been established and are fully operational, these include Breede-Gouritz in the Western Cape and Inkomati-Usuthu in Mpumalanga. The remaining 7 Water Management Areas (Proto-CMAs) do not have the functions that should have been delegated to them under the ambit of the National Water Act (No. 36 of 1998). Therefore, they perform limited functions at best. Despite the clear stipulation in the South African legislation for the establishment of CMAs, there seem to be disagreements on various aspects of CMA establishment (Department of Water & Sanitation, 2018, p. 39). The establishment of CMAs has long been presented with challenges due to, in part, the fact that CMAs broach a broad range of contentious social, economic and political issues. The decisions made during this

process have, at times, been met with shock and surprise as was experienced in 2017 when it was announced that all CMAs would be amalgamated into one super CMA (Munnik, 2020, p. iv).

The establishment of CMAs and the delay thereof has been the subject of various studies and strategic debate. Several reasons have been provided for this delay including a lack of capacity, ambitious goals (over-accelerated change), misunderstanding of roles and responsibilities between authorities, sustainability in terms of financial costs for CMA management, to name a few (Stuart-Hill & Meissner, 2018, p. 11).

In his paper, Dr Khorommbi (2019:32) noted that it took DWS 6 years to establish the first CMA, and it took a further 6 years before the appointment of the first governing board. An international cooperation initiative was developed to assist in the process. A bilateral partnership between South Africa and the Netherlands, under the banner of the Kingfisher Programme, was formed to assist the former in the establishment of CMAs by way of Dutch technical expertise and collaboration in water resource management.

"The aim of the Kingfisher programme (2012-2018) was to support the institutional establishment and development of nine (proto) Catchment Management Agencies (CMAs), by capacitating the (proto) CMAs in their water governance role, thereby aiming to provide a basis for Integrated Water Resource Management (IWRM), as well as sustainable Local Economic Development (LED). Through this initiative, it was envisioned that all 9 CMAs would be established and fully operational by the year 2016. The programme achieved a few notable milestones such as the gazetting of 6 CMAs for their establishment, the appointment of acting CEOs and the establishment of a CMA CEO forum. Six Proto-CMAs were established, Pongola-Umzimkulu, Limpopo-North West, Vaal and Olifants CMAs. The business cases for the remaining three (Berg-Olifants, Orange and Mzimvubu-Tsitsikamma) have been gazetted and an acting CEO is appointed"

That the process itself has taken longer than expected is understandable. The sheer magnitude of the goal that CMAs seek to achieve requires that all involved understand and be aligned on a clear vision. However, because CMAs go beyond regional and political borders and touch on socio-economic issues, it would require meaningful engagements at greater levels.

By the end of the Kingfisher Programme, it was conceded that the remaining CMAs were not going to be fully operational by the committed date. The Kingfisher Programme came to an end in 2019 without being able to realise the goal of having 9 fully functional CMAs with the capacity to effectively and sustainably play their role in the integrated water resource management arena (Kingfisher Programme Final Report 2014 – 2016:24).

Despite all these drawbacks, in 2018, the then minister of the Department of Water and Sanitation, Mr Gugile Nkwinti indicated that nine CMAs would be established. The Department of Water and Sanitation is now taking up its plans of establishing the nine CMAs once again. Since this announcement by former Minister Nkwinti, there has been little literature to inform the status of the establishment of CMAs. As such, primary data collection was used to supplement the desktop study.

The literature review in this report aimed to provide a brief contextual description and background of the arrangements of decentralised water management in South Africa. It sought to frame the available information on the status quo of CMAs in the country.

4. METHODOLOGY

Our approach advocated for peer-to-peer interaction and development of joint solutions. The methodology adopted by CLCB has a learning element that is in line with the EI4WS Project in that it sought to acquire lessons learned in the establishment process of Catchment Management Agencies and disseminate these good practices to encourage learning in the project.

The implementing team has been working with CMAs for several years and was at the centre of the establishment process of CMAs through the Kingfisher Programme. At present, the team is also engaging with CMAs through a Dutch funded Programme called the 'Blue Deal Programme'. The Blue Deal Programme has been built on experiences of the Kingfisher Programme and is expected to ensure that 2.5 million people in at least three Water Management Areas in South Africa have better access to clean and sufficient water by the end of 2030. The engagements made through the Kingfisher and Blue Deal programmes have provided valuable insight into the status of CMAs and the challenges that have been subsequently experienced by CMAs. Additional information was gathered through stakeholder engagement and literature reviews on the status of CMAs.

Interviews were conducted with 2 CMAs and 6 WMAs. In the demonstration catchments, a total pf 84 WUAs and IBs were contacted for interviews, however, only 10 respondents (6 WUAs and 4 IBs) have engaged with the implementing team. The team is continuing to follow up with the WUAs and IBs, an online questionnaire will be developed to double on these efforts. It is our hope that more responses will be received by the time of the completion of this report.

During the interviews, stakeholders were asked to reflect on the establishment process of CMAs thus far, the objectives of WUAs and IBs, operations and understanding of where they fit in relation to the operations of CMAs. Responses and observations were classified into five general categories nine themes. These categories and themes are described and discussed in the findings recommendations sections, respectively.

Desktop study: A literature review to assess the current institutional arrangements for WMAs and identify current entry points. This exercise will ascertain the status quo of Catchment Management Areas in South Africa.

One of the objectives of component 3 of the EI4WS Project is to develop a strategy that will inform knowledge management and social learning for change. Such strategic interventions are set to enable robust knowledge management and social learning and further enhance the replicability and post-project sustainability of systemic project interventions. This Social Learning, Knowledge Management and Mediation (SKMM) strategy will be developed through a separate project initiated by WRC, working with various stakeholders across the water value chain. The goal of this Assignment was to contribute to this learning component of the EI4WS Project. A contextual understanding of the CMA environment will provide some direction into which aspects the strategy should focus on.

This project's final report, including recommendations, will also partly be guided by the final SKMM strategy that will be completed by then. This report will take into account the information collected and analysed from the desktop study and fieldwork which will be directly aligned to the strategy. The insights from this study will inform and enrich the stakeholder engagement work needed within the SKMM processes and will be incorporated into a stakeholder database and tracking tool. It is important that there is integration between these segments of work to make room for effective learning in component 3. The exact modality of this integration and alignment will be determined once there has been engagement between the CLCB team and the team responsible for the development of the SKMM strategy.

This research will assess and determine the existing institutional arrangements of WMAs and give an indication of the numbers and operations of other local water resource management institutions (such as Irrigation Boards and WUAs) in the demonstration catchments given the current situation.

Fieldwork: The desktop study was supplemented by fieldwork through primary data collection in the form of stakeholder interviews and focus groups (where possible). The interview method was exercised to gain insight and information from officials working within water resource management institutions.

This activity was conducted through these sub-activities:

- Identification of interview participants
- Development of primary data collection tool: Interview guide
- Getting the relevant authorisation documentation from DWS and WRC
- Setting up of interviews
- Gathering of interviewee list
- Administering of interview guide: Telephonic interviews and Face to face
- Data Capturing
- Data Analysis

Engagements were completed with senior and mid-level officials from the following organisations:

- The Department of Water and Sanitation
- Water User Associations
- Irrigation Boards
- Catchment Management Agencies
- Water Management Areas (Proto-CMAs)
- Kingfisher Experts from Dutch Water Authorities

Fieldwork was carried out using a questionnaire tool that utilized semi-structured interviews to allow for flexibility during the interviews. This model enabled the tool to adapt to the local context thus allowing for issues to be effectively fleshed out.

The lessons learned from the Kingfisher Programme and insights from Kingfisher experts were utilized to guide interviews through the development of relevant questions and to provide recommendations.

In the interest of understanding the operational environment of the three CMAs, a database of operational local water resource management institutions (LWRMIs) in the demonstration catchments was compiled. The list was made up of Irrigation Boards and Water User Associations.

5. KEY FINDINGS - CMAS

The primary data collection exercise with key stakeholders provided valuable insight into the current status of the CMA establishment process. By interviewing stakeholders directly involved at different levels of the establishment process, the information that was gathered was rich and extensive. In this section, we will address five key findings which are supplemented by engagements with DWS. DWS Institutional Establishment has been at the core of the CMA establishment. The insights gained from our engagements with the Institutional Establishment Unit were invaluable. The following are the five categories that were identified:

- Key objectives of CMAs/WMAs
- Top challenges faced by CMAs/WMAs
- Top areas of assistance
- CMAs as the ideal model for Water Management in South Africa
- Areas of overlap between Regional Authorities and CMAs/WMAs

The stakeholder engagements/interviews had two main objectives including:

- Identify gaps (if any) on the existing knowledge base of the CMA establishment process and
- Get a view of the understanding of the various officials that are directly involved in the establishment process.

It should be noted that for anonymity, the identities of the respondents and the coordinating organisations are not disclosed.

5.1. KEY OBJECTIVES OF CMAS/WMAS

The team needed to understand from the onset, how officials perceive their organizations' objectives in the catchment management areas. Within this category, three themes were identified. During the engagements, it was realized that some responses were taken directly from organizational documents. However, there were objectives provided that were specifically based on their day to day operations with the organizational objectives used as an overarching guiding theme.

5.1.1. Water resource management

This theme was understandably the most common objective that was raised by the respondents. This objective forms a fundamental component of the legislated functions of a CMA. As mandated by the National Water Act 36 of 1998, CMAs were established to have water resource management functions performed at a regional or catchment level.

The respondents elaborated on the importance of their role in water resource management. Effective management of water resources for some of the respondents is directly linked to the promotion of the importance of their resources. This was an important insight as it showed a deeper understanding of the interlinkages between water resource management and the awareness of its importance to the broader community. It was indicated that an important gap exists between the knowledge and importance of water services to the community versus the importance of water resource management. The link between these elements needs to be

made clearer, and more work needs to be done through public participation processes (stakeholder engagement) to create awareness of water resource management.

> ***"…there is a need for awareness, we need to capacitate stakeholders."***
>
> Official from WMA6

Additionally, a key factor raised by the respondents was the importance of organisational collaboration between local water resource management institutions in catchment areas. To ensure efficient operations, CMAs/WMAs delegate some functions of water resource management to their local water management institutions such as WUAs and involve local communities in the decision-making processes through Catchment Management Forums. Collaboration and coordination between various stakeholders form the foundation for the effective management of South Africa's water resources.

5.1.2. Ensuring equitable access to water for all

This was a clear theme coming out of the available literature and engagements with the various CMAs and WMAs. This forms part of a broader objective of the South African government to right the wrongs of the past. As a result of the segregated system of the Apartheid regime, the majority of the South African population was left without equal access to resources and services in general. To ensure that transformation is achieved, CMAs/WMAs collaborate with and monitor the operations of LWRMIs such as WUAs and IBs. The goal is to not only achieve effective water management but to make sure that previously disadvantaged populations are involved and have access to water and management thereof.

During our engagements, it was noted that working with organisations such as WUAs and IBs is not enough to achieve the goal of equitable access to water for all. It requires engaging and supporting previously disadvantaged farmers and local water users. This engagement and support can come in the form of capacity development, awareness of rights and obligations, promoting participation in the management of water resources, the provision of resources and development of infrastructure where possible.

> ***'As such, one of the responsibilities of the… Catchment is to build resourceful farmers that have access to and are supplied with water resources. We intend to achieve this.'***
>
> Official from WMA3

An important factor to note here is that once again, there is a clear link between sustainable use and equitable access to water resources. By promoting awareness and participation in water management related activities, better ways of managing the resource can be developed together. Transformation is easier to achieve when all concerned have a clear understanding of the goals. Additionally, better solutions can be found for water resource management, sustainable use and protection, and equitable access, especially considering that the same resources are now being used by many more people. Only collaboration and stakeholder engagement can create a sustainable solution in that case. As such, this objective cannot take place in isolation of other dependencies, all stakeholders must take ownership and co-create. WMA1 further indicated that another key objective is ensuring equitable use of water in consultation with the Provincial and Local Government as well as other sector partners and stakeholders. This also puts forward strong advocacy for intergovernmental relations/collaboration to achieve effective water resource management.

5.1.3. Water resource protection and creating sustainable solutions

Various respondents linked water resources protection and the development of sustainable solutions. South Africa is currently plagued with water scarcity challenges, especially in the Western Cape which has experienced drought since 2017. The role of the CMAs/WMAs is to drive the protection of the resource at the catchment level. This means engaging with water users to ensure that they are aware of the challenges during water scarce/extended dry periods (droughts), the dangers of excessive use and pollution/contamination of water resources. Additionally, it also means that corrective action needs to be taken in situations where users continue to use water excessively and pollute/contaminate water resources.

Furthermore, there is a need to develop sustainable solutions for the use and management of water amongst stakeholders while ensuring that there is development in the catchment. The promotion and development of the local economy is important, but so is the protection of ecological infrastructure. However, there is a fine line between the destruction of resources and economic development. As in many cases, resource protection cannot be achieved without limiting development, and development cannot take place without limiting resource protection. It is, therefore, the role of the CMAs/WMAs to find sustainable solutions that take all these factors into consideration. This can only be done through stakeholder engagement and co-creation.

5.2. TOP THREE CHALLENGES FACED BY CMAS/WMAS

A further objective of this assignment is to map out areas in which CMAs/WMAs face challenges. This would assist in understanding the operational context in the development of recommendations. This ties into one of the objectives of the EI4WS of exploring potential areas in which it can assist in the selected demonstration catchments.

5.2.1. The full establishment of CMAs

Admittedly, the biggest challenge for the 7 Water Management Areas (WMAs) that are not yet fully operational was the continued delay in the process thereof. This is their biggest obstacle towards achieving the goals of playing a role and contributing to water resource management as mandated by the National Water Act (No 36 of 1998). The partial operation of WMAs means that they operate at limited capacity, as they do not have fully delegated functions. Thus, factors such as decision-making, and budget allocation are hampered because WMAs have to report to Regional Authorities. This is a unilateral concern and challenge across all 7 WMAs.

> ***"…submitted business case for our operational establishment. The challenge is approval that is required to this end."***
>
> Official from WMA 3

Several reasons were provided as to why this is the case. The first reason being **the lack of continuity** and ownership of decisions. It was argued that decisions are taken at the highest level, however, decisions seem to change along with changes in leadership. An example was how the change in leadership between Minister Nomvula Mokonyane and her predecessor, Mr Nkwinti was followed by decisions to change the number of CMAs from 9 to 1 and back to the reestablishment of multiple CMAs. It was stressed that these changes are aligned to politics.

Political interference has negatively and substantially affected the establishment of CMAs. Respondents indicated that implementation of policy should be the responsibility of administrators and should not be affected by politics. This line has been blurred and part of the reason for this is the seemingly weak leadership of the Department of Water and Sanitation. Respondents argued that the Department should be at the forefront of ensuring

> ***"We are faced with the poor implementation of the National Water Act"***
>
> ***"The Act mandates for the establishment of CMAs but we are still continuing with institutional review & realignment… changing and redesigning the water management areas. Instead of implementing what we have, we focus on other things. This shows that there is no policy or implementation direction."***
>
> Official from WMA4
>
> ***"Organizational structure not responsive to functions to be fulfilled at DWS, CMA and WUA/IB level."***
>
> Official from WMA5

that CMAs are established.

Respondents indicated that politics should not come in the way of implementing policy decisions. Rather, the focus should be placed on the sustainable implementation of solutions and change. That way the focus would be on meaningful change and not political objectives. It defeats the purpose of setting long term sustainable objectives of efficient and effective water resource management if decisions change with leadership. It was argued that the continued debate and subsequent changes in the number of CMAs to be established, was one of the reasons the Kingfisher Programme was unable to achieve its overall objectives.

The second reason that was provided was that there is a **lack of understanding of the roles and responsibilities** between local, regional and national key players. This has resulted in actors not focussing on the goal of ensuring meaningful, decentralised, and equitable management of the water resource. Rather, actors focus on what they perceive as a loss of power should CMAs be established. Regional Authorities have a vested interest and are conflicted. The inherent challenge here is precisely the fact that actors put their interests ahead of the interests of the many. This shows that the **whole ideology behind the decentralisation of water resource management through the establishment of CMAs is not clearly understood.** As a result, some individuals will stand in the way of the establishment process. This should not be the case; respondents argued that it is a fundamental flaw to view roles as personal attachments rather than pieces in a greater and

> ***"There are three levels of WRM, the first being the ministry (including head office and regional offices). Then you have CMAs followed by smaller institutions such as IBs & WUA… regional heads will fall under the DWS as a regional authority and CMAs would form part of the local water resource management scene. Focus on the goals and objectives of the institution and not individual goals. This work was not created for a special/specific person. Individuals retire but the work carries on."***
>
> Official from WMA4

more fulfilling puzzle.

5.2.2. Financial constraints

All CMAs and WMAs mentioned the challenges they face because of financial constraints. These challenges were divided according to low funds due to budget constraints and lack of revenue due to non-payment by water users.

An official from WMA2 claimed that **revenue collected through water use charges go straight to the Department** since WMA2 is not fully operational. This provides some challenges in terms of allocation of the budget because priorities between WMA2 and the regional authority may not always be aligned. It was claimed that this leaves WMA2 without the **sufficient budget required for implementation on some of their objectives.**

The second reason that affects the budget is the culture of non-payment within the CMAs and

> ***"There is a big culture of non-payment. This is not only a lack of understanding but, there are also politically motivated culture of not paying. We got this land for free so we will not pay for charges."***
>
> Official from WMA6

WMAs:

Once again, issues of political interference were brought forward. Although not directly related to the establishment of CMAs, it nonetheless affects the operations of water use management. It was indicated that non-payment was linked to a lack of understanding of the financial importance of water use charges. Stakeholders need to be informed and understand why and what they are paying for before they are willing to pay for their water use. As it stands, this is a contentious issue as most stakeholders have not been capacitated and made aware of this importance. It is evident that CMAs and WMAs need to improve their stakeholder engagement sessions and to raise awareness on factors such as sustainable water resource management and other related issues (water use charges, etc.).

Finally, also related to financial constraints and revenue collection is the limited number of funds that are generated by WMAs specifically. Officials indicated that the revenue they generate is not enough to create and maintain a self-sustained organisation.

> ***"Revenue generated… is not equivalent to budgetary demands… as such [we] would not be able to operate at its full capacity because revenue collection is low. Needs to be over 95% of revenue collected."***
>
> Official from WMA3

Another reason for this as pointed out by an official from WMA6 is the capping on the amount of revenue that can be collected from charges by the government. As a result, a lot of money is being lost through wasted collection opportunities. This will lead to WMAs being reliant on National Treasury until they can become a self-sufficient body.

> ***"If we can get billing, revenue and charges out of the way, we can focus on other important issues as well and ensure the sustainability of the CMA."***
>
> Official from WMA6

5.2.3. Meaningful transformation of Irrigation Boards

A challenge to note is ensuring that there is a meaningful transformation of Irrigation Boards into Water User Associations as mandated by the National Water Act (No. 36 of 1998). It has been indicated that transformation may be taking place on paper but not in practice. Respondents noted that transformation has not really taken place if historically disadvantaged farmers and water users are not involved in the management and operation of WUAs. Of course, this is not directed at the actions of the WUAs alone. However, there needs to be a clear intention from the WUAs to involve previously disadvantaged people. For this to take place previously disadvantaged people need to have a keen interest and willingness to participate in matters related to water resource management. There are several reasons that users do not participate in these activities. One of which is related to them being purposely prevented from doing so by WUAs for whatever reason. The second reason is related to a gap in the knowledge of water users. There is once again a major theme coming out of this challenge, stakeholder engagement is integral in several aspects of water resource management.

It was indicated that intergovernmental and organisational collaboration is needed. The Department of Agriculture, for example, is needed when it comes to land distribution. CMAs have a major role to play to ensure free access to water for all. The Regional and National Departments are essential bodies for the checking and challenging of claims to transformation in collaboration with CMAs. Finally, WUAs and IBs should do their parts to ensure fair use and access to water by users. All in all, the true meaning of transformation needs to be understood by all role players. Having a WUA that covers areas inhabited by previously disadvantaged populations does not mean that there has been a transformation.

> ***"You find that transformed WUAs are far from historically disadvantaged farmers (leading to exclusion). Saying that your association covers previously disadvantaged areas is not real transformation… has white management with only the service level duties taken up by people of colour (e.g. the helpers in the kitchen, gardener, etc.) but this is not transformation."***
>
> Official from WMA6

5.3. KEY AREAS OF ASSISTANCE

There were several areas identified by CMAs and WMAs, however, the following were the most prevalent areas of assistance:

5.3.1. Capacity development/building

The lack of capacity is considered to be the biggest issue that was raised by the respondents. There is capacity building assistance required, whether related to a shortage of human resource capacity or a lack of the required skills in the organisations. The respondents felt that

> ***"Integrated water management skills and competencies [are needed] at all levels of water institution management"***
>
> Official from WMA5
>
> ***"Most challenges are related to capacity constraints (human resources and skills)"***
>
> Official from WMA4

capacity constraints were a big reason as to why they are not implementing their duties as effectively as possible.

5.3.2. Management and monitoring of water resources

Assistance with the management and monitoring of water resources was raised by all respondents. An official from WMA4 indicated that to fill internal capacity gaps such as that of water quality monitoring, the services of an external service provider is typically enlisted. However, it was observed that in some cases the appointed service providers tend to not finish the work, and as a result, the WMA has to complete the work itself. This has an impact on the WMAs processes, which negatively affects the progress of some operations.

5.3.3. Funding assistance

Two sub-themes were identified within this one response. More specifically, the sub-themes related to the reasons behind the need for funding and infrastructure. The first part dealt with funding needed to help with the direct operational mandates of the organisations. The second part dealt with the need for funding to achieve transformation and assist water users.

5.3.3.1. Funding assistance for operational needs

This is not only in relation to monetary funding but also in relation to the provision of land for previously disadvantaged people. There were, of course, calls for monetary funding to assist in fixing ageing infrastructure and to procure additional equipment for CMA/WMA operations. It was argued that there was no infrastructure in the poorer areas of the catchments, as such, no transformation could be achieved if users do not have access to the required infrastructure.

Furthermore, access to land was identified as an important factor for transformation. In this sense, the respondents called for the Department of Agriculture to provide more land to the previously disadvantaged.

> ***"Access will assist in a greater transformation impact. There needs to be meaningful transformation because at the moment it is not being done meaningfully."***
>
> Official from WMA3

5.3.3.2. Funding assistance for transformation

The second sub-theme was not necessarily related to the operational capacity of the CMAs and WMAs. Rather, this funding was requested for the water users. The respondents deemed it important that resources are made available to assist all stakeholders, most especially previously disadvantaged users. Resources can be used to educate users and create awareness campaigns for them to know and understand their rights, roles and responsibilities within water resource management. Respondents argued that without this kind of assistance, the process of transformation will continue to be a long and arduous one.

5.4. CMAS AS THE IDEAL MODEL FOR WATER MANAGEMENT IN SOUTH AFRICA

The majority of the respondents advocated for the CMA model as the best model for water management in the country. Respondents referenced the ideals behind the establishment of the CMA to begin. CMAs were brought into existence to bring the management of water to the local level. Decentralization of water management is not only an international best practice but also the most practical model if true transformation is to be realized. Furthermore, with the

water scarcity problem South Africa is currently faced with, the CMA model would be the best means in which to combat and develop solutions to the problem.

For any problem or issue to be addressed, an understanding of the context of the problem is required. This type of understanding and the extent to which the problem can be solved is best achieved by those who are locally situated. If one is not locally situated, how would he/she be in a position to provide solutions? It was argued by respondents that for this reason, CMAs are the best vehicle to drive decentralized water management. Additionally, CMAs have an understanding of the environmental context, and therefore understand the challenges related to non-payment of water use charges. Therefore, CMAs are always in the best position to make decisions based on their understanding of their stakeholders. An entity, such as the department, that is far placed from operations would not be in a position to achieve this.

> ***"Therefore, you find that the department is being owed millions because they are not on the ground. However, having management at local level will prevent this as there is more awareness of what is going on. It is easier to meet and discuss terms of payment."***
>
> Official from WMA6

In addition to the aforementioned benefits, some respondents indicated that the CMA model is beneficial as it transfers the responsibility and ownership of the sustainable use of water to the local level in this case to the water user/s. It was indicated that when water users are held accountable and responsible for the water that they use, there is an incentive to take good care of the resource. In this case, water users tend to be aware that they face the risk of losing this resource should they not use it sustainably.

An official from WMA4 indicated that the number of CMAs is not the issue, the issue is the approach taken. Should the approach still make room for decentralization, then it is acceptable. However, if the decentralization is to be practically achievable, then more CMAs are required. As such, reducing the number of CMAs from nine to six is not necessarily the best course of action. For example, this reduction would change the hydrological boundaries while drastically increasing the management boundaries of some of the water management areas. This then defeats the objective of decentralization as it would result in the CMAs no longer being at the heart of their operations.

> ***"The correct arrangement should be [the] management of systems that drain into the same river basin. You need to have decentralized LWRM so that you focus on problems at a local level."***
>
> Official from WMA4
>
> ***"I believe in the decentralization of water resource management to the catchment level. It enables people in the catchment to manage their water resources as they understand better at a local level."***
>
> Official from WMA6

However, not all respondents felt that way, the viability of the CMA model was questioned. One respondent, in particular, felt strongly that after all this time and interference; the CMA model will never work and should be abolished. The respondent argued that the two fully operational CMAs have not been as successful as they claim. There has been no transformation, nor has there been progress in terms of more effective water management under the CMA structure. The respondent pointed out that water management requires an

even more decentralized system than is currently proposed/planned. The respondent further indicated that better and more innovative solutions are needed to achieve efficient water

> ***"Develop new mechanisms and approaches, have government be fully staffed and run it as government. Abandon the CMAs system, it is not working, and allow WUAs to become functional government structures and manage water resources at the local level. Make sure that government and WUAs are capacitated to perform this function."***
>
> Official from WMA3

resource management. Water User Associations should be provided with the necessary capacities and resources and turned into smaller units within government structures to replace CMAs.

5.5. AREAS OF OVERLAP BETWEEN REGIONAL AUTHORITIES AND CMAS/WMAS

It was indicated that there are and should not be any overlaps between regional authorities, CMAs and WMAs. CMAs have delegated functions while WMAs (proto CMAs) are within the full structure of the regions. In that sense, there is no overlap as WMAs report to the regions. An official from CMA1 indicated that in their case, there is no overlap as regional authorities have no operational mandate to take on CMA functions in an area where a CMA exists. WMA1 elaborated further and stated that in their area where there is no CMA, DWS through the regional office plays the CMA role. Even in this case, the role of the regional authority is limited as it can only perform functions that are not delegated to the WMA, e.g. approval of water use licences and Reserve Determination. WMA2 highlighted that they are not aware of any overlap between Regional Authorities and CMA/WMAs.

> ***"The overlap will only happen in those areas (functions) which are not delegated to the CMA yet, e.g. approval of water use licences and Reserve Determination."***
>
> Official from WMA1

6. DISCUSSION OF KEY FINDINGS AND GAP ASSESSMENT

The engagements with the key stakeholders brought to light some new insights around the status of CMA establishment, but also reemphasized points that have been raised in the past. This section discusses some of the key findings and expands on these findings by supplementing engagements with DWS Institutional Establishment Unit on the same topic. This section touches on four discussion points that stood out the most during our engagements. This section discusses the following topics:

- The current status of CMA establishment
- Challenges faced in the CMA establishment process
- Meaningful transformation of irrigation boards into water user associations
- Gap assessment

The section also wraps up the discussion points by providing a gap assessment of the items that were identified during the engagements with the stakeholders.

DWS Institutional Establishment Unit has been at the core of the CMA establishment. The insights gained from our engagements with the Institutional Establishment Unit were truly valuable.

6.1. CURRENT STATUS OF CMA ESTABLISHMENT

The DWS Institutional Establishment unit provided on the current status and progress made towards the CMA establishment. At present, based on advice from her advisors, Minister Lindiwe Sisulu has approved the establishment of a total of 6 CMAs. This decision requires the amalgamation of the remaining WMAs into 4 fully operational CMAs. Furthermore, the two operational CMAs (BGCMA and IUCMA), will also be combined with WMAs as well. The envisioned breakdown of CMAs is as follows:

- **Breede-Gouritz-Olifants:** BGCMA to be combined with Berg-Olifants
- **Vaal-Orange:** Vaal WMA to be combined with Orange WMA
- **Inkomati-Pongola:** IUCMA to be combined with Pongola
- **Limpopo-Olifants:** Limpopo WMA to be combined with Olifants WMA
- **Mhlathuze-Mzimkhulu:** To form one CMA
- **Mzimvubu-Tsitsikamma:** To form one CMA

Stakeholder engagement sessions have already been conducted between the CMAs, WMAs and DWS. These key stakeholders are aware of the plans of the Department and have participated in the planning sessions. The establishment processes of the proposed CMAs are in varying degrees of advancement. Due to the nature of the CMA establishment process, specific details cannot be provided until DWS has completed its internal processes.

6.2. CHALLENGES FACED IN THE CMA ESTABLISHMENT PROCESS

The challenges faced by the CMAs (on a local level) were on par with those of the Department of Water and Sanitation's national standpoint. The top key challenges pointed out by the Department were political interference and financial constraints. This demonstrates that there is a problem of alignment between various key stakeholders and decision-makers in the establishment process as these points were raised by all respondents.

Despite the new direction for the establishment of six (6) CMAs instead of nine (9) CMAs, the above-mentioned challenges remain, this, therefore, requires the development of practical solutions. To ensure that pain points are attended to before they become major stumbling blocks, DWS is involving all key stakeholders, e.g. involvement and alignment with labour unions. Another contentious issue in the establishment process of CMAs and has been heavily politicised. As such, Minister Sisulu will be on hand to manage the issue at the relevant political level.

6.3. MEANINGFUL TRANSFORMATION OF IRRIGATION BOARDS INTO WATER USER ASSOCIATIONS

This issue was raised by both the CMAs and WMAs. The lack of meaningful transformation of IBs which, at its optimum, would involve the inclusion of all users affects the goals and mandates of CMAs and WMAs. Particularly in terms of the inclusion of the previously disadvantaged in the sphere of water resource management. This concern is shared with DWS at a national level and as such, is being addressed at the national level through the implementation initiative to have IBs transformed into WUAs. One such initiative is being carried out with the EI4WS Project to transform one IB into a WUA in KwaZulu-Natal. Furthermore, DWS is engaging with water management institutions and subsidiary entities to ensure meaningful transformation. The goals and outcomes for this initiative are to achieve a fully inclusive and representative local water management regime that makes room for:

- Equitable water allocation
- Water conservation and demand management
- Resource protection
- Universal access to water supply by communities

Department of Water & Sanitation

To ensure that meaningful transformation is achieved, DWS is has included consultation sessions with all key stakeholders. Additionally, to make certain that there will be adherence to transformation, non-negotiable principles for the transformation of IBs have been developed. These include oversight processes for governance and the setting up of racial and gender representation in the WUA Management Committee (Governance).

There is no indication on the final number of IBs that will be transformed into WUAs, however, the goal for DWS in the 2020/2021 financial year is to transform 20 IBs into WUAs. It should be noted that not all IBs in the country will be transformed and, some IBs might be disestablished based on criteria that will be developed by DWS. This decision will be based on a due diligence exercise that will be implemented in order to assess which IBs will be viable and sustainable for transformation. The goal for DWS is meaningful transformation, as such, IBs will not be transformed simply as an item to tick off. The goal/aim of transformation is to achieve meaningful change and impact. This combined with the move to establish the rest of the CMAs is a show of commitment and focus from DWS to bring stability into the LWRM environment.

6.4. GAP ASSESSMENT

The gap analysis performed in this report serves as the organisational lens for the establishment of CMAs. Focus is placed on the benchmark that was set in the decentralisation of water management through the development of CMAs. This benchmark is measured against the actual results that have been experienced in the process thus far. The gaps identified are aligned with the additional challenges that were pointed out by the CMAs during our engagement processes.

01

EQUAL UNDERSTANDING OF THE END GOAL

The gap that underlays all the challenges experienced in the CMA establishment process is the understanding of what exactly is to be achieved. This includes the positive effect of an efficient decentralised water management system. As such, the process was internalised and focused on how it would affect the officials involved and not the actual beneficiaries (end users) and positive effects the implementation of such a system would have. This resulted in factors such as power struggles, confusion on the roles and responsibilities between CMAs and Regional Offices. Furthermore, there is a lack of understanding from WUAs & IBs in terms of the inclusion of community members. On the other hand, community members seem to not know their rights, roles & responsibilities. The following challenges and subsequent gaps that were identified:

02

Involvement of WUA & IBs in WRM: The involvement of WUA & IBs is integral to efficient WRM. They are not a means to an end but rather part of the system. Their value extends beyond paying water use charges. The chief consideration here should be how LWRMIs can work together to create an inclusive and enabling WRM environment that caters for all while taking care of the water resource.

03

Lack of capacity: This is a gap identified by all key stakeholders involved in the process. Key skills missing include the technical expertise needed to drive efficient WRM, as well as not having enough personnel in organisations. Furthermore, there is a lack of capacity in terms of the required infrastructure (especially in poorer areas).

04

Financial constraints: There is a lack of financial resources to implement changes and effect efficient WRM. Financial constraints are not only experienced due to non-payment of water users but also due to national policy that affects how much organisations can collect from users and be granted from National Treasury. A sustainable and inclusive funding strategy is needed.

05

Lack of meaningful transformation: True transformation is the goal of the South African government. Each activity and strategy should be purposefully implemented. It was identified that transforming IBs into WUAs is not meaningful. There needs to be capacity building to sensitise stakeholders on the importance of achieving meaningful transformation and inclusion of the previously disadvantaged in WRM.

7. RECOMMENDATIONS AND CONCLUSION

The recommendations below are a synthesis of insights from the respondents, the authors of this report as well as experts from the Kingfisher program. They address five critical categories discussed earlier in the report.

7.1. LESSONS LEARNT

7.1.1. Political involvement

The most important lesson extracted from the expertise in the Kingfisher program across a local, national and international facets is that the CMA establishment process is extremely politicised. Where program objectives were (and are) often overshadowed by divergent priorities. (Kingfisher experts) was the politicisation of the CMA establishment process. This led to hindering the process and wasting time. The focus was placed on the institutional setup, modality and political appointments instead of implementing meaningful change. This, unavoidably, hindered and delayed the progress in the establishment process.

7.1.2. Lack of collaboration and a common goal

Decentralised water management is not a new concept. A major obstacle in this process has been the lack of collaboration and divergent goals between the key stakeholders. The lessons to note here are that open and honest dialogue as well as determining a common goal are required for a large undertaking such as the establishment of CMAs. Although the goal of establishing CMAs is an important milestone, it is not, however, the final objective. This process forms part of a larger water governance vision. This cannot be achieved if there is no collaboration between the various role-players. In conclusion, a common goal and collaborative efforts are needed for meaningful change to be achieved.

The two points mentioned above arise due to the mismatch between the focus of policies, politics, and governance on the one hand and the operationalization and implementation of objectives on the other. The establishment of CMAs in South Africa continues to be hampered by continuous changes in political standpoints, positions and policies. Furthermore, external influences such as the interest of labour unions have negatively affected the establishment process. A new goal-oriented approach focused on collaboration is needed if the CMA establishment process is to be successful.

7.2. ESTABLSIHMENT OF SIX CMAS VS NINE INDEPENDENT CMAS

The modality and number of CMAs to establish have been a central discussion for years, the focus here has been misplaced as the number of CMAs should not be the issue but rather, the first step to an even bigger goal of decentralised water management. If CMAs are the vehicles selected to bring about efficient decentralised water management and meaningful change, the focus should firstly be placed on their establishment. No organisation is ideal, however, moving forward and placing focus on implementation and operations is a key to the success of any organisation. All other concerns can be dealt with as long as the organisation is set up to perform its duties.

In early years, the Netherlands had approximately 4000 Dutch Regional Water Authorities (Dutch variant of CMAs) but that number was reduced to 21. The number of Dutch Water Authorities that should be operational in the Netherlands continues to be debated, however, their role and functions are not. As such, they continue to operate and provide value to Dutch citizens despite these debates. It is argued that through this almost 20-year debate on the

structure of CMAs in South Africa, so much could have been achieved if role players had focused mainly on the goal of establishing CMAs.

The recommendation is to look at the implementation aspect of CMAs instead of the institutional lens. To achieve this, the Department of Water and Sanitation as the authority should drive the establishment of CMAs for the sake of the prosperity of South Africa.

The principle motivation behind establishing CMAs should be at the core of its mandate. It is not necessarily accurate to claim that there is going to be decentralised water management if CMAs are expected to cover massive areas of management. Regardless of the number of CMAs to be established, a structure that enables true decentralisation is required if success is to be achieved. CMAs should always be close to the ground to adequately address any issues faced.

7.3. AREAS OF ASSISTANCE FOR CMAS

The remaining WMAs require assistance at a strategic and operational level to convert into fully operational CMAs. All obstacles need to be dealt with as united front pushing for the decentralisation of water management in a water-scarce South Africa.

At an operational level, all the practical activities as mentioned in the gap assessment need to be operationalised and implemented. This includes the following activities:

- Financial assistance
- Enabling policies
- Capacity building
- Inclusive governance and water management practices

All in all, swift establishment and rapid operationalisation of the CMAs should be supported strongly. Adequate (start) funding and fair labour conditions should be agreed upon. Stakeholder engagement should be effectively utilised to ensure that key players and interest groups are adequately informed of the goals, objectives, mission and benefits for CMA establishment.

7.4. THE RELATIONSHIP BETWEEN LWRMIS AND CMAS

The effective operation of LWRMIs is pivotal for the achievement of an efficient and sustainable water resource management system. As mentioned above, WUAs and IBs should be a central part of WRM operations. Their functions expand beyond the payment of water use charges, rather they assist CMAs at the very lowest level of water resource management, i.e. on the ground management and support. Hence, direct collaboration and coordination between IBs, WUAs and CMAs is critical. CMAs should be in a position to assist and support IBs and WUAs. This entails a shift in the mindset of the parties from that of a reporting relationship to one of collaboration and coordination to achieve the same goal.

7.5. ROLE OF DWS IN CMA ESTABLISHMENT

The Department of Water and Sanitation should form the cornerstone of Water Resource Management. As the responsible authority, DWS needs to show presence and strong leadership that is recognised and respected by all key players in the environment. Decisions made by the Department should be final, as such, DWS should take ownership of the decisions made at the highest level. Through this leadership, emphasis should be placed on ensuring collaboration and fostering co-dependency amongst the various governmental departments.

A culture of collaboration should be embedded in the structure of the program to encourage teamwork rather than competition. This requires meaningful stakeholder engagement at all levels, which include political engagements. The focus of CMA establishment should be on, the value and benefit of decentralised water management, rather than the institutional impact of CMA establishment.

A lot of work has been documented around the establishment of CMAs; these insights are well known. However, it does show that the methods deployed by decision-makers around decentralised water management have been insufficient. This has led to fatigue and frustration in relation to whether the CMA model is the best fit for purpose. It is important to make decisions and commit to implementation. With the Department going ahead with the establishment process, it is critical that past mistakes are not repeated. The challenges as mentioned throughout this report need to be dealt with and the necessary interlocks need to be completed.

It is important to note that the above-mentioned recommendations are based on the areas that were raised by the respondents. Understandably, officials are focused on the establishment process and any assistance that will help in this regard. Additionally, the areas of assistance that have been requested by officials have been in direct correlation with their areas of work. A strong recommendation would be to have engagements with officials to raise awareness on the importance of Ecological Infrastructure and the value add this could bring into their operations and objectives.

7.6. CONCLUSION

The research team involved in this report engaged with CMAs, WMAs, Kingfisher experts, WUA and IBs with the intention of assessing and determining the existing institutional arrangements of WMAs. It also sought to give an indication of the numbers and operations of other local water resource management institutions (i.e. Irrigation Boards and WUAs) in the demonstration catchments.

The objectives were met and recorded. However, the response rate from WUAs & IBs were far less than expected. Unfortunately, only ten (3 Irrigation Boards & 7 Water User Associations) responded to requests for interviews. The remaining WUAs & IBs either refused or did not respond to communication and phone calls. The findings from the organisations that did respond have been included in this report as an appendix. The information received was not enough to be analysed as representative.

Based on the information received during this project, further engagement is required to co-create sustainable, future fit solutions that would benefit all parties involved. Issues raised in this paper are not new, it is clear that traditional ways of working are not sufficient to deal with the challenges faced by CMAs and water resource management. More work and thought leadership are needed to usher in a ‘new normal’ way of working. To achieve this, collaboration, and an open mind with focus on a bigger goal should be at the centre of all activities and decision making.

8. APPENDIX

8.1. KEY FINDINGS – WATER USER ASSOCIATIONS & IRRIGATION BOARDS

The focus of this study was, part, aimed at providing an indication of the numbers and operations of local water resource management institutions (i.e. Irrigation Boards and WUAs) in the demonstration catchments. Interviews were conducted with IBs and WUAs in order to gain an additional contextual understanding of local water resources management in the Catchments. It should be noted, however, that a majority of the organisations declined to participate or simply ignored the requests for interviews. In total, only 10 organisations responded (3 IBs and 7 WUAs) responded to the questionnaires. Nevertheless, the information below has been captured to provide a brief description of the views and feedback received from WUAs and IBs. The focus is placed on mainly, their objectives, challenges and their engagements with CMAs. Supplementing these responses is a database of all WUAs & IBs operating in the demonstration catchments.

The information below is purely based on the responses of the 10 interviewed organisations and is in no part a representation of the WUAs & IBs in the demonstration catchments.

The following were the findings from the engagements with the WUAs and IBs:

8.1.1. Key objectives of Water User Associations (WUAs) & Irrigation Boards (IBs)

8.1.1.1. Ensuring an equitable supply of water to users

The biggest and most common objective for the WUAs that were interviewed was the supply of water to their members and users. These ranged from the supply of water to water boards who would then purify the water for sale to municipalities, to supplying water for land schemes and animals. In line with this objective was the structural management of infrastructure to ensure that water was supplied as efficiently as possible.

The strategic supply of water to users was of utmost importance for the WUAs. As such, improving the delivery of water to users and farmers through the most efficient means possible was a big objective for the respondents. This included the management of water delivery systems such as upgrading and maintaining furrows

Underlying this objective was the priority of all WUAs to ensure that they supply water fairly and equally to all water users. Particular focus is given towards making sure that the previously disadvantaged and emerging farmers are provided with enough water supply. This is in line with the National Water Act, however, for most of the Water Users, the goal is to find the best ways in which to achieve this. This includes using efficient means to monitor water use, increase collaboration between users and improving irrigation practices and systems. These practices combined would put the WUAs in a better position to prevent abuse and domination of the water supply thus ensuring equitable distribution of water to their users.

8.1.2. Top challenges faced by WUAs/IBs

8.1.2.1. Adequate control/regulation of water usage

This challenge is brought about due to the interference of some water users on the supply of water. In some cases, water users redirect the flow of water from furrows or dams and this results in the unequal distribution and access to water by other groups of water users. As such, there is inevitably an unequal distribution of wealth which sees previously disadvantaged farmers or users left with not enough water to adequately conduct their business.

8.1.2.2. *Transformation of IBs into WUAs*

The NWA is clear in its mandate, it requires Irrigation Boards to be transformed into Water User Associations. The Irrigation Boards that were interviewed indicated that they had submitted the necessary applications for their transformation. However, no response had been provided to them regarding the results of their applications.

8.1.2.3. *Financial challenges*

Financial constraints, mainly as a result of non-payment of water use charges by water users was cited as a big challenge by the WUAs/IBs. Furthermore, it was indicated that even when the charges were paid, the amounts collected were not enough to cater to the demands required for maintenance and purchasing of infrastructure. As a result of factors such as droughts, infrastructure damage, wildfires and ageing equipment, more finances are needed to attend to these factors. However, the lack of money means that the situation on the ground gets worse as time goes by. These financial constraints are thus impeding the ability of these organisations to perform their duties efficiently. As such, access to additional capital to make room for the shortfall is a major challenge for WUAs/IBs.

8.1.3. Engagement between WUAs/IBs & CMAs

All the respondents indicated that there were no issues related to engagement amongst them. It was indicated that there are multiple forums through the year where WUAs/IBs engage with CMAs on all relevant matters. It was, however, indicated that the most common engagement between these organisations is when it comes to payment of licenses. It was also indicated that for one of the IBs, engagement with WMA/DWS had continually deteriorated over the years as WMA/DWS had increasingly become inaccessible.

On average, engagements between CMAs, IBs & WUAs take place four times a year. In some cases, there are no engagements due to the distance that WUAs are required to travel to attend such meetings. Due to these distances and the fact that some WUAs do not see the value in attending these meetings as they believe that their challenges and opinions are minuscule as compared to their larger counterparts.

8.2. REFLECTION

The interviewed WUAs and IBs are implementing their duties as mandated by the NWA. Furthermore, the IBs have already initiated the processes that are necessary for their transformation to WUAs. Additionally, there is an earnest focus on equality for all. However, for there to be transformation, there is a need for WUAs & IBs to view the role they play as part of a bigger well-oiled machine.

It is important for there to be a mind shift relating to how these parties engage with their respective counterparts. Once again, focus should be placed on the delivery of value and sustainable development. There are obvious mandates stipulated by the NWA, however, what strategies can be put in place to ensure that DWS, CMAs, WUAs & IBs work together to achieve a common goal? The challenges and objectives as mentioned by the WUAs & IBs are based on a direct goal, but it would be beneficial to have a change of focus to include innovative thought for longer term solutions. The EI4WS Project could assist in providing value and a learning element to positively disrupt the normal ways of doing business.

In an increasingly changing world, parties need to be flexible and adaptive to change. This is especially important in the South African context where water is already a scarce resource. The focus areas for WUAs & IBs are extremely positive, however, innovative thought leadership would significantly add value to the work that is already being implemented. There

is a learning element that can be scaled up to the WUAs that are in the process of being transformed by the Department of Water & Sanitation. The issue of nonpayment is well known and has been in existence for years, there is a need for the exploration of structures that can be put in place to ensure that WUAs are self-sustaining and fully operational.

The link between Ecological Infrastructure, Water Security, investment and Local Economic Development is a crucial one. A shift in focus is needed for users to work towards creating an enabling environment that creates opportunities for all parties involved. Attention should be on creating scenarios where users (CMAs, WUA & users) work collaboratively to use the water resource sustainably for the resource to pay for itself. Such a cultural shift is important and would address most, if not all of the challenges faced by WUAs & IBs. This would also prepare CMAs, WUAs & IBs as future-ready and adaptive organisations.

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9. STAKEHOLDER PRESENTATION

THE ECOLOGICAL INFRASTRUCTURE FOR WATER SECURITY PROJECT (EI4WS)

STRENGTHEN INSTITUTIONAL CAPACITY AND OPERATIONAL GOVERNANCE IN CATCHMENT MANAGEMENT AGENCIES (CMA) FOR ECOLOGICAL INFRASTRUCTURE PROJECT
FEEDBACK SESSION

Centre For Local Capacity Building (CLCB) Report Presentation
08 December 2020

Presented by Andrew Kaliati

Agenda

- Executive summary
- Project Progress
- Findings
- Project challenges
- Next steps
- Questions

Executive summary

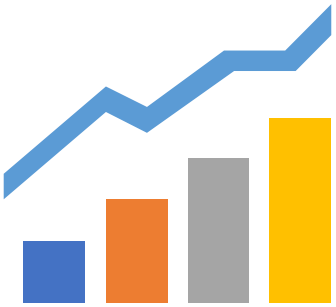
CLCB is involved in the EI4WS project through CLCB through component 3 of the Project, to 'Strengthen institutional capacity and operational governance in Catchment Management Agencies (CMA) for ecological infrastructure. This contract period specifically focuses on the following:

- An assessment of Proto-CMA/WMAs establishment
- Identifying areas of overlap between the mandates and future plans of CMAs that are operational and the focal areas of the EI4WS project; and investigate the arrangements for water research management in Water Management Areas where CMAs are not yet established
- To explore how the EI4WS project can be of assistance in the operations of CMAs and/or DWS within the two EI4WS demonstration catchments
- To compile an inventory and analysis of local water resource management institutions active in the demonstration catchments
- To convene the CMA CEO forum or equivalent structure

All activities are underpinned by a learning element that seeks to inform knowledge management and social learning for change

Project Progress

The CLCB assignment officially commenced in February 2020. Substantial work has been completed since then:



01 **Inception meeting: February 2020**

- An inception meeting took place to align on project objectives and goals

02 **Inception report: March 2020**

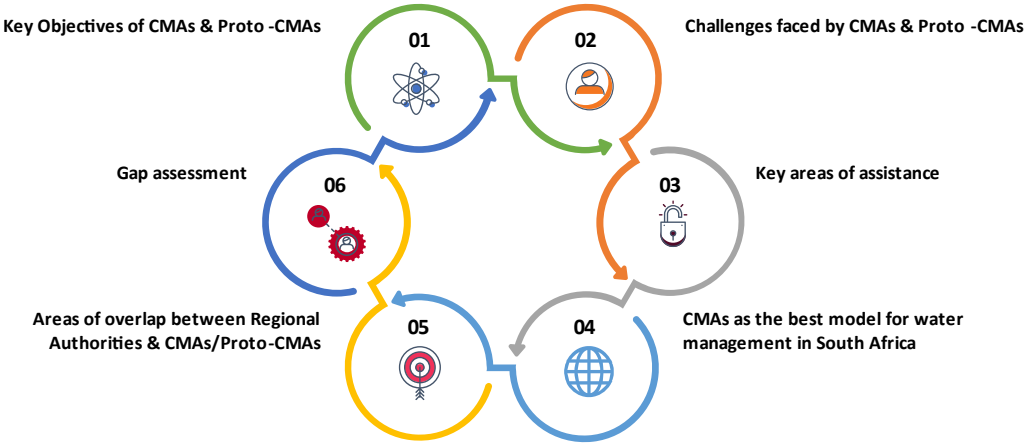
- Breakdown of project understanding
- Description of goals and objectives
- Discussion of project approach

03 **Project Execution**

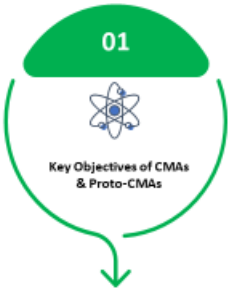
- Desktop study
- Stakeholder engagements
  - Department of Water & Sanitation
  - CMAs & Proto -CMAs
  - Irrigation Boards
  - Water User Associations
- Development of report

Findings

Through engagements with the key stakeholders, the report has unearthed the following findings:



Findings (1/5)



Three main objectives were identified

Water resource managements

- This theme was understandably the most common objective that was raised by the respondents.

Ensuring equitable access to water for all

- This forms part of a broader objective of the South African government to right the wrongs of the past.

Water resource protection and creating sustainable solutions

- Various respondents linked water resources protection and development of sustainable solutions.

> *"...there is a need for awareness, we need to capacitate stakeholders."*
>
> Official from WMA6

> *'As such, one of the responsibilities of the... Catchment is to build resourceful farmers that have access to and are supplied with water resources. We intend to achieve this.'*
>
> Official from WMA3

Findings (2/5)

Three main challenges were identified

The full establishment of CMAs

- Admittedly, the biggest challenge for the 7 Water Management Areas (WMAs) that are not yet fully operational was the continued delay in the process thereof.

Financial constraints

- All CMAs & WMAs mentioned the challenges they face because of financial constraints.

Meaningful transformation of Irrigation Boards

- Ensuring that there is a meaningful transformation of Irrigation Boards into Water User Associations as mandated by the National Water Act (No. 36 of 1998) has been a challenge faced by all CMAs & Proto-CMAs

> *"We are faced with the poor implementation of the National Water Act"*
>
> *"The Act mandates for the establishment of CMAs but we are still continuing with institutional review & realignment... changing and redesigning the water management areas. Instead of implementing what we have, we focus on other things. This shows that there is no policy or implementation direction."*
>
> Official from WMA4
>
> *"Organizational structure not responsive to functions to be fulfilled at DWS, CMA and WUA/IB level."*
>
> Official from WMA5

> *"There is a big culture of non-payment. This is not only a lack of understanding but, there are also politically motivated culture of not paying. We got this land for free so we will not pay for charges."*
>
> Official from WMA6

Findings (3/5)

Three main areas of assistance were identified

Capacity building/development

- The lack of capacity is considered to be the biggest issue that was raised by the respondents.

Management & monitoring of water resources

- Assistance with the management and monitoring of water resources was raised by respondents.

Funding assistance

- This is not only in relation to monetary funding but also in relation to the provision of land for previously disadvantaged people

> *"Integrated water management skills and competencies [are needed] at all levels of water institution management"*
>
> Official from WMA5
>
> *"Most challenges are related to capacity constraints (human resources and skills)"*
>
> Official from WMA4

Findings (4/5)

A majority of the respondents advocated for the CMA model

- However, some were in opposition. The viability of the CMA model was questioned.
- It was argued that the two operational CMAs had not been as successful as was claimed.
- There has been no transformation, nor has there been progress in terms of more effective water management under the CMA structure

> *"Integrated water management skills and competencies [are needed] at all levels of water institution management"*
>
> Official from WMA5
>
> *"Most challenges are related to capacity constraints (human resources and skills)"*
>
> Official from WMA4

> *"Access will assist in a greater transformation impact. There needs to be meaningful transformation because at the moment it is not being done meaningfully."*
>
> Official from WMA3

Findings (5/5)

It was indicated that there are but should not be any overlaps between regional authorities, CMAs & WMAs.

- CMAs have delegated functions while WMAs (proto CMAs) are within the full structure of the regions.
- In that sense, there is no overlap as WMAs report to the regions.

> *"The overlap will only happen in those areas (functions) which are not delegated to the CMA yet, for e.g. approval of water use licences and Reserve Determination."*
>
> Official from WMA1

Findings

3

Involvement of WUA & IBs in WRM: The involvement of WUA & IBs is integral to efficient WRM. They are not a means to an end but rather part of the system. As such, they are not only good for paying water use charges. The biggest question should be how LWRMIs can work together to create an inclusive and enabling WRM environment that caters for all while taking care of the water resource.

1

EQUAL UNDERSTANDING OF THE END GOAL

Perhaps the most important gap that underpins all the challenges experienced in the CMA establishment process is the understanding of what exactly is to be achieved. This includes the positive effect of an efficient decentralised water management system. As such, the process was internalised and focused on how it would affect the officials involved and not the actual beneficiaries and positive effects of implementing such a system. This resulted in factors such as power struggles, confusion on the roles and responsibilities between CMAs and Regional Offices. Furthermore, there is a lack of understanding from WUAs & IBs including community members on their rights, roles & responsibilities the following challenges and subsequent widening gaps that were identified:

5

Financial constraints: The lack of financial resources to implement changes and effect efficient WRM is a gap that was also identified. Financial constraints are not only experienced due to non-payment of water users but also due to national policy that affects how much organisations can collect from users and be granted from National Treasury. A sustainable and inclusive funding strategy is needed.

4

Lack of capacity: This is a gap for all key stakeholders involved in the process. Key skills missing include the technical expertise needed to drive efficient WRM. This also includes not having enough personnel in organisations. Furthermore, there is a lack of capacity in terms of the required infrastructure (especially in poorer areas). This lack of capacity also ties into the lack of understanding on roles and responsibilities

2

Absence of the role of Ecological Infrastructure in the operations of CMAs: It was noted that the Ecological Infrastructure component was not a major factor around the operations of CMAs. Understandably, the critical factors to their operations were around, their operational establishment, financial and resource capacity and the transformation of CMAs.

6

Lack of meaningful transformation: True transformation is the goal of the South African government. Each activity and strategy should be purposefully implemented. It was identified that transformation IBs into WUAs is not meaningful. There needs to be capacity building to sensitise users on the importance of achieving meaningful transformation and inclusion of the previously disadvantaged in WRM.

10. STAKEHOLDER ENGAGEMENT – FEEDBACK SESSION

10.1. PROJECT BACKGROUND AND SESSION PURPOSE

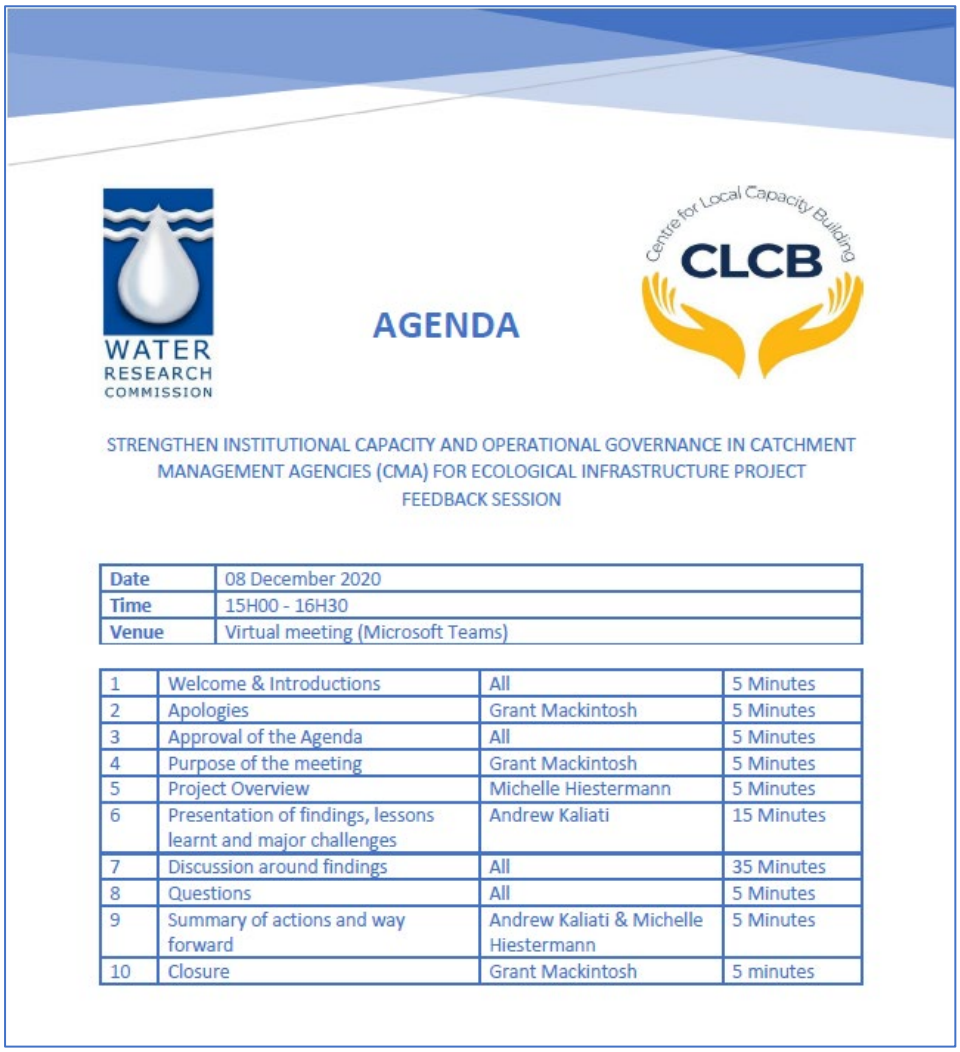
CLCB is involved in the EI4WS project through component 3 of the Project to 'Strengthen institutional capacity and operational governance in Catchment Management Agencies (CMA) for ecological infrastructure'. The outcomes of this project will guide and assist WRC on how to take their support and activities forward and achieve meaningful change, through capacity building effort. This contract period specifically focuses on the following:

- An assessment of Proto-CMA/WMAs establishment
- Identifying areas of overlap between the mandates and future plans of CMAs that are operational and the focal areas of the EI4WS project; and investigate the arrangements for water research management in Water Management Areas where CMAs are not yet established
- To explore how the EI4WS project can be of assistance in the operations of CMAs and/or DWS within the two EI4WS demonstration catchments
- To compile an inventory and analysis of local water resource management institutions active in the demonstration catchments
- To convene the CMA CEO forum or equivalent structure

This report provides a summary of the ***"To convene the CMA CEO forum or equivalent structure"*** component, and outlines the feedback provided by participants (Figure 1).

Figure 4: Feedback presentation on ecological infrastructure for water security project

A 2-hour stakeholder feedback and working session was held on 8 December 2020. The purpose of the session was twofold. First, to provide feedback to the various institutions that were interviewed as part of this study, as well as those who are currently involved in other Ecological Infrastructure (EI) related projects or similar. Secondly, to facilitate feedback considerations from the attendees as to the value of the work completed, and any future considerations going forward. The meeting agenda is set out in Figure 2, the session was attended by 17 participants (Figure 3) from various organisations, listed in Table 1, and the feedback presentation is appended in **Annexure A**.



AGENDA

STRENGTHEN INSTITUTIONAL CAPACITY AND OPERATIONAL GOVERNANCE IN CATCHMENT MANAGEMENT AGENCIES (CMA) FOR ECOLOGICAL INFRASTRUCTURE PROJECT FEEDBACK SESSION

Date	08 December 2020
Time	15H00 - 16H30
Venue	Virtual meeting (Microsoft Teams)

1	Welcome & Introductions	All	5 Minutes
2	Apologies	Grant Mackintosh	5 Minutes
3	Approval of the Agenda	All	5 Minutes
4	Purpose of the meeting	Grant Mackintosh	5 Minutes
5	Project Overview	Michelle Hiestermann	5 Minutes
6	Presentation of findings, lessons learnt and major challenges	Andrew Kaliati	15 Minutes
7	Discussion around findings	All	35 Minutes
8	Questions	All	5 Minutes
9	Summary of actions and way forward	Andrew Kaliati & Michelle Hiestermann	5 Minutes
10	Closure	Grant Mackintosh	5 minutes

Figure 5: Feedback session agenda

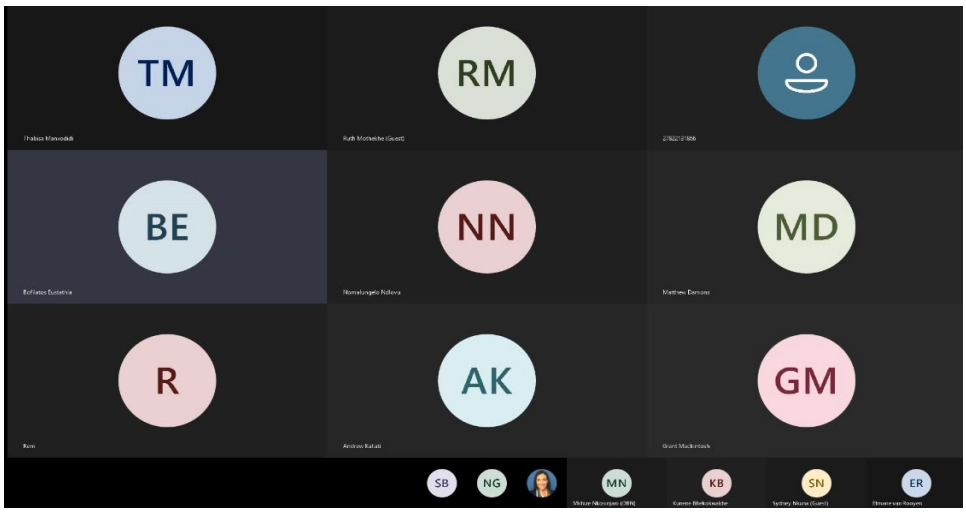


Figure 6: Stakeholder feedback session

Table 1: Participant list

Participant	Institution

Eustathia Bofilatos	DWS National
Kunene Bhekokwakhe	Mzimvubu-Tsitsikamma (proto) CMA
N Gwentshe	Mzimvubu-Tsitsikamma (proto) CMA
Sydney Nkuna	Olifants (proto) CMA
Nkosinjani Mkhize	Pongola Umzimkulu (proto) CMA
Ruth Mothekhe	Orange (proto) CMA
Elmarie van Rooyen	Breede-Gouritz CMA
Samantha Braid	EI4WS Coordinator (responsible for Berg Breede)
Pearl Gola	EI4WS Coordinator (responsible for uMgeni)
Lungi Ndlovu	EI4WS Coordinator (responsible for uMgeni)
Quinex Chiluwe	Infrastructure Projects Manager at Climate Resilient Infrastructure Development Facility
Michelle Hiestermann	WRC
Andrew Kaliati	Centre for Local Capacity Building
Remember Sekgokgo	Centre for Local Capacity Building
Grant Mackintosh	Emanti Management
Thabisa Manxodidi	Emanti Management
Matthew Damons	Emanti Management

10.2. PRESENTATION AND DISCUSSION

The presentation provided an overview of the project, project progress, key findings from stakeholder engagements, gap assessment and the challenges faced by CMAs. The key findings of the project highlighted the:

i. Key objectives of CMAs and proto-CMAs,
ii. Challenges faced by the CMAs and Proto-CMAs,
iii. Key areas requiring assistance,
iv. CMAs as the ideal model for water management, and
v. Areas of overlap between Regional Authorities and CMAs and Proto-CMAs.

The gap assessment highlighted the following:

i. Equal understanding of the end goal,
ii. Absence of the role of Ecological Infrastructure in the operations of the CMAs,
iii. Involvement of the Water User Associations and Irrigation Boards in Water Resource Management (WRM),
iv. Lack of capacity,
v. Financial constraints, and
vi. Lack of meaningful transformation.

Based on the findings and gaps presented, participants provided comments, feedback and their experience through their research and day to day tasks. It should be noted that participants resonated with the above gaps, as during the discussions, the same themes and sub-themes emerged. It was also observed that there is a clear link between these themes and that if addressed in practice, should not be considered in isolation. Rather, the link between themes needs to be determined and addressed together. By way of example: capacitating stakeholders can result in the inclusion of previously disadvantaged people to assist in meaningful transformation. Below is the reflection of the discussions based on the identified findings and gaps.

10.2.1. Equal understanding of the end goal

Participants indicated that the role of CMAs and governance needs to be adequately defined and understood. There is also a need to understand local level catchment challenges and develop catchment management plans for proper implementation of solutions.

> ***"…role of CMAs and governance needs to be adequately defined… There is a misunderstanding between the role of CMAs and the Regional Authorities within their area of operation."***

As a generic catchment management strategy may not be well suited to address all the issues in each CMA and Proto-CMA. Each catchment may have unique challenges which may require unique solutions.

The discussion highlighted that:

- There is a misunderstanding between the role of CMAs and the Regional Authorities within their area of operation. This has resulted in some regional authorities engaging stakeholders without working with or communicating with the CMAs about their activities.
- It was strongly emphasised that there needs to be a shift in focus, to address water resource management related requirements, rather than to focus on institutional requirements. This results in effective and continued water resource management that can inform the requirements for institutional arrangements and governance structures.
- Furthermore, it will inform the required activities and those who need to perform the activities. This will also provide a clear view of the idea of governance arrangements, the type of institutional arrangements and the financial requirements.

10.2.2. Absence of the role of Ecological Infrastructure in the operations of the CMAs

In terms of the absence of EI prioritisation, it was indicated that the newly developed National Water Resources Strategy 3 (NWRS3) and the National Water and Sanitation Master Plan (NWSMP), now have a strong focus on the inclusion of ecological infrastructure to facilitate grey infrastructure gaps. Previous plans and strategies gave focus to other priorities and overlooked ecological infrastructure as a solution to address grey infrastructure needs. Participants indicated that there is a need to review and evaluate the implementation of the NWRS3.

> ***"…Ecological Infrastructure can be combined with other water resources management functions, such that it can be budgeted for adequately."***

At present, it is not implemented at the local/catchment level but rather it is at the national level. This will facilitate the planning of allocated resources to better implement appropriate EI solutions. Additionally, this EI can be combined with other water resources management functions, such that it can be budgeted for adequately. However, this requires the functions of the NWRS3 to be delegated to the appropriate level (CMA level) to ensure the implementation of appropriate EI within a given area.

10.2.3. Involvement of the WUA and IBs in Water resource management (WRM)

Participants indicated that the challenges and gaps presented, are not new within the water sector. In order to overcome these challenges water resources management needs to be decentralised through the establishment of the CMAs as per the National Water Act of 1998 (NWA). However, the operationalisation of CMAs is not as easy as it was originally envisaged in the NWA.

> ***"Water resources management needs to be decentralised… as per the National Water Act of 1998 (NWA)."***

10.2.4. Lack of capacity

Participants indicated that issues of transformation and capacity cannot be addressed without adequately addressing the core issues within CMAs, WUAs and IBs. The constraints to learning and capacity building should also be identified at a decision maker level, to create and facilitate an enabling environment.

One of the main factors in which to address the lack of transformation and capacity is through institutional strengthening. Institutional strengthening needs to equip stakeholders with technical skills, but also with the understanding of how to engage within the workplace and associated projects. Institutional strengthening should also provide a platform for knowledge sharing and collaboration between various institutions and stakeholders. Institutions need to develop strong learning cultures and put in place relevant structures and support to adequately capacitate stakeholders. Finally, stakeholders will need to get the required support to implement workplace projects.

> ***"The constraints to learning and capacity building should also be identified at a decision maker level… Institutional strengthening should also provide a platform for knowledge sharing and collaboration"***

WRC is currently developing courses to address capacity gaps as described and will be implemented/launched in 2021.

10.2.5. Financial constraints

CMAs tend to be financially constrained due to poor revenue collection. The main challenge hampering the revenue collection is due to the slow progress and has resulted in the assumption that the CMA model "will never be sustainable and will never work". Therefore, the benefits of the CMA model need to be clearly outlined in terms of social and economic benefits and successful transformation achieved.

> **"…challenge hampering the revenue collection is due to the slow progress…** ***CMA model need to be clearly outlined in terms of social and economic benefits"***

The broader EI4WS project is considering the financial mechanisms, unlocking these financial mechanisms to implement ecological infrastructure at the CMA level. Participants indicated that there is a need to fully understand what the available funds are actually allocated to, and whether or not they address water resource management issues or are they addressing the water infrastructure development needs. If CMAs were properly capacitated with skills and knowledge, then spending could be reduced on other services.

Finally, issues relating to resource poor farmers remains a challenge as there is a huge gap in financial assistance for these farmers.

10.2.6. Lack of meaningful transformation

Transformation needs to be clearly elaborated upon and a clear way forward must be developed, such that CMAs can operate independently but also have the ability and capacity to influence policy. To date, only 36% of IBs have been successfully transformed. Inclusion of those stakeholders "who are not in the room" must also be achieved, to ensure the right level of local and national involvement to key conversations and insights.

To achieve this, inclusive governance is required, not only by departments/institutions involved in water resources management but also other departments such as the Department of Agriculture, Land Reform and Rural Development (DALRRD). It was recognised that if DALRRD is not included within the transformation agenda, the CMA will lack the required position to effectively transform Irrigation Boards (IBs) into Water User Associations (WUAs). The inclusion of departments such as DALRRD will ensure that water is properly allocated to all stakeholders, which will fulfil the water resource management mandate at a local level.

"The inclusion of departments such as DALRRD will ensure that water is properly allocated to all stakeholders…"

There is a clear need to understand transition pathways, and to deeply consider the social technical systems. Transformation is key to addressing the infrastructure gaps and water resource provision in those areas where infrastructure is lacking. It is not uncommon to find that the IBs are only concerned with the welfare of those users within the reach of their infrastructure. Therefore, those stakeholders who are still using the resource and benefit from existing EI but are not within reach of the IB infrastructure do not receive the benefit of services provided by IBs. These stakeholders need to be included in the management of water resources.

10.3. SIMILAR PROJECTS BEING DONE BY PARTICIPANTS

Quinex Chiluwe is looking at lessons learned from institutions that are undergoing transforming and how the process can be improved. His project seeks to identify the bottlenecks and what innovative ideas can be used to achieve transformation.

10.4. WORKSHOPPING RECOMMENDATIONS BY PARTICIPANTS

A facilitated discussion session was enthusiastically engaged with by the participants. From these interactions, participants identified additional research needs for consideration of the project team and the WRC. In particular, it was suggested that research be carried out on the current CMAs (IUCMA and BGCMA) and highlight the sustainability, viability, achievements, and performance of these CMAs in terms of financial performance and non-financial performance. The additional research should also assess and address the perceptions that CMAs are not achieving their mandates and goals for which they were formed.

Participants indicated that there is a need for CMAs to operate independently but still have the ability to influence policies in terms of water resource management. Additionally, there is also a need to understand the barriers, preventing transition and consider the social technical systems. This will assist in identifying the transition pathways, towards localising and devolving the activities that are performed by the Proto-CMAS and the Regional Authorities.

10.5. WORKSHOPPING ECOLOGICAL INFRASTRUCTURE ISSUES AMONGST PARTICIPANTS

Given the lack of feedback in the project survey interactions relating specifically to Ecological Infrastructure, and with uncertainty as to how energetic the facilitated discussion component of the workshop would be, the project team crafted six (6) Discussion Teaser questions with an Ecological Infrastructure focus. As it transpired, the discussion session was very energetic and valuable and ran over time and the Discussion Teaser questions could not be tabled. It is recommended by the Project Team that these be taken forward in the new year 2021 via a Survey and follow-up workshop.

a. Please convey in one sentence as to what Ecological Infrastructure means to your CMA.
b. What are the topmost significant potential benefits of Ecological Infrastructure to your CMA: *please provide at least one and up to three topmost benefits.*
c. Can Ecological Infrastructure contribute towards your CMA's underserviced community needs? *If Yes, how…*
d. Can stakeholder collaboration (WUAs, IBs, DWS, CMAs, etc.) around ecological infrastructure initiatives improve transformation (Including stakeholder knowledge, policy, financial, and capacity needs) within your CMA? *If Yes, how…*
e. Please indicate, in your opinion, the priority next steps that CMAs require from DWS to ensure operations improvement via Ecological Infrastructure initiatives (e.g. Finance, enabling policies, capacity building, inclusive governance, water management practices). *Your suggested first three steps to get the ball rolling…*

Please propose, in your opinion, a way forward to address the financial constraints faced by CMAs. *Your suggested first three steps to get the ball rolling…*

10.6. WAY FORWARD

The project team will take the insights and feedback provided and consolidate into a final report. The final report will be sent to the WRC team who will assess the feedback and will be used to further improve training/course material and capacity building efforts. WRC encourages participation in the courses currently in development, to assist stakeholders to develop solutions to some of the challenges they are experiencing. Finally, WRC will be screening for additional activities/initiatives and suggestions, by providing a platform whereby participants that are engaging in similar type of work can discuss and potentially collaborate. The recommendations from this study will be made available to the participants of this workshop.