# FINAL EVALUATION OF THE ADAPTATION FUND PROJECT ENTITLED 'BUILDING RESILIENCE IN THE GREATER uMngeni CATCHMENT'

## Final Report

## September 2024

UMNGENI
RESILIENCE PROJECT

Prepared by:

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## ACRONYMS

| | |
|---|---|
| AF | Adaptation Fund |
| BESG | Built Environment Support Group |
| COGTA | Department of Cooperative Governance and Traditional Affairs |
| CSD | Central Suppliers Database |
| DAEA | Department of Agriculture and Environmental Affairs |
| DARD | Department of Agriculture and Rural Development |
| DPME | Department of Planning, Monitoring, and Evaluation |
| DUCT | Duzi uMngeni Conservation Trust |
| EE | Executing entity |
| FPA | Fire Protection Association |
| HOD | Head of Department |
| ITB | Inonyama Trust Board |
| KZN | KwaZulu-Natal |
| M&E | Monitoring and Evaluation |
| MOU | Memorandum of Understanding |
| MTE | Mid-term Evaluation |
| NEP | National Evaluation Plan |
| NIE | National Implementing Entity |
| NQF | National Qualifications Framework |
| PPP | Public-private partnership |
| SAMEA | South African Monitoring and Evaluation Association |
| SANBI | South African National Biodiversity Institute |
| SEA | Strategic Environmental Assessment |
| SEE | Sub-executing entity |
| SEMP | Strategic Environmental Management Plan |
| ToR | Terms of Reference |
| UKZN | University of KwaZulu-Natal |
| uMDM | uMgungundlovu District Municipality |
| UNFCCC | United Nations Framework Convention on Climate Change |
| URP | uMngeni Resilience Project |
| USD | United States Dollars |
| WESSA | Wildlife and Environment Society South Africa |

## PROJECT GENERAL INFORMATION

| | |
|---|---|
| **Adaptation Fund Project ID** | *ZAF/NIE/Water/2013/1* |
| **Project category** | *Regular* |
| **Country** | *South Africa* |
| **Title of project** | *Building Resilience in the Greater uMngeni Catchment* |
| **Type of Implementing Entity** | *National* |
| **Implementing Entity** | *South African National Biodiversity Institute (SANBI)* |
| **Executing Entities** | • *uMgungundlovu District Municipality*<br>• *University of KwaZulu-Natal (UKZN)* |
| **Amount of financing requested** | *USD 7 495 055* |

## PROJECTED TIMETABLE

| **Project timetable** | **Expected Date** | **Actual Date** |
|---|---|---|
| *Start of Project Implementation* | April 2015 | November 2015 |
| *Mid-term Review* | October 2017 | April 2019 |
| *Project Closing* | March 2020 | September 2023 |
| *Final Evaluation* | December 2019 | June 2024 |

| **Project Components** | **Expected Concrete Outputs** | **Expected Outcomes** | **Amount (US$)** |
|---|---|---|---|
| 1. Early warning and response systems improve preparedness and adaptive capacity of local communities and small scale farmers, drawing on and integrating scientific and local knowledge. | 1.1 Hydro-climatological and fire information and warnings supplied timeously in an appropriate format for direct use by communities and relevant disaster response officials.<br>1.2 Early warning systems empower municipal officials and local communities to respond timeously to seasonal forecasts and potential disaster events.<br>1.3: Access to seasonal weather forecasting improves the resilience of small scale farmers to climate variability. | Local capacities and tools for guiding responsive action triggered by hydro-climatological information reduce vulnerabilities and strengthen adaptive responses.<br>• Hydro-climatological information systems integrate local and scientific knowledge to provide advance warning on appropriate time frames.<br>• Communication protocols provide advanced warning information to communities about potential disaster events.<br>• Officials integrate preventative and risk reduction interventions into approaches to disaster management.<br>• Local communities and households using early warning system information | 945 737 |

| Project Components | Expected Concrete Outputs | Expected Outcomes | Amount (US$) |
|---|---|---|---|
| | | to protect lives and assets against fire, storms and flooding.<br>• Small scale farmers using information from seasonal weather forecasting in seasonal production planning. Small scale farmers using early warning system information to protect assets against fire, storms and flooding. | |
| 2. A combination of ecological and engineering solutions helps local communities to reduce vulnerability to the existing and anticipated impacts of climate variability and change. | 2.1: Critical settlement infrastructure, community facilities and homes strengthened and stabilised to buffer vulnerable communities against anticipated climate-induced stresses in rural communities.<br>2.2 Restored and protected critical ecosystems that maintain ecosystem resilience, provide buffering from climate change impacts and provide freshwater to local communities downstream.<br>2.3: Officials empowered to mainstream climate change adaptation into relevant planning and infrastructure development plans and frameworks. | Built and ecological infrastructure enhances resilience and reduces vulnerability to risks associated with climate variability and change.<br>• Vulnerable rural households have increased resilience to climate-induced stresses, as a result of investments in ecological infrastructure.<br>• Structural measures for infrastructure and community buildings (to respond to climate-related risks or threats) designed and implemented, benefiting vulnerable households.<br>• Ha of quinary catchment (including wetlands) with improved functionality.<br>• Development and land use planners in the uMDM integrate emerging disaster risks associated with climate change into local planning processes. | 3 197 307 |
| 3. Small scale farmers have improved resilience and reduced vulnerability to existing and anticipated impacts of climate variability and change. | 3.1: Investments in climate-resilient agricultural practices and physical infrastructure at the farm level mitigate impacts of climate variability and change for small scale farmers.<br>3.2: The KZN Provincial Department of Agriculture and Environmental Affairs mainstreams adaptation practices into its extension | Productive landscape resilience increased through the installation of farm-level infrastructure and the integration of climate change responses into agricultural practices.<br>• Farm plans that include best practice adaptation measures produced collaboratively by Field Assistants, extension officers and farmers.<br>• Best practice farm plans and climate change resilient agricultural practices implemented. | 1 410 476 |

| Project Components | Expected Concrete Outputs | Expected Outcomes | Amount (US$) |
|---|---|---|---|
| | services and farmer support programmes. | • Market linkages established<br>• Training materials developed and training courses held.<br>• Extension officers trained to mainstream climate change adaptation into farmer support programmes. | |
| 4. Capacity building and sharing of lessons and policy recommendations facilitates scaling up and replication. | 4.1. Community champions, officials and authorities are empowered to participate in the project's activities.<br>4.2 Project outputs and experiences are shared and captured.<br>4.3 Policy recommendations support sustaining, scaling up and replicating project successes. | Adaptation practices integrated in relevant climate variability and change policies at the municipal level, in targeted sectors and beyond.<br>• Project partners have enhanced capacity to engage with climate change adaptation issues<br>• Project results are shared at relevant local, national and international fora.<br>• Policy recommendations to address climate variability and change risks formulated and disseminated.<br>• Mechanisms are supported to include project processes and outputs in government planning and budgeting cycles. | 698 116 |
| Project Execution Cost | | | 656 249 |
| Total Project Cost | | | 6 907 885 |
| Project Cycle Management Fee charged by the Implementing Entity | | | 587 170 |

## PROJECT COMPONENTS AND FINANCING

| Project Component | Budgeted | Actual |
|---|---|---|
| Component 1 | US $ 945 737 | To be updated once the project audits are complete |
| Component 2 | US $ 3 197 307 | Same as above |
| Component 3 | US $ 1 410 476 | Same as above |
| Component 4 | US $ 698 116 | Same as above |

# EXECUTIVE SUMMARY

The "Building Resilience in the Greater uMngeni Catchment" project, known as the uMngeni Resilience Project (URP), was introduced to mitigate the vulnerability of communities and small-scale farmers in the uMgungundlovu District Municipality (uMDM) to climate change. The region faces significant climate-related challenges like severe droughts, flash floods, intense storms, and wildfires, compounded by non-climate-related factors like informal housing in flood-prone areas and poor land use management. The URP aimed to address these challenges through an integrated adaptation approach, combining traditional knowledge with scientific research and emphasising gender sensitivity in its interventions.

Officially approved by the Adaptation Fund Board in October 2014, the project was implemented through a partnership involving the South African National Biodiversity Institute (SANBI) as the National Implementing Entity (NIE). It was executed in KwaZulu-Natal by the uMgungundlovu District Municipality (UMDM), serving as the Executing Entity (EE), and the University of KwaZulu-Natal (UKZN) as a Sub-Executing Entity (sub-EE). Initially planned to run from October 2015 to September 2020 with a total budget of USD 7,495,055, the project received four no-cost extensions, extending its duration until March 2024 without requiring additional funding.

The URP focuses on three identified areas and communities at risk from climate variability and change impacts. These include Nhlazuka, which is Ward 5 of Richmond Municipality; Swayimane, which is Ward 8 of uMshwathi Municipality; and Vulindlela, which is made up of Ward 8 and parts of Wards 7 and 39 of Msunduzi Municipality.

## Key Interventions

The project comprises the following four key components, which are designed to promote climate resilience in the three aforementioned communities:

1. **Early Warning and Disaster Response Systems** - The project implemented early warning systems and ward-based disaster response mechanisms in the demonstration sites to alert communities about impending climate-related disasters like floods, storms, and wildfires. This enabled communities to better prepare and respond to such events.
2. **Ecological and Engineering Infrastructure** - The project developed and implemented a combination of ecological and engineering infrastructure solutions tailored for vulnerable communities, including women.
3. **Climate-Resilient Agriculture** - The project integrated climate-resilient crops and climate-smart agricultural techniques into existing farming systems of small-scale farmers in the demonstration sites. This aimed to enhance their agricultural practices' resilience to climate change's impacts.
4. **Dissemination of Lessons Learned and Policy Recommendations** - The project disseminated lessons learned and policy recommendations from the demonstration sites to facilitate scaling up and replicating successful adaptation interventions in other areas. This included hosting events like the Climate Change Indaba in 2023 to share experiences and recommendations.

# Methodology

As the project concludes, this evaluation critically assesses its effectiveness, efficiency, relevance, and long-term impact, reflecting on achievements, challenges, and lessons learned from the inception of the URP to summation. The evaluation, conducted from December 2023 to June 2024, involved site visits to Swayimane and Vulindlela, engaging with various stakeholders, including the SANBI, executing and sub-executing entities, community beneficiaries, and service providers. The evaluation methodology combined quantitative and qualitative approaches, ensuring a comprehensive assessment. Key focus areas included project results, sustainability, design, relevance to government priorities, and M&E systems. Ethical considerations were paramount, with informed consent from all participants and measures taken to ensure effective communication and confidentiality. Despite some limitations, such as timing constraints and logistical challenges, the evaluation provides valuable evidence for decision-making.

## Achievements and Outcomes

The URP significantly exceeded its target of involving 25,640 community members, ultimately benefiting 102,855 individuals, including 53,572 females and 48,283 males. The project established three early warning systems, covering the entire uMDM for flood and storm monitoring and creating partnerships for fire warning systems.

The project also achieved most of its infrastructure and agricultural resilience goals, restoring 206 hectares of grassland and implementing solar irrigation systems for communal farmers in Swayimane. However, some targets, such as retrofitting houses for climate resilience, were not fully met due to delays and logistical challenges. The URP's effectiveness is further evidenced by its impact on policy and knowledge integration. Three significant policy recommendations were developed, and the project's interventions were incorporated into the KwaZulu-Natal Provincial Disaster Management Plan and Climate Change Adaptation Strategy. These achievements are further summarised below:

### Early Warning Systems (Outcome 1)

**Overall Target** - Establish three early warning systems for fire, flood/storm, and agro-meteorological threats.

**Achievements** - All three systems were fully implemented, with additional success in developing a lightning early warning system due to the high incidence of lightning strikes in the region.

**Specific Systems:**

- **Flood Early Warning System** - Although delayed, it is now fully operational, covering 100% of the uMDM with detailed configurations for 75 km of prioritised rivers.
- **Fire Early Warning System** - Implemented in collaboration with the Fire Protection Association (FPA), this system includes strategically positioned fire detection cameras and direct community engagement.
- **Agro-Meteorological and Lightning Early Warning Systems** - Real-time weather stations and a lightning warning system were established, providing timely alerts and data for community decision-making.

## Resilient Infrastructure (Outcome 2) - Included retrofitting existing structures and capacity building within the community.

**Overall Target** - Strengthen or construct 300 houses, 5 pedestrian bridges, and 10 km of stormwater drainage channels.

**Achievements** - Constructed 263 houses, 5 pedestrian bridges, and 1.8 km of stormwater drainage channels. Most targets were met, except the full completion of stormwater drainage channels.

Challenges included alignment issues between designers and constructors and implementation delays due to inadequate technical support and political interference.

### Natural Resource Management (Outcome 2.2)

**Target** - Restore 200 hectares of grassland, rehabilitate 12 km of riparian zones, remove 100 hectares of alien vegetation, and create 100 km of firebreaks.

**Achievements** - Exceeded targets for restored grassland (206 hectares) and firebreaks (106 km). Partial success in rehabilitated riparian zones (5.47 km) and alien vegetation removal (68 hectares in Vulindlela and 2,688 hectares in Nhlazuka).

### Policy Recommendations (Outcome 2.3)

**Target** - Develop at least three policy revision recommendations.

**Achievements** - Successfully developed three key policy recommendations: including BEGS and BEDS.

## Agricultural Resilience (Outcome 3)

**Overall Target** - Increase yields and market access for small-scale farmers.

**Achievements** - Partially achieved yield targets with an average of 2.9 t/ha for maize and 0.82 t/ha for beans. Successfully increased market access for 100% of farmers in Ward 8 of Swayimane through training and the establishment of a pack house.

**Specific Initiatives:**

- **Soil Testing** - Enabled farmers to optimise crop selection, leading to better yields and reduced financial losses.
- **Solar Irrigation Systems** - Supported farmers with sustainable farming infrastructure.

## Capacity Building (Outcome 4)

**Overall Target** - Increase community awareness and integrate adaptation practices into municipal policies.

**Achievements** - 91% of community members gained awareness of climate change adaptation (target was 80%). All three targeted development strategies were implemented.

**Training Sessions** - Conducted 15 training sessions for officials to mainstream climate change adaptation in policies and plans.

## Challenges and Lessons Learned

The project faced several challenges, including delays due to changes in sub-executing entities and high turnover rates among municipal leadership. Financial management disputes and logistical issues also hindered progress. Despite these challenges, the URP demonstrated the importance of adaptive management and the need for longer project timelines to achieve comprehensive implementation.

Key lessons include the critical need for aligning project management with its conceptualisation, addressing institutional capacity gaps, and ensuring prompt implementation to maintain relevance and impact. The project also highlighted the importance of focusing interventions on specific communities rather than broader areas to enhance efficiency and effectiveness.

### Table 1: Lessons Learnt

| Lesson | Description |
|---|---|
| Realistic Timelines | Project timelines should be realistic, ideally spanning 7-8 years, to allow comprehensive implementation and achieve project objectives. Short durations may not allow sufficient time for necessary arrangements and activities. |
| Aligning Project Management | Align project management with its conceptualisation and address institutional capacity gaps within executing and sub-executing entities. Building and enhancing these capabilities ensures effective implementation of project responsibilities. |
| Evidence-Based Decision-Making | Integrate evidence into decision-making processes at every project stage. Access to high-quality science and information enables adaptive management, facilitating timely updates and strategy adaptations. Future projects should prioritise building institutional capacity for evidence-based decision-making and adaptive management. |
| Agility in Bureaucratic Processes | Working with entities that can efficiently navigate bureaucratic processes ensures timely task execution, such as developing terms of reference, securing approvals, and recruiting personnel. |
| Strong Governance Processes | Strengthening governance structures enhances accountability and streamlines decision-making processes, reducing delays and improving project efficiency |
| University Partnerships | Leveraging university partnerships can augment project outcomes through access to research and knowledge sharing, as demonstrated by the favourable results stemming from university engagement in the URP. |
| Adaptive Project Management | Adopting adaptive management principles allows project teams to remain responsive to evolving challenges, opportunities, and stakeholder needs. Regularly monitoring progress, soliciting feedback, and making timely adjustments to strategies and activities enhance resilience and optimise outcomes. |
| Focused Interventions | Focus on individual villages rather than entire wards for more efficient resource management. Consider terrain and accessibility when planning projects in remote areas. Clustering interventions based on geographical proximity and terrain characteristics enhances efficiency and streamlines logistics. Prioritise impact and sustainability over quantity to achieve significant improvements in quality of life and foster long-term resilience. |
| Managing Community Expectations | Manage expectations within communities, especially regarding ambitious project targets. Setting realistic goals and focusing on achievable outcomes can prevent disappointment and ensure tangible benefits. |

## Recommendations

The following recommendations should be considered:

R1. Consider implementing a project closure phase and allocating a budget to ensure the sustainability of ongoing project interventions that still require support beyond the project's end.

R2. Document and strategise the finalisation of ongoing project interventions to ensure their successful completion, even after the project concludes.

R3. Prioritise support for outstanding key project deliverables to ensure their continuity post-project end.

R4. Conduct a thorough verification exercise of outcome 2 interventions to assess their effectiveness and address any discrepancies.

R5. Clarify and finalise sustainability discussions surrounding interventions like financial support for early warning system equipment, ensuring clarity before the end of URP funding.

R6. Explore expanding the project's coverage to additional communities, leveraging the benefits experienced by current participants. However, this expansion would necessitate increased funding to support scalability and reach.

R7. Package the experiences and successes of the URP in various formats to effectively share lessons learned with other stakeholders, maximising the project's impact beyond its current scope.

R8. Future projects should adopt an adaptive management approach that allows for flexibility and responsiveness to changing circumstances. They should build in mechanisms for regular monitoring and evaluation, feedback loops, and course corrections based on lessons learned from projects such as the URP. This can improve projects' ability to adapt to evolving challenges and optimise their impact over time.

R9. Future projects similar to the URP should ensure that executing entities are not solely bureaucratic institutions. Instead, they should consider a mix of public, private, and civil society organisations that can bring diverse expertise and agility to project implementation. This can help mitigate bureaucratic hurdles and enable innovation in project execution.

## Conclusion

The URP implemented early warning systems that significantly benefited community members and small-scale farmers in Swayimane, Vulindlela, and Nhlazuka. The installation of an automatic weather station at Swayimane High School provided real-time weather data and forecasts, enabling farmers to receive alerts about extreme weather events such as heavy rains, storms, or dry spells, which allowed them to prepare and plan their farming activities accordingly. These systems enhanced disaster preparedness by rallying communities, including farmers, during potential climate-related disasters like floods or wildfires, helping protect crops, livestock, and property. Through workshops and training sessions, the URP equipped farmers with the skills to interpret weather data and seasonal forecasts, facilitating informed decisions about planting dates, crop selection, and other agricultural practices to increase resilience and productivity. Additionally, these early warning systems complemented other project interventions like climate-smart agriculture techniques and ecological infrastructure solutions, further enabling farmers to adapt to climate change impacts. Despite administrative and

logistical challenges, the URP was forward-looking, addressing climate variability in South Africa and serving as a model for scalability or replicability. Overall, the early warning systems played a crucial role in increasing the adaptive capacity of small-scale farmers by providing critical climate information, disaster preparedness tools, and the ability to make informed decisions, thereby safeguarding their livelihoods and food security amidst climate variability and change.

# 1. INTRODUCTION

The 'Building Resilience in the Greater uMngeni Catchment' project, locally referred to as the 'uMngeni Resilience Project' (URP), was officially approved by the Adaptation Fund Board in October 2014. The project, formally named "Building Resilience in the Greater uMngeni River Catchment Project", is a climate change adaptation project implemented through a partnership between the uMgungundlovu District Municipality (uMDM) and the University of KwaZulu-Natal (UKZN), with the South African National Biodiversity Institute (SANBI) as the National Implementing Entity. Initially set to run from October 2015 to September 2020, the URP was designed as a five-year initiative with a total budget of USD 7,495,055, equivalent to about R108 million. However, the project timeline was extended four times, with the Adaptation Fund granting no-cost extensions that prolonged the project's duration until the end of March 2024. This extension provided additional time for the completion and consolidation of the project's objectives and activities without additional funding requirements.

The central goal of the URP is to mitigate the vulnerability of communities and small-scale farmers in the uMDM to the adverse impacts of climate change. This region is increasingly experiencing climate-related challenges such as severe droughts, flash floods, intense storms, and wildfires. The vulnerability of these communities is further exacerbated by a range of non-climate-related factors. These include the prevalence of informal housing in flood-prone areas, the construction of poor-quality housing on steep slopes, fire stations that are inadequately equipped, high-density settlements that heighten risk exposure, ineffective land use management, and unsustainable practices in resource utilisation. All these elements contribute to increasing the susceptibility of these communities to sundry hazards, making the project's intervention crucial for enhancing their resilience and capacity to cope with these challenges.

The URP aims to enhance climate resilience and adaptive capacity by employing an integrated approach that merges traditional knowledge with scientific research. The project documents direct that enhancing climate resilience and adaptive capacity through a synergistic integration of traditional and scientific knowledge is key to mitigating vulnerability. In addition, this project places a strong emphasis on gender sensitivity in its interventions, recognizing the varying impacts of climate change on different genders, particularly women. Key interventions of the project include:

**Table 2: Key interventions of the URP**

| Intervention Category | Description | Focus Areas |
|---|---|---|
| Establishment of Early Warning and Ward-Based Disaster Response Systems | Designed to provide timely alerts on climate hazards, enabling communities to prepare and respond effectively to minimise damage and loss of life. | - Timely alerts for climate hazards<br>- Community preparation and effective response<br>- Minimising damage and loss of life |

| | | |
|---|---|---|
| **Development of Ecological and Engineering Infrastructure for Vulnerable Communities** | Focuses on creating infrastructure resilient to climate change, with special attention given to women. This involves constructing structures and systems that can withstand climate-related disasters. | - Resilient infrastructure construction<br>- Protection of communities and livelihoods<br>- Special attention to women's needs |
| **Integration of Climate-Resilient Crops and Climate-Smart Farming Techniques** | Introduces crops more resistant to climate extremes and promotes sustainable farming practices. These practices are tailored to support and empower women in small-scale agriculture. | - Climate-resilient crops<br>- Sustainable farming practices<br>- Empowering women in agriculture |
| **Dissemination of Lessons Learned and Policy Recommendations** | Shares insights gained from the project and provided policy suggestions to ensure scalability and replication of successful strategies. Aims to extend the project's impact beyond immediate communities. | - Sharing of knowledge and insights<br>- Policy suggestions for scalability<br>- Influence on wider policy and practice in climate change adaptation |

The below specific sites were chosen based on vulnerability assessments, stakeholder consultations, and site visits:

- ✓ Low-lying high-density settlements in Msunduzi Local Municipality.
- ✓ The rural area of Ward 8 of Vulindlela, Msunduzi Local Municipality.
- ✓ The rural farming area of Ward 8 of Swayimane, uMshwathi Local Municipality; and
- ✓ The rural area of Ward 5 of Nhlazuka, Richmond Local Municipality.

Figure 1 below, shows the location of the areas where the project is being implemented:

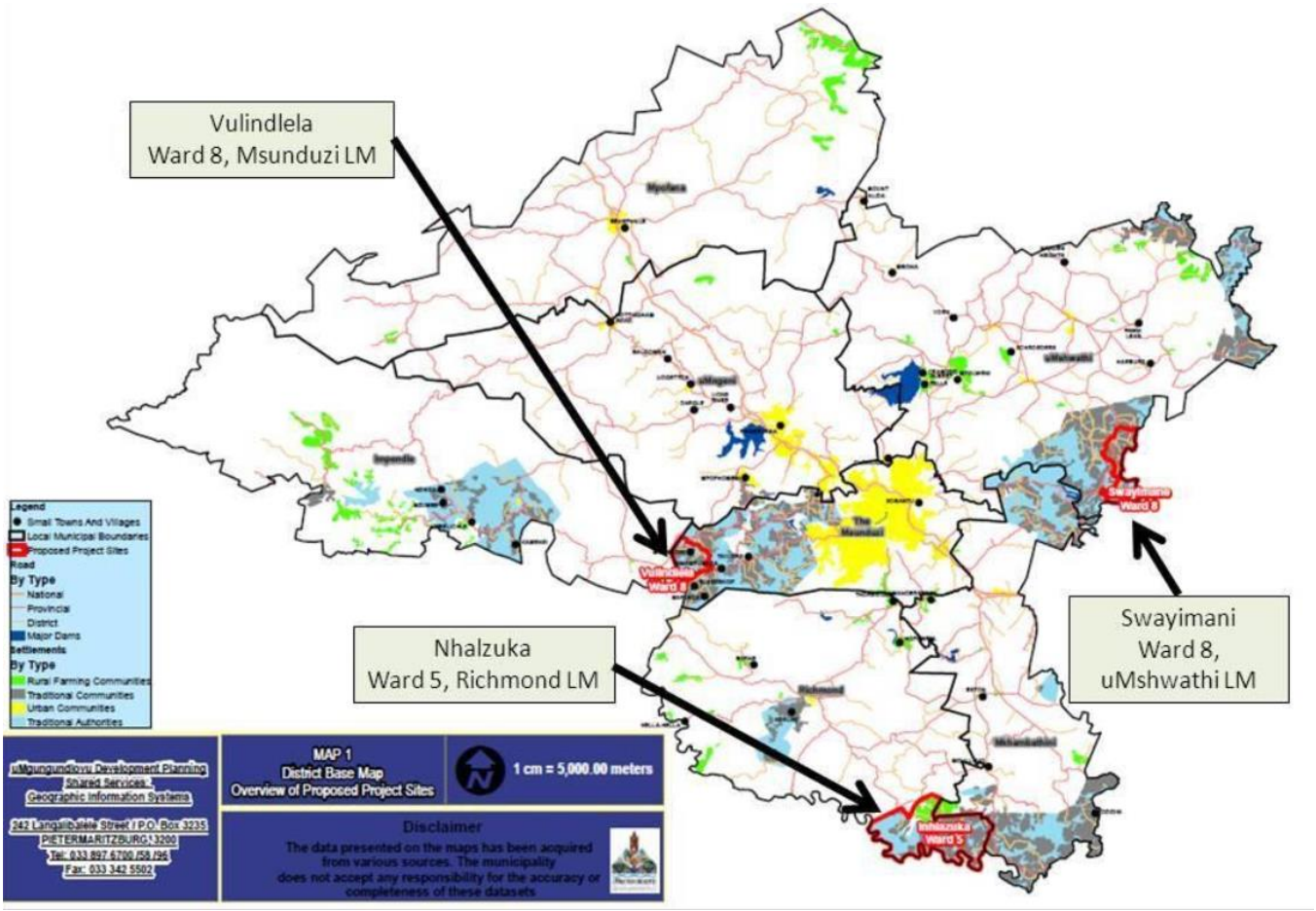


**Figure 1: Project sites within the uMgungundlovu District Municipality, KwaZulu-Natal, South Africa.**

This report presents a comprehensive analysis of the URP from inception to summation. The URP was designed with the critical objective of enhancing resilience to climate change and its associated impacts within the Great uMngeni Catchment. Over the years, the project has focused on implementing various adaptation strategies, capacity building, and introducing innovative practices to mitigate the adverse effects of climate change on the environment and local communities. This summative evaluation aims to critically assess the project's overall effectiveness, efficiency, relevance, and long-term impact. The timing of this evaluation is pivotal, aligning with the URP's conclusion phase. This period offers an opportune moment to reflect on the project's journey, achievements, challenges encountered, and lessons learned. The evaluation will be guided by a structured methodology, encompassing both quantitative and qualitative analysis, ensuring a thorough and unbiased assessment of the URP's various components.

## Study purpose and objectives.

The Terms of Reference (ToR) for the evaluation clearly outline several key areas that need to be assessed to comprehensively evaluate the project. Firstly, the evaluation is to focus on the project results, both outputs and outcomes, including ratings, with a special emphasis on the achievements related to concrete adaptation measures proposed. Additionally, it examines any results that the project achieved beyond those initially included in the project design. Furthermore, the ToR specifies the need to assess the project design itself. This assessment delves into the effectiveness and efficiency of the design in meeting the project's objectives. Another

critical aspect to be evaluated is the sustainability of the project's results at completion, again including ratings. This part of the evaluation will determine whether the outcomes and outputs of the project are likely to continue or be maintained after its conclusion.

The evaluation also considers the various processes that influenced the achievement of these results. This includes an examination of aspects such as preparation and readiness, country ownership, stakeholder involvement, institutional capacity, financial management, supervision, and backstopping by the National Implementing Entity (NIE), as well as any start-up and implementation delays encountered during the project. Additionally, the ToR calls for an evaluation of the project's relevance to government priorities and strategies and how the project's achievements have contributed to the Adaptation Fund's targets, objectives, impact, and overall goal. This should include a report on the contributions to the Adaptation Fund's standard/core indicators.

Lastly, the evaluation assesses the project's monitoring and evaluation (M&E) systems. This involves evaluating the effectiveness of these systems in tracking the project's progress, measuring its impact, and providing insights for future improvements. Each of these aspects forms a crucial part of the comprehensive evaluation as outlined in the ToR, ensuring a thorough understanding of the project's overall performance and impact.

## Evaluation general information

| | |
|---|---|
| **When, and for how long, the evaluation took place** | *From December 2023 to June 2024 (Around 6 months)* |
| **Places visited** | *Site visits were done in Swayimane and Vulindlela* |
| **Who was involved in the evaluation** | *Engagements were conducted with the NIE team, representatives of executing and sub-executing entities, community beneficiaries, and other service providers. A complete list of the interviewees is provided in the Annexes, while details of the focus groups are provided in the following paragraphs.* |
| **Methodology and Evaluation key questions** | *The evaluation methodology (including the stipulated evaluation focus areas) is discussed in detail in Section 2.* |

The methodology section of this report outlines the systematic approach and procedures adopted by Citofield, following its appointment by the UKZN in October 2023. This section provides insight into the steps taken from the initial stages of planning and agreement through to the implementation of the data collection process. It is essential to understand the methodologies applied in gathering and analysing the data, as these processes underpin the validity and reliability of the findings presented in this evaluation. The preceding process were followed in this evaluation:

**Initial Engagement and Planning**

The evaluation process commenced with a sequence of preparatory meetings. These meetings were important in establishing a mutual understanding of the project's objectives and the methodologies to be employed. The discussions aimed at refining and agreeing upon a suitable approach that would guide the entire evaluation process. Following these deliberations, Citofield submitted an Inception Report, outlining the proposed methodology and work plan for the project. This document underwent review and was subsequently approved by UKZN and SANBI, setting the stage for the evaluation to commence.

**Development of Data Collection Tools**

With the Inception Report approved, the evaluation team, proceeded to develop the data collection tools. This was pivotal in ensuring that the information gathered would be relevant, comprehensive, and aligned with the objectives of the evaluation. The development of these tools was informed by an initial review of existing documents and secondary data sources, which helped in identifying gaps and areas of focus for primary data collection.

**Data Collection Process**

The data collection phase of the evaluation was conducted from 11 January to 27 February 2024. This phase was marked by the team's physical visits to two communities, Swayimane and Vulindlela. These visits were essential for engaging directly with the beneficiaries and obtaining firsthand information.

**Key Informant Interviews**

A significant component of the data collection process involved conducting Key Informant Interviews (KIIs). A total of thirty-eight (38) KIIs were completed. These interviews were facilitated using a snowball sampling technique. Initially, a database compiled by UKZN provided the contacts for potential respondents. During the interviews, these respondents were then asked to suggest additional contacts, thereby expanding the pool of information sources.

**Focus Group Discussions**

In addition to KIIs, the evaluation team conducted Focus Group Discussions (FGDs) within the communities visited. In Swayimane, three FGDs were organised, involving diverse groups such as the chief and his council, local farmers, and leaders representing the farming community. These discussions provided a platform for collective reflection and sharing of experiences, enriching the data collected with varied perspectives. Vulindlela saw the convening of one focus group, comprising 19 farmers. This session allowed for an in-depth exploration of the issues pertinent to the farming community within that area.

The methodologies described herein form the foundation upon which the findings and recommendations of this evaluation are based, providing a solid framework for understanding the dynamics and outcomes of the project under review.

# 2. METHODOLOGY

The Citofield evaluation team, in its approach to the final evaluation of the URP, used a pragmatic evaluation paradigm that combines the strengths of both quantitative and qualitative data. We understand that relying solely on quantitative data cannot fully encapsulate the efficacy of the URP. Our paradigm marries the interpretivism perspective — recognising that individual experiences and stories vary widely — with the positivism paradigm, which allows for quantification and generalisation of impacts to a broader population. We firmly believe in the complementary nature of quantitative and qualitative methods in evaluation. While each has its individual strengths, it's their combination that provides a more nuanced and comprehensive understanding of the URP's impact.

## Evaluation design

The evaluation design for the URP is a comprehensive, multi-stage, multi-strand, and multi-method framework, fundamentally based on the principle of triangulation. This approach combines quantitative methods like performance data with qualitative techniques including interviews and focus groups, ensuring a well-rounded assessment. Each stage of the evaluation was designed to uncover different facets of the URP, from its implementation efficiency to the measurable outcomes and broader impacts. By integrating diverse stakeholder perspectives through active engagement, our evaluation aims to offer a holistic view of the project, capturing both its direct outcomes and long-term effects. This design allows for a nuanced understanding of the URP's effectiveness and its contribution to the community, ensuring comprehensive insights for future resilience initiatives.

## Evaluation key questions

The ToR for the evaluation of the project clearly outlines several key aspects that need to be assessed:

**Table 3: Evaluation Key Focus Areas**

| Evaluation Aspect | Details |
|---|---|
| Project Results (Outputs and Outcomes) | Evaluate results, including ratings, with a focus on achievements related to concrete adaptation measures. |
| Additional Achievements Beyond Project Design | Assess results achieved by the project that were not part of the initial project design. |
| Project Design | Analyse the project's overall design, including its objectives, strategies, and methodologies. |
| Sustainability of Project Results at Completion | Evaluate the sustainability of the project's results (outputs and outcomes) at project completion, including ratings. |
| Processes Influencing Achievement of Project Results | Examine factors such as preparation and readiness, ownership, stakeholder involvement, institutional capacity, National Implementing Entity supervision and backstopping, financial management, and project start-up and implementation delays. |
| Project Relevance to Government Priorities and Adaptation Fund Objectives | Assess the project's alignment with government priorities and its contribution to the Adaptation Fund's targets, objectives, impact, and goal, including its alignment with standard/core indicators. |

| | |
|---|---|
| Project's Monitoring and Evaluation (M&E) Systems | Review the effectiveness of the project's M&E systems in tracking progress and measuring impacts. |

## Ethical considerations

Stringent ethical considerations were observed in this evaluation to ensure the integrity and ethical conduct of the evaluation process. Central to these considerations, consent was obtained from all participants involved in the study. Before the commencement of any interviews, both verbal and written consents were sought and secured from the respondents in order to ensure the participants' autonomy, ensuring that they were fully informed about the purpose of the study, the nature of their involvement, and their rights to withdraw at any point without any repercussions.

Recognising the diversity of the communities involved in the study, particularly in terms of linguistic preferences, the evaluation team took measures to ensure effective communication. Where necessary, interpreters were employed to facilitate a seamless and clear exchange of information. This not only ensured that the respondents were comfortable with the language used during the interviews but also contributed to the accuracy and reliability of the data collected by eliminating language barriers. Moreover, the evaluation team was acutely aware of the sensitivity and confidentiality of the information shared by the participants. In adherence to the ethical guidelines, all data gathered during the evaluation process was treated with the utmost confidentiality. Strict protocols were in place to ensure that the information was not disclosed to individuals outside the evaluation team.

## Study limitations.

One significant limitation pertained to the timing of the evaluation where there was a festive holiday in between and impacted the duration of the evaluation. In addition, the data collection process was conducted within a constrained timeframe, which limited the extent and depth of engagement possible with the communities involved. Also, the evaluation team encountered difficulties in reaching key stakeholders they had intended to gather inputs from, including the current leadership of uMDM and Umngeni Water.

Another notable limitation was the inability to reach certain key sites, specifically the communities of Umsunduzi and Nhlazuka, which were initially identified as critical areas for data collection. The failure to access these sites was primarily due to logistical challenges, including transportation difficulties and absence of officials to accompany the evaluation team to the sites. While this limitation is unfortunate, it does not significantly impact the outcomes of the evaluation study. Some stakeholders who were engaged provided insights on activities in these areas, and secondary data from reviewed reports was triangulated to ensure the evaluation team had sufficient information to work with. However, it would have been desirable to have actual site visits for a more comprehensive assessment.

# REVIEW OF PROJECT BASELINE INFORMATION

This section provides a background on the key focus areas, indicators, and targets that are being evaluated in this report. It outlines the specific areas of interest and the metrics used to measure progress, setting the stage for a detailed analysis of the outcomes of the URP outlined in Figure 2.

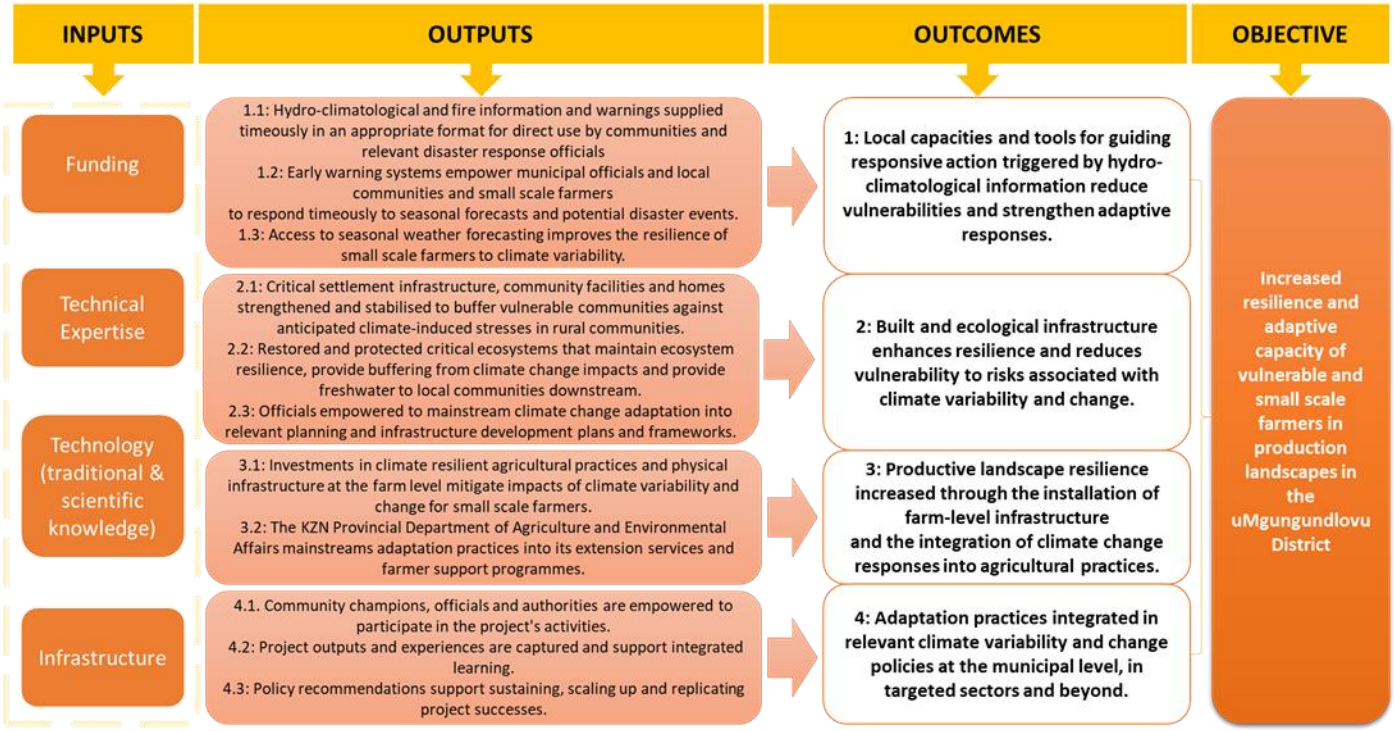


**Figure 2: Umngeni Resilience Project results chain.**

The report will highlight the achievements accomplished over the eight years since the implementation of the URP. Additionally, it includes findings from a midline evaluation where significant progress and achievements were noted. This retrospective analysis aims to offer a comprehensive view of the successes and challenges encountered during the implementation period, providing insights into the effectiveness and impact of the initiative. In addition, comparing baseline and midline data during an endline evaluation is important for evaluators to gain a comprehensive understanding of the trajectory of a project or programme's development. This analysis facilitates the assessment of whether the initially set goals and objectives have been achieved and helps identify areas where adjustments may be required.

The Umgeni project is focused on mitigating climate vulnerability and enhancing the resilience and adaptive capacity of vulnerable and small-scale farmers in the production landscapes within the uMDM. These areas are facing significant risks due to climate variability and change. As alluded above, the project's primary goal is to implement an integrated approach to adaptation, helping these communities better cope with the impacts of climate-related events.

To effectively measure the success of the URP, a specific indicator was established: the number of people with reduced risk to climate-induced hazards such as floods, storms, fires, and droughts, because of the project's interventions. At the beginning of the project, the baseline for both women and men were zero, indicating that no individuals were yet impacted by the project's efforts. The set targets were seemingly ambitious, whereby at the end of the intervention, the project aimed to have positively impacted 13,414 women and 12,226 men, significantly reducing their risk to the adverse effects of climate change. This quantifiable measure as indicated

in the below table provides a clear and objective means to evaluate the project's effectiveness in achieving its goal of building climate resilience among the targeted communities.

| Project Strategy | Indicator | Baseline Level | End of Project Target |
|---|---|---|---|
| **Objective:** Reduce climate vulnerability and increase the resilience and adaptive capacity of vulnerable and small-scale farmers in production landscapes in the uMDM that are threatened by climate variability and change, through an integrated adaptation approach. | Number of people with reduced risk to climate change driven floods, storms, fires, and drought, because of project intervention | 0 women and 0 men | 13,414 women and 12,226 men |

The project set specific outcome targets to gauge its effectiveness, with Outcome 1 focused on enhancing local capacities and tools for taking informed, responsive actions based on hydro-climatological information. This goal was directed at reducing vulnerabilities and strengthening adaptive responses to climate-related events. To measure the success of this outcome, the chosen indicator was the number of early warning systems benefiting vulnerable communities and small-scale farmers. At the beginning of the project, according to project documents and the Mid-Term Review, there were no early warning systems in place. The aim of the project was to establish three distinct early warning systems by the time of its completion. These systems were to be tailored to specific environmental threats: one each for flood/storm, wildland fire, and agrometeorological conditions.

| Outcome | Indicator | Baseline | Target at summation |
|---|---|---|---|
| Outcome 1: **Local capacities and tools for guiding responsive action triggered by hydro climatological information reduce vulnerabilities and strengthen adaptive responses.** | Number of early warning systems benefiting vulnerable communities and small-scale farmers | 0 early warning systems in place | 3 early warning systems; 1 each for flood/storm, wildland fire and agrometeorological. |

Outcome 2 of the project is focused on ensuring that both built and ecological infrastructure are enhanced to increase resilience and reduce vulnerability to risks associated with climate variability and change. To measure the success of this outcome, three specific indicators were employed:

**Physical Assets Strengthened or Constructed** - This indicator tracks the number of rural physical assets that have been strengthened or constructed to withstand conditions resulting from climate change-driven floods, storms, fires, and drought. The baseline for this indicator was zero houses, zero kilometers of stormwater drainage channels, and no pedestrian bridges at the start of the project.

**Natural Resource Assets Maintained and Improved** - The second indicator measures the area and type of natural resource assets that have been maintained and improved to withstand the same conditions. At the

project's inception, there were zero hectares of restored grassland, zero kilometers of rehabilitated riparian zones, no alien vegetation removal to prevent bush encroachment, and no firebreaks.

**Policy Revisions and Recommendations Developed** - The third indicator focuses on tracking the number of policy revisions and recommendations developed to include adaptation considerations, stemming from the knowledge gained through the project. However, at the beginning of the project, it registered 0 policy revision recommendations.

The targets of these indicators are as below:

| Outcome | Indicators | Baseline | Target at Summation |
|---|---|---|---|
| Outcome 2<br>**Built and ecological infrastructure enhances resilience and reduces vulnerability to risks associated with climate variability and change.** | 1. Number of rural physical assets strengthened or constructed to withstand conditions resulting from climate change - driven floods, storms, fires, and drought. | 0 houses; 0km of stormwater drainage channels; and 0 pedestrian bridge at project start | At least: 300 houses; 10 km of stormwater drainage channels; and 5 pedestrian bridges. |
| | 2. Area & type of natural resource assets maintained and improved to withstand conditions resulting from climate change - driven floods, storms, fires, and drought. | 0ha of restored grassland; 0km of rehabilitated riparian zones; 0 ha of alien vegetation removed to prevent bush encroachment; and 0 km of firebreaks at project start | In target areas, at least: 200 ha of restored grassland; 12 km of rehabilitated riparian zones; 100 ha of alien vegetation removed to prevent bush encroachment; and 100 km of firebreaks. |
| | 3. Number of policy revisions recommendations developed to include adaptation considerations as a result of knowledge gained through the project. | 0 policy revision recommendations | At least 3 policy revision recommendations, for the inclusion of adaptation considerations into each of: • rural settlement planning processes/ SPLUMA; • South Africa's EPWP; and • peri-urban and urban settlement design and upgrade processes/ SPLUMA |

Outcome 3 of the project focused on enhancing the resilience of productive landscapes through the establishment of farm-level infrastructure and the integration of climate change responses into agricultural practices. Two key indicators were developed to measure the success of this outcome:

**Increase in Yield from Climate-Resilient Farms/Community Home Gardens**: This indicator tracks the improvement in agricultural yields as a result of project interventions. At the beginning of the project, the

baseline yield was an average of 0.5-1 ton/hectare (t/ha) for maize and 0.3-0.5 t/ha for dry beans in the current farms within the target areas. The project set a target to increase these yields to an average of 3-5 t/ha for maize and 0.75-1.5 t/ha for dry beans from climate-resilient farms/community home gardens in the target areas. Achieving these targets would demonstrate a significant improvement in agricultural productivity, attributable to the adoption of climate-resilient farming practices and infrastructures.

**Increase in Access to Markets for Farmers in Ward 8 of Swayimane**: The second indicator focuses on enhancing market access for farmers. The baseline was described as limited current access to markets for farmers in Ward 8 of Swayimane. The project aimed to achieve a 50-100% increase in market access for these farmers by the end of the project. This indicator is critical because improved market access can significantly enhance the economic benefits of increased agricultural yields, providing a direct incentive for farmers to adopt and continue using climate-resilient practices.

| Outcome | Indicator | Baseline Level | End of Project Target |
|---|---|---|---|
| Outcome 3<br>**Productive landscape resilience increased through the installation of farm-level infrastructure and the integration of climate change responses into agricultural practices.** | Increase in yield from climate-resilient farms/ community home gardens as a result of project interventions. | Average of 0.5- 1 t/ha for maize and 0.3-0.5 t/ha for dry beans from current farms in target areas. | Average of at least 3-5 t/ha maize and 0.75- 1.5 t/ha for dry beans from climate-resilient farms/ community home gardens in target areas. |
| | Increase in access to markets for farmers in Ward 8 of Swayimane as a result of project interventions | Limited current access to markets for farmers in Ward 8 of Swayimane | 50-100 % increase in access to markets for farmers in Ward 8 of Swayimane. |

Outcome 4 of the project is focused on integrating adaptation practices into climate variability and change policies at the municipal level, in specific sectors, and more broadly. To measure the success of this outcome, two key indicators were developed:

**Indicator 1 - Knowledge Integration in Development Strategies**

**Objective:** This indicator measures the number of development strategies that incorporate adaptation considerations due to the knowledge generated by the project.

**Baseline**: At the project's inception, the baseline was established at zero, meaning no existing strategy revisions were influenced by the project's knowledge output.

**Target**: The project set a goal for 80% of its beneficiaries (both men and women) to have an increased understanding of climate change adaptation and resilience-enhancing options by the end of the project.

**Indicator 2 - Beneficiary Knowledge Enhancement**

**Objective**: This indicator tracks the percentage of beneficiaries (both women and men) who have gained increased knowledge on climate change adaptation and options to enhance climate resilience.

**Baseline:** The baseline was 0 strategy revision recommendations that incorporate adaptation considerations as a result of knowledge generated through the project.

**Target:** The project aimed to achieve strategy revisions in three key areas: agriculture, human settlements, and disaster response, as a direct result of the knowledge generated through the project.

These indicators are also captured in the below table.

| Outcome | Indicators | Baseline Values | Target at summation |
|---|---|---|---|
| **Outcome 4: Adaptation practices integrated in relevant climate variability and change policies at the municipal level, in targeted sectors and beyond** | 1. Percentage of community members in target areas with increased awareness, as a result of the project, of climate change adaptation and options to enhance climate resilience. | 0 beneficiaries trained | 80% (for both women and men) of beneficiaries with increased knowledge on climate change adaptation and options to enhance climate resilience. |
| | 2. Number of development strategies that incorporate adaptation considerations as a result of knowledge generated through the project. | 0 strategy revision recommendations as a result of knowledge generated through the project. | 3 development strategy revision recommendations: agriculture; human settlements; and disaster response. |

# 3. EVALUATION OF ACHIEVEMENT OF PROJECT OUTPUTS AND OUTCOMES

This section of the report examines and evaluates the relevance, effectiveness, and efficiency of the URP. It revisits the project outputs and outcomes established during the baseline phase and adjusted during the mid-term period, as outlined in the preceding section. The report thoroughly assesses the project's achievements in relation to the predetermined targets.

## Relevance

The URP is highly relevant to the South African community, society, and government by significantly enhancing climate resilience and sustainable livelihoods. For communities, the URP reduces vulnerability to climate change and natural disasters while promoting sustainable agricultural practices and improving food security and public health. Societally, it fosters environmental sustainability, social cohesion, and better public health outcomes. For the government, the URP aligns with South Africa's strategic imperatives and policies, such as the National Disaster Management Framework, the National Climate Change Response Policy, and supports international commitments like the Paris Agreement. The project's success in promoting innovation and research provides a scalable model for climate adaptation, contributing to broader economic stability and informing effective policymaking. This alignment drives ongoing initiatives to replicate and expand URP interventions across South Africa, demonstrating the project's indispensable role in building a resilient and sustainable future.

The URP's relevance is highlighted by its alignment with both the Adaptation Fund's objectives and South Africa's imperatives, particularly regarding the need to enhance community resilience. The URP incorporates interventions such as early warning systems and community-based initiatives, which are important for strengthening resilience to natural hazards and climate-related disasters. These interventions are further supported by the KwaZulu-Natal Provincial Disaster Management Plan and the KwaZulu-Natal Climate Change Adaptation Strategy, which advocate for community capacity building, infrastructure resilience enhancement, and sector-specific interventions, notably in agriculture – an area the URP delivered on most of its intended outcomes.[1]

The outcomes stemming from the URP, particularly considering the prevalent natural disasters in the greater KwaZulu-Natal region, have also explicitly demonstrated the project's relevance. The project's contributions in mitigating the impact of disasters from extreme weather conditions (including thunderstorms and floods) in the project areas such as Swayimane received positive recognition and appreciation from key stakeholders, including those associated with the NIE, and the implementing entities, that is, the engaged UKZN personnel, and former uMDM officials.

Overall, there is an increasing recognition that the conceptualisation of the URP in 2012/13 was remarkably forward-thinking, particularly in its responsiveness to climate-related challenges. This foresight is now becoming abundantly clear to all stakeholders, including community members, who are witnessing the tangible benefits of the project's interventions. Consequently, there is a strong consensus among engaged stakeholders that the project's relevance is unequivocal. The strategic alignment of the URP with emerging climate imperatives highlights its exceptional prescience and points out to the project's indispensability in contemporary discourse on climate resilience and adaptation.

[1] KwaZulu-Natal - Lets Respond Toolkit

Inputs from engagements with the project's key stakeholders provided further evidence of the URP's relevance from various perspectives. SANBI management, in particular, expressed a strong interest in replicating and scaling up the project's successes. This interest is evidenced by initiatives such as research projects inspired by the URP's methodologies and the development of proposals like the 'Ecosystem-based Approaches for transforming smallholder farming systems that are vulnerable to the impacts of climate change in South Africa' (EbA-Farm) project. At the time of this evaluation report, the EbA-Farm project was in development for submission to the Green Climate Fund (GCF). The proposal seeks a $25 million grant to expand the project's interventions to other areas. The EbA-Farm project aims to replicate and extend the successes of the current project to additional properties and regions. This signifies the perceived effectiveness and relevance of the URP, as evidenced by the desire to extend its benefits to a broader scope. Additionally, SANBI Management mentioned other project partners who are also upscaling specific aspects of the project's work. For example, there are efforts to expand the early warning system developed by the project to other areas through other donor-funded projects.

Evidence showing the engagement of the URP in knowledge-sharing activities and policy influence also implies the project's broader impact beyond its implementation. Through actively participating in conferences, influencing policy development, and engaging with national departments and disaster management centers, the URP has or is contributing to broader discussions on climate change adaptation and disaster management. This demonstrates willingness to address climate challenges and enhancing resilience at both local and national levels as promoted in the strategic documents.

Nonetheless, the delays in the implementation of some of the URP's interventions, as will be unpacked in the succeeding sub-sections, compromised the relevance of certain project aspects, for example the interventions around the rehabilitation of rural households and the clearing of invasive species such as Black Wattle. Some officials from the UKZN and uMDM emphasised the need for improved project management and implementation to ensure timely, effective, and relevant interventions.

Overall, the URP demonstrated its relevance through its alignment with both Adaptation Fund and South Africa's strategic imperatives, and broader contributions. However, there was need for the project to have addressed implementation delays in some of its key interventions to maximise its impact and maintain its relevance in addressing ongoing climate challenges.

### Rating

The evaluation team rates the relevance of the URP as '**Satisfactory**,' reflecting the strong alignment of all the project's concept and the four outcomes with the objectives of the Adaptation Fund and South Africa's strategic imperatives. Its success serves as a scalable model for broader implementation, reinforcing the project's critical role in advancing South Africa's resilience to climate change and natural disasters.

## Effectiveness

This subsection evaluates the effectiveness of the URP. As part of the discussions forming part of the subsection, the evaluation team assesses whether the actual project outcomes align with the original or modified project objectives. The report revisits the evaluation framework discussed in the earlier baseline review section and provides detailed discussions on whether the various outcomes were achieved. The evaluation is based on both

the information reported in the project progress reports and the validations obtained from stakeholder engagements and field visits.

Table 3 below provides a summary of the project's accomplishments compared to its targets. The main goal of the project was measured by the number of community members involved and targeted. Initially aiming for 25,640 community members, the project far surpassed this goal, reaching 102,855 beneficiaries. Of these, 53,572 were females, significantly exceeding the target of 13,414, while 49,283 males benefited compared to a target of 12,226. This demonstrates the project's significant success in surpassing its objectives. The overachievement rates show males reaching 395% of their target and females reaching 399.34%. These impressive results suggest that the original targets might have been too conservative or that the project's impact reached more areas than anticipated. However, it was noted that there was limited participation from younger females, with most female beneficiaries being older women. This highlights the need for future projects similar to the URP to develop innovative strategies to better engage younger females.

**Table 4: Project Achievements**

| Type of Indicator | Indicator | Baseline | Progress since inception | Target for Project End |
|---|---|---|---|---|
| **Objective**: Reduce climate vulnerability and increase the resilience and adaptive capacity of vulnerable and small scale farmers in production landscapes in the uMgungundlovu District that are threatened by climate variability and change, through an integrated adaptation approach | Number of people with reduced risk to climate change-driven floods, storms, fires and drought, as a result of project interventions | 0 women and 0 men | Beneficiaries from fire early warning system: Nhlazuka: 4 950 females and 4050 males. Total: **9 000** beneficiaries. Swayimane: 1 855 females and 1 645 males. Total: **3 500**<br><br>Beneficiaries from floods early warning system: 43 588 males and 46 767 females. Total: **90 355**<br><br>**TOTAL: 102 855 community members (53 572 females and 48 283 males)** | 13,414 women and 12,226 men |
| **Outcome 1**: Number of early warning systems benefiting vulnerable communities and small scale farmers | Number of early warning systems benefiting vulnerable communities and small scale farmers | 0 early warning systems in place | 3 early warning system in place (flood, agro-meteorological and fire) | 3 early warnings systems; 1 each for flood/storm, wildland fire and agro-meteorological |

| | | | | |
|---|---|---|---|---|
| **Output 1.1**: Hydro-climatological and fire information and warnings supplied timeously in an appropriate format for direct use by communities and relevant disaster response officials | 1. Flood/storms: Area of the uMDM covered by improved monitoring network, to allow early detection of flooding threats to vulnerable communities | 0% of the uMDM is covered by an improved monitoring network | 100% of the uMDM is covered by an improved monitoring network; Detailed configuration available for 75 km of prioritised rivers in uMDM | High-level/course configuration: 100% of the uMDM; detailed configuration: 75 km of the prioritised rivers in uMDM |
| | 2. Wildland fire: Number of PPPs in place between the relevant FPAs, the Ingonyama Trust Board and the Local Authorities | 0 PPPs with FPAs, ITB and local authorities | 1 PPPs in place | 1 PPP between the relevant FPAs, the Ingonyama Trust Board and the Local Authorities |
| **Output 1.2**: Early warning systems empower municipal officials and local communities and small scale farmers to respond timeously to seasonal forecasts and potential disaster | 1. Number of ward-based disaster management systems piloted in project target areas | 0 ward-based disaster management systems have been piloted in the project target areas | 3 ward-based management systems | 3 ward-based disaster management systems: one each for the low-lying high-density site, Ward 8 of Vulindlela and Ward 5 of Nhlazuka |
| | 2. Number of community members benefiting from ward-based disaster management systems | 0 community members (0 women and 0 men) in the low-lying high-density site; ward 8 of Vulindlela and ward 5 of Nhlazuka | 46 767 women and 43 588 men in the low-lying high-density site,<br>0 women and 0 men in Ward 8 of Vulindlela ,<br>4,950 women and 4,050 men in Ward 5 of Nhlazuka<br>Swayimane: 1 855 females and 1 645 males. Total: 3 500 | At least: 500 women and 500 men in the low-lying high-density site<br>7,962 women and 7,327 men in Ward 8 of Vulindlela<br>4,852 women and 4,014 men in Ward 5 of Nhlazuka |

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|---|---|---|---|---|
| | 3. Number of community-based fire risk management programmes pilot in project target areas | 0 community-based fire risk management programmes | 1 community-based fire risk management programmes | 1 community-based fire risk management programme in Nhlazuka |
| | 4. Number of trainees directly benefiting community-based fire risk management programme | 0 women and 0 men in Ward 5 of Nhlazuka | 42 women and 31 men in Ward 5 of Nhlazuka | 30 women and 30 men in Ward 5 of Nhlazuka |
| **Output 1.3**: Access to seasonal weather forecasting improves the resilience of small-scale farmers to climate variability | Number of small-scale farmers in Ward 8 of Swayimane benefitting from improved agro-meteorological forecasts at the farm level | 0 women and 0 men in Ward 8 of Swayimane | 324women and 102 men in Ward 8 of Swayimane (Total: 426) | 300 women and 100 men in Ward 8 of Swayimane |
| **Outcome 2**: Built and ecological infrastructure enhances resilience and reduces vulnerability to risks associated with climate variability and change | 1. Number of rural physical assets strengthened or constructed to withstand conditions resulting from climate change-driven floods, storms, fires and drought | 0 houses;<br>0km of stormwater drainage channels; and<br>0 pedestrian bridge at project start | 263 houses<br>1,8 km of stormwater drainage channels<br>5 pedestrian bridges | 300 houses<br>10 km of stormwater drainage channels<br>5 pedestrian bridges |

| | | | | |
|---|---|---|---|---|
| | 2. Area and type of natural resource assets maintained and improved to withstand conditions resulting from climate change-driven floods, storms, fires and drought | oha of restored grassland;<br>okm of rehabilitated riparian zones;<br>oha of alien vegetation removed to prevent bush encroachment; and<br>o km of firebreaks at project start | 206 ha of restored grassland<br>5.47 km of rehabilitated riparian zones<br>68 (Vulindlela) Ha and 2 688 Ha (Nhlazuka) of alien vegetation removed to prevent bush encroachment<br>106 km of firebreaks | 200 ha of restored grassland<br>12 km of rehabilitated riparian zones<br>100 ha of alien vegetation removed to prevent bush encroachment<br>100 km of firebreaks |
| | 3. Number of policy revisions recommendations developed to include adaptation considerations as a result of knowledge gained through the project | o policy revision recommendations | 2 policy revision recommendations | At least 3 policy revision recommendations, for the inclusion of adaptation considerations into each of:<br>rural settlement planning processes/SPLUMA<br>South Africa's Extended Public Works Programme<br>peri-urban and urban settlement design and upgrade processes/SPLUMA |
| **Output 2.1**: Critical settlement infrastructure, community facilities and homes strengthened and stabilised to buffer vulnerable communities against anticipated climate-induced stresses in rural communities | Number rural structures with strengthened climate resilience in the target area, in direct response to participatory vulnerability mapping of the project | o houses;<br>o km of stormwater drainage channels; and<br>o pedestrian bridges | 263 houses<br>1,8 km of stormwater drainage channels<br>5 pedestrian bridges | 300 houses<br>10 km of stormwater drainage channels<br>5 pedestrian bridges |

| | | | | |
|---|---|---|---|---|
| **Output 2.2**: Restored and protected critical ecosystems that maintain ecosystem resilience, provide buffering from climate change impacts and provide freshwater to local communities downstream | Area of target ecosystems within target areas with improved climate resilience | 0 ha of restored grassland;<br>0 km of rehabilitated riparian zones;<br>0 ha of alien vegetation removed to prevent bush encroachment; and<br>0 km of firebreaks at project start | 206 ha of restored grassland<br>5.47 km of rehabilitated riparian zones<br>68 (Vulindlela) Ha and 2 688 Ha (Nhlazuka) of alien vegetation removed to prevent bush encroachment<br>106 km of firebreaks | 200 ha of restored grassland<br>12 km of rehabilitated riparian zones<br>100 ha of alien vegetation removed to prevent bush encroachment<br>100 km of firebreaks |
| **Output 2.3**: Officials empowered to mainstream climate change adaptation into relevant planning and infrastructure development plans and frameworks | 1. Number of tools for mainstreaming climate change adaptation considerations/ standards into informal settlement upgrade planning in the uMDM | 0 climate change adaptation mainstreaming tools | 1 climate change adaptation mainstreaming tools | At least 1 climate change mainstreaming tool, for the uMDM |
| | 2. Number of training sessions to build the capacity of relevant officials to mainstream climate change adaptation in policies and plans | 0 training sessions | 15 training sessions | 15 output driven training and workshops with relevant officials |
| **Outcome 3:** Productive landscape resilience increased through the installation of farm-level infrastructure and the integration of climate change responses into agricultural practices | 1. Increase in yield from climate-resilient farms/community homegardens as a result of project interventions | Average of 0.3-1 t/ha for maize and 0.1-0.5 t/ha for dry beans from current farms in target areas | Average of:<br>Maize = 2.9 t/ha<br>Beans = 0.82 t/ha | Average of at least 3-5 t/ha maize and 0.75-1.5 t/ha for dry beans from climate-resilient farms/community homegardens in target areas |
| | 2. Increase in access to markets for farmers in Ward 8 of Swayimane as a result of project interventions | 0% increase in access | 100% | 50-100 % increase in access to markets for farmers in Ward 8 of Swayimane |

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|---|---|---|---|---|
| **Output 3.1:** Investments in climate-resilient agricultural practices and physical infrastructure at the farm level mitigate impacts of climate variability and change for small scale farmers | 1. Number of farms/community homegardens in target areas on which climate-resilient project interventions are being implemented | 0 farms/community gardens in target areas | Swayimane: 634 farms<br>Vulindlela: 123 farms<br>Nhlazuka: 98 farms, 5 community gardens | Swayimane Ward 8: 200 farms<br>Vulindlela Ward 8: 200 farms<br>Nhlazuka Ward 5: 5 community homegardens |
| | 2. Area of farms/community homegardens in target areas in which climate-resilient project interventions are being implemented | 0 ha | 504 ha in Swayimane<br>30 ha in Vulindlela<br>18 ha in Nhlazuka | Swayimane Ward 8: 2,000 ha of farm land<br>Vulindlela Ward 8: of 1,000 ha farm land<br>Nhlazuka Ward 5: 2.5 ha of community homegardens |
| | 3. Number of small scale farmers in target areas benefitting from climate-resilient agricultural practices introduced through the project | Swayimane Ward 8: 0 women and 0 men farmers; Vulindlela Ward 8: 0 women and 0 men farmers | 688 farmers benefitting in Ward 8 of Swayimane: 540 females and 148 men<br>123 farmers benefitting in Ward 8 of Vulindlela: 92 female and 31 male<br>152 farmers benefitting in Ward 5 of Nhlazuka: 113 female and 39 male | Swayimane Ward 8: 300 women and 100 men farmers<br>Vulindlela Ward 8: 300 women and 100 men farmers<br>Nhlazuka Ward 5: 100 women and 50 men community home gardeners |
| **Output 3.2:** The KZN Provincial Department of Agriculture and Environmental Affairs mainstreams adaptation practices into its extension | 1. Number of trained extension officers placed in project target areas | 0 trained extension officers in target areas | 2 extension officers trained and employed by the URP | 2 trained extension officers (1 in each of Swayimane Ward 8 and Vulindlela Ward 8) |

| | | | | |
|---|---|---|---|---|
| | 2. Number of trained extension officers in uMDM | 0 Extension officers trained in uMDM | 100% of DAEA (now called DARD) extension officers in uMDM undergoing training | 100 % of DAEA extension officers in uMDM trained |
| **Outcome 4**: Adaptation practices integrated in relevant climate variability and change policies at the municipal level, in targeted sectors and beyond | 1. Percentage of community members in target areas with increased awareness, as a result of the project, of climate change adaptation and options to enhance climate resilience | 0% at project start | **91%** of community members in target areas with increased awareness on climate change adaptation and options to enhance climate resilience | 80% (for both women and men) of beneficiaries with increased knowledge on climate change adaptation and options to enhance climate resilience |
| | 2. Number of development strategies that incorporate adaptation considerations as a result of knowledge generated through the project | 0 at project start | 7 development strategies | 3 development strategy revision recommendations:<br>agriculture<br>human settlements<br>disaster response |
| **Output 4.1.** Community champions, officials and authorities are empowered to participate in the project's activities | 1. Number of project beneficiaries trained on climate change adaptation and options to enhance climate resilience | 0 at project start | 60 community champions (37 women and 23 men)<br>5 councillors (2 women and 3 men)<br>22 officials (14 women and 8 men) | 40 cmmunity champions (25 women and 15 men)<br>4 councillors<br>8 officials |
| | 2. Percentage beneficiaries with improved knowledge of climate change adaptation and options to enhance climate resilience | 0% at project start | 67 NQF certificates obtained | 48 NQF certificates |

| | | | | |
|---|---|---|---|---|
| **Output 4.2:** Project outputs and experiences are captured and support integrated learning | Number of platforms to share project outputs and experiences | 0 platforms at project start | 8 reflection workshops<br>6 learning exchanges<br>3 conferences | 8 reflection workshops<br>3 learning exchanges<br>3 conferences |
| **Output 4.3:** Policy recommendations support sustaining, scaling up and replicating project successes | Number of national policy conferences and scaling up workshops based on project lessons learned | 0 at project start | 1 national Early Warning System workshop<br>3 national policy conference (1 Climate Change Indaba)<br>3 scaling up workshops | 3 national policy conferences<br>3 scaling up workshops |

***Key to Table***

| | |
|---|---|
| | Achieved |
| | Partially achieved |
| | Not achieved |

Table 3 confirms the successful completion of outcome 1, which evaluated the deployment of early warning systems benefiting small-scale farmers and vulnerable groups. The aim was to establish three early warning systems: for fire, flood/storm, and agro-meteorological threats. Currently, all three systems have been fully implemented. In addition, two out of three outputs under outcome 1 were achieved, and the other was partially achieved.

There was also the development of the lightning early warning system, which, although not initially planned for, has become one of the key deliverables and successes of the URP, given the necessity for such systems due to the project area's susceptibility to lightning strikes and thunderstorms. As the URP was progressing, the project management team identified a significant issue related to lightning strikes in the KwaZulu-Natal (KZN) region, leading to fatalities among both humans and animals. They discovered that while South Africa had a lightning detection network in place, warnings were not effectively disseminated to the general public. Additionally, the development of the Rangeland Early Warning System, even in its prototype stage, is worth mentioning. This system aims to address and mitigate risks associated with environmental factors affecting rangelands, further showcasing the URP's proactive approach to identifying and addressing critical regional issues.

The above early warning systems are discussed in detail in the paragraphs below.

**Floods early warning system:** The reviewed annual reports indicated that the installation of flood instrumentation had been finalised and Umngeni Water, the entity responsible for the installation of this early warning system, conducted the monitoring and calibration of the flood early warning system. Furthermore, recent progress data for the project shows that the flood early warning system has now been fully implemented and is operational.

**Fire early warning system:** The fire early warning system implemented as part of the URP involves collaboration with the Fire Protection Association (FPA), a key stakeholder with expertise in fire detection and prevention, particularly within the forestry and farming industries. The FPA's involvement presents an opportunity to extend their services to local communities, leveraging advanced technology for early fire detection and response. Utilising the FPA's expertise and resources, the system aims to enhance the communities' preparedness and responsiveness to fire incidents. The advanced technology employed includes real-time monitoring and alert systems that detect fire outbreaks at an early stage, allowing for swift action to prevent widespread damage. This collaboration not only enhances the effectiveness of fire management strategies but also empowers local communities with the tools and knowledge needed to protect their environments and livelihoods.

The integration of the FPA's services into the URP framework facilitates a comprehensive approach to fire risk management. By involving local communities in the process, the project ensures that the benefits of advanced fire detection and prevention technologies are accessible to those most at risk. This approach fosters a sense of ownership and responsibility among community members, encouraging proactive measures to mitigate fire hazards.

The FPA's contribution includes the installation and operation of strategically positioned fire detection cameras, managed through their detection centres. These cameras utilise advanced technology to detect signs of fire, such as changes in imagery and the presence of smoke or firelight, providing early warnings to relevant stakeholders. The approach adopted by the FPA ensures prompt notification of fire incidents, enhancing community safety and mitigating risks posed by wildfires.

Despite initial challenges in communication within the project, the FPA took measures to directly engage with communities, bypassing intermediary dispatch centres. This direct communication enables prompt alerts to relevant individuals within the community, empowering them to take immediate action in response to fire incidents. Furthermore, the FPA's efforts extend beyond fire alerts to include weather warnings, enhancing community resilience and preparedness.

The FPA's intervention received positive responses from the community, although challenges in relying solely on municipal resources for support were acknowledged. Suggestions for improvement include expanding camera coverage and exploring additional communication channels like Short Message Service (SMS) for broader coverage. Additionally, clarity regarding communication responsibilities within the project is highlighted as necessary for improved accountability.

However, there were some concerns from the Richmond municipality, within which the project area with the fire detection system is located. Concerns were raised about the accessibility and transparency of equipment, something the evaluation team believes can be addressed through engagements between the project management team, the FPA, and the Richmond municipality. Addressing communication challenges and ensuring community understanding and engagement are important for enhancing the system's effectiveness and sustainability within the project area.

**Lightning and agro-meteorological early warning systems:** As part of this intervention, an academic at the UKZN was tasked with implementing an intervention involving the establishment of a real-time weather station and a lightning warning system. The primary objective of this intervention was to effectively communicate information about extreme weather events to the local community. Initially, the local community, including farmers, in the Swayimane area are reported to have relied on rudimentary alerts, such as red lights or noise signals from a local device, which provided limited information. Additionally, the intervention aimed to provide supporting data to learners at Swayimane High School and postgraduate students who were conducting research in the area. This initiative served to enhance community resilience by providing timely information and valuable data for decision-making and academic research purposes. Additionally, supervision was provided for a PhD student conducting research on the installed equipment at the school. Over time, the responsibilities evolved, with a shift towards more comprehensive involvement in equipment procurement, warning dissemination, and educational initiatives within the community. By the time of the project's conclusion, the local community, including farmers, was receiving timely SMS alerts and emails through a sophisticated early warning system. These alerts allow the community to prepare for potential weather-related challenges by taking proactive measures.

The URP partially achieved its Outcome 2 targets. Outcome 2.1 focused on strengthening or constructing rural physical assets to withstand climate change-driven floods, storms, fires, and drought. The targets were to retrofit 300 houses, 5 pedestrian bridges, and 10 km of stormwater drainage channels. Reports indicate that 263 houses were retrofitted, although this could not be independently verified. Additionally, all 5 pedestrian bridges were completed, and 1.8 km of stormwater drainage channels were built. Some project issues and delays prevented the achievement of all targets. Like Outcome 1, 2 out of the 3 outputs under were successfully met.

**Climate resilient housing:** The URP intervention on climate-resilient housing encompassed two main elements:

1. Retrofitting Existing Structures: The first element involved retrofitting existing structures to enhance their resilience to climate change impacts. This included actions such as improving insulation, using more

durable materials, and addressing structural vulnerabilities caused by soil erosion. The goal was to demonstrate sustainable retrofitting techniques that could be adopted by homeowners in the future. By retrofitting existing structures, the project aimed to mitigate the risks posed by climate change while also promoting long-lasting and environmentally friendly building practices.

2. Legacy and Capacity Building: The second element focused on legacy and capacity building within the community. This aspect of the project aimed to empower community members with the knowledge and skills needed to build climate-resilient housing. It involved showcasing sustainable building techniques using locally sourced materials and equipping community members with the necessary skills to construct their own resilient homes. By providing training and education on sustainability and climate change adaptation, the project aimed to create a lasting impact and foster self-sufficiency within the community.

However, the URP's climate-resilient housing intervention faced numerous challenges, as highlighted in reviewed reports and stakeholder discussions. A significant issue stemmed from a misalignment between the research-oriented approach of the designers and the practical needs of implementation projects. Although the initial design process aimed to create climate-resilient housing structures through community engagement and practical interventions, converting these design concepts into actionable plans for on-the-ground implementation proved difficult. Additionally, the project team's decision to transfer the construction responsibilities from the designers to hired construction companies resulted in numerous delays. These construction companies lacked the same understanding and expertise as the designers, further complicating the implementation process

Implementation delays further exacerbated the challenges faced by the intervention. Stakeholders expressed dissatisfaction with the construction teams' work, citing incomplete and substandard practices such as improper plastering and missing essential components like mesh wire. These shortcomings not only raised concerns about the quality and effectiveness of the intervention but also highlighted issues with project management and oversight. Despite detailed planning and consultation processes, some planned activities, such as the establishment of demonstration sites for climate-resilient housing prototypes, were not realised during the project's execution phase. This gap between planning and execution suggested a breakdown in project management and coordination, leading to unmet expectations and missed opportunities for validating and disseminating project outcomes.

Technical support and effective stakeholder engagement emerged as critical factors influencing the success of the housing intervention. Challenges related to inadequate technical support from the municipality and difficulties in engaging effectively with the local community hindered progress. Cultural and language barriers hampered communication, while turnover of personnel within the municipality disrupted continuity and coordination.

Budget constraints and political factors added complexity to the project's implementation, exacerbating existing challenges. Reported promises made by local politicians regarding new houses created confusion and dissatisfaction among community members, leading to challenges in managing stakeholder perceptions. Additionally, the project fell short of its targets, particularly in terms of retrofitting and renovating houses for climate resilience. Factors contributing to this failure included unrest caused by business forums, delays in approvals for the project's second phase, and cost escalation over time.

**Bridges and stormwater drainage channels**: Information obtained through stakeholder engagements indicated that five bridges were constructed, achieving 100% of the target. These constructions were carried out by

professional contractors for safety reasons, and their success was affirmed by the UKZN management overseeing the project. However, regarding the planned 10 km of stormwater drainage channels—2km for roads and 8 km for houses—only up to 2 km of road drainage was completed, with no drainage work undertaken for the houses as initially planned. It's important to note that these reported achievements could not be verified due to the lack of a field visit to Nhlazuka during the evaluation process.

Outcome 2.2, which measured the area and type of natural resource assets maintained and improved to withstand climate change-driven floods, storms, fires, and drought, was achieved. The target included restoring 200 hectares of grassland, and the project succeeded in restoring 206 hectares. Additionally, the targets included 12 km of rehabilitated riparian zones, 100 hectares of alien vegetation removed to prevent bush encroachment, and 100 km of firebreaks. Commendably, most targets were exceeded, except for the 5.47 km of rehabilitated riparian zones achieved against the 12 km target. Outcome 2.3, which aimed to measure the number of policy revision recommendations developed to include adaptation considerations based on knowledge gained through the project, was partially achieved. The target was a minimum of three policy revision recommendations, but the project successfully developed two.

**Outcome 3** was also partially achieved: Outcome 3.1, which aimed at increasing the yield from climate-resilient farms/community home gardens as a result of project interventions was partially achieved, with an average 2.9 t/ha[2] of maize yielded against a target average of 3-5t/ha. The average beans yielded was 0.82 t/ha from climate-resilient farms/community home gardens which fell within the average target range of 0.75 – 1.5t/ha. In Swayimane, there are project initiatives including the implementation of solar irrigation systems with jojo tanks to support local communal farmers in their community gardens. Additionally, these efforts involve fencing the community gardens to enhance the security of farmers' produce. During on-site visits to Swayimane, the evaluation team confirmed that the communal land hosting the irrigation system was actively utilised, with visible crops being tended to by individual communal farmers. Furthermore, a beneficiary showcased the functionality of the system. These interventions are perceived to have played a role in the reported partial progress of outcome 3.1. Furthermore, outcome 3 had 2 outputs, with only one being fully achieved and the other being partially achieved.

Furthermore, the project introduced the local communal farmers to the concept of soil testing, enabling them to make informed decisions about which crops to cultivate based on the suitability of their land and environmental conditions. Previously, farmers would often plant crops without considering whether their soil was suitable for specific crops, leading to wasted resources and poor yields. With access to soil testing information and guidance, farmers could optimise their crop selection, leading to more successful harvests and reduced financial losses.

Outcome 3.2, which aimed at increasing the access to markets for farmers in Ward 8 of Swayimane as a result of project interventions was achieved. The target was to increase market accessibility for farmers in Ward 8 of Swayimane by 50% - 100%. Based on the project information, 100% of the farmers from the area had increased accessibility. The training of local farmers is the main element linked to the achievement of the set target. As part of the on-site visits to Swayimane, the local farmers confirmed that regular training sessions were held where a team of experts came into the community and shared knowledge regarding climate intervention, teaching on different techniques to grow crops. A particular question that arose was "what to do with surplus produce?" and through training they learnt that they could make other products such as juice or jam to generate income. The

[2] Other reports have 3.8t/ha.

beneficiaries highlighted that the sessions brought unity amongst themselves, upskilled their knowledge in crop farming, marketing, and encouraged them to continue farming. Furthermore, the completion in the building of a pack house is further anticipated to increase the local farmers' access to not just markets but quality markets. The beneficiaries highlighted that the pack house will assist them as it will give them a competitive advantage when selling their produce in the markets. The pack house will serve as a place for sizing, grading, and packing and cleaning the local farmers' produce enabling them to cost their produce at a market related price like large scale farmers. The intervention brought a solution to the local farmers' problem of sorting and packing produce accordingly.

The last **Outcome 4** addressed the adaptation of practices integrated in relevant climate variability and change policies at the municipal level, in targeted sectors and beyond. This was measured in two components: Outcome 4.1 measured the percentage of community members in target areas with increased awareness, as a result of the project, of climate change adaptation and options to enhance climate resilience. With a target of 80%, the final M&E report indicated that 91% of community members had gained awareness at the end of the project, indicating an achievement as well. Outcome 4.2 examined the number of development strategies that consider adaptability, with a target of three. This was exceeded, with seven development strategies implemented at the end of the project (that is, five policy briefs on climate-resilient agriculture; one policy brief on Ecological Infrastructure; and one overarching policy brief on adaptation in South Africa). Additionally, all the outputs under outcome 4 were achieved.

The project deserves commendation for its accomplishments because the majority of its goals were fully achieved. Despite several challenges, including COVID-19, community involvement, and procurement delays, the project was able to demonstrate its efficacy and provide positive outcomes. Overall, the project's development and outcomes are commendable. Accordingly, one of the engaged key project stakeholders acknowledges the URP's overall potential as generally a pilot initiative with the capacity for future replication or expansion into other regions.

### Rating

The evaluation team assesses the overall effectiveness of the URP as '**Satisfactory**,' given that four out of the project's seven outcome targets were fully achieved, and three were partially achieved.

| Project outcome | Achievement of outcome targets | Rating |
|---|---|---|
| 1 | Outcome 1 target fully achieved | *Highly satisfactory* |
| 2 | Three outcome targets partially achieved. | *Moderately Satisfactory* |
| 3 | One target fully achieved, and the other partially achieved | *Satisfactory* |
| 4 | All two targets fully achieved | *Highly satisfactory* |
| **Overall rating** | | **Satisfactory** |

## Efficiency

The URP's efficiency was notably impacted by delays in project timelines, as what was initially planned for five years extended to eight years. While factors like the Covid-19 pandemic may offer valid explanations for implementation delays, it is important to note that the project was already experiencing setbacks, as will later be discussed in a later sub-section on project implementation delays, prior to the onset of the pandemic. This raises

questions about the project's efficiency, particularly concerning time management. Regarding the project's effectiveness in achieving outcomes relative to the funds invested, the absence of additional funding through the no-cost extensions suggests that no extra resources were allocated to achieve the project's initial objectives or outcomes. However, the failure to attain certain key budgeted project outcomes, such as the integration of climate-resilient housing and stormwater drains, may indicate inefficiencies, suggesting that funds were utilised without corresponding tangible results in some areas. On the other hand, consideration must also be given to the implementation of tangible interventions that were not planned or budgeted for but were successfully delivered. Examples include the extra early warning systems, Jojo tanks, additional irrigation in Nhlazuka, and Vulindlela fencing. These unplanned achievements should offset some of the perceived inefficiencies in delivering on the Outcome 2 targets. Additionally, it is noteworthy that Outcome 2 was underspent, which may further explain the disparities in expected versus actual project deliverables.

Several respondents also expressed concerns that delays in fund disbursement, procurement processes, and institutional inefficiencies, such as protracted approval procedures, lead to postponements in hiring project staff and consequently slowed down project implementation. In the same line of thinking, another respondent mentioned that the delays in fund allocation, procurement, and institutional inefficiencies not only hindered the timely recruitment of essential staff but also impeded the overall momentum of the project, affecting its efficiency in achieving its intended outcomes.

Many of the stakeholders engaged as part of the evaluation study believe that several of the causes for the URP's inefficiencies may be attributed to internal challenges within the executing entity, the uMDM. The turnover in senior management positions within the municipality posed a significant challenge, with new management teams requiring time to understand the project and its objectives, leading to disruptions and delays. The transitions between the municipal departments and management structures necessitated realignment, causing further delays and inefficiencies. Finding the right people or entities to manage the project was identified as crucial for success. Nonetheless, according to the engaged stakeholders, the subsequent transfer of the project to UKZN was seen as a positive step, albeit one that also presented difficulties during the transition period. Despite the difficulties, stakeholders believe that the project's ultimate results and efficiencies have been relatively positive compared to what might have been achieved without the move to UKZN.

The project management team also identifies the non-participation of many key initial sub-executing entities as a major cause of the delays that characterised the project from its inception and impacted the overall efficiency. As detailed in a governance subsection later in the report, the project encountered significant implementation challenges because some key sub-executing entities were dropped at the inception stage, regardless of them having contributed to the conceptualisation and drafting of the project proposals. The withdrawal of these entities necessitated the engagement and inclusion of other sub-executing, who then required time to familiarise themselves with the proposed plans and proceed accordingly, resulting in implementation delays.

### Rating

Although the project was not completed within the initially planned timelines (i.e. 5 years), the request for a no-cost extension suggests that time constraints rather than budgetary issues were the primary challenge. Therefore, the evaluation team assesses efficiency within the extended eight-year timeframe, scrutinising each outcome item individually. A qualitative analysis of the efficiency of each outcome area, shown in the table below, indicates that most areas achieved moderately satisfactory to *highly* satisfactory efficiency ratings, with one area rated moderately unsatisfactory. Consequently, the overall efficiency rating is deemed 'Satisfactory'.

| Project outcome | Efficiency in achievement of outcomes | Rating |
|---|---|---|
| 1 | All the three planned early warning systems were achieved in full and on budget. Regardless of the delays that characterised the finalisation of the flood early warning system, it is imperative to note that all the three early warning systems are now operational. | *Satisfactory* |
| 2 | The bulky of the project's infrastructural interventions were not completed in full, on time, and on budget. | *Moderately unsatisfactory* |
| 3 | The bulky of the project's agricultural activities were achieved on time and in full | *Satisfactory* |
| 4 | All capacity building activities were achieved in full and on time | *Highly satisfactory* |
| **Overall rating** | | **Satisfactory** |

## Achievement of Outcomes: Overall Rating

The comprehensive assessment of the project yields a rating of '**Satisfactory**' across relevance, effectiveness, and efficiency. This indicates that the URP achieved significant outcomes in terms of relevance, effectiveness, and efficiency. However, there were a few areas, notably the integration of climate-resilient infrastructure, where performance fell short of optimal levels.

Overall, the 'Satisfactory' rating further supports the notion that the URP played a pioneering role in South Africa's climate change adaptation initiatives. Essentially functioning as a pilot project, its conceptualisation and implementation predated significant national attention to climate change concerns. However, the prevailing disasters affecting various parts of the country have amplified the importance of proactive interventions like the URP. Over time, stakeholders have come to recognise the project's forward-looking nature, appreciating its role in enhancing community resilience amidst evolving climate challenges. As such, while the project may have encountered shortcomings in certain areas, its broader impact and foresight in addressing climate vulnerabilities contribute to its overall value and relevance.

| Evaluation area | Assigned rating | Overall rating |
|---|---|---|
| Relevancy | Satisfactory | *Satisfactory* |
| Effectiveness | Satisfactory | |
| Efficiency | Satisfactory | |

# 4. RISKS TO SUSTAINABILITY AND PROGRESS TOWARDS IMPACTS

Assessing sustainability is crucial in evaluating the long-term impact of the URP. Hoque et al. (1996) analysed the sustainability of water, education, and sanitation projects in Bangladesh and highlighted the significance of beneficiary acceptance of promoted practices for sustainability, even six years post-implementation. In contrast, AfDB (2000), who examined integrated coastal management, found that a community's perception of potential benefits significantly influences their ongoing participation and, consequently, the project's sustainability. The sustainability of a project can be influenced by several factors related to its design, implementation, and the specific context in which it operates. For instance, the level of emphasis placed on community consultations and outreach can be pivotal when the support of recipient communities is crucial, affecting the project's overall sustainability and its trajectory towards achieving intended impacts. To evaluate sustainability, the evaluation team utilised feedback from stakeholder engagements, and conducted a bibliographic review of available documentation, including implementation reports and other relevant materials like the midterm report. Sustainability was assessed on a 4-point scale: sustainable, moderately, and unsustainable. In assessing the performance, the team considered:

- Aspects such as the financial, economic, social, political, and environmental sustainability
- Probability and likely effect of a risk
- Accrued and likely benefits
- Time within which the benefits are expected.

The assessment was both back looking - taking account of the gained net benefits and forward looking – estimating the likelihood of accrual of net benefits. The review showed that, in general, most projects that were assessed at implementation completion (midterm) as likely to sustain were also assessed as being sustainable during the post completion period. The evaluation noted that the project was carried out across various regions, sectors, and communities, with its effectiveness and sustainability differing by area. For instance, in component 2, the rangeland management initiatives are expected to see higher standards due to the farmers' engagement with the project's strategies. These strategies were devised years ago, and their implementation has shown meaningful progress, thanks to collaboration with project partners. As the project have come to completion, these efforts are likely to persist, driven by the community's recognition of their value. For example, maintenance like fence repairs for interventions such as paddocks, community gardens, and the pack house might require funding, but because of the level of ownership that the communities have embraced, the likelihood of their commitment to ensure that the fence remains intact is commendable.

## Financial and economic

The sustainability of the project interventions beyond the Adaptation Fund, financing period is uncertain due to the lack of clarity on alternative funding sources. No potential financiers seem to be directly engaged with the project at the time of writing this report. One of the respondents mentioned that availability of financial support for follow up activities is an important aspect of sustainability. In contrast, the absence of financial backing for subsequent activities can negatively impact a project's capability to secure its long-term goals. For instance, during a visit to Vulindlela, the evaluation team acknowledged that the advantages of the established paddocks would benefit the beneficiaries for an extended period. However, the impact would have been significantly amplified had there been a strategy for follow-up financing. The evaluation team observed that beneficiaries

were in possession of significant amounts of left over fencing material, which could have been utilised to fully finalise the project. Due to resource limitations, these materials, if left unused, risk becoming obsolete.

However, the majority of the URP's agricultural interventions are expected to be self-sustainable without significant external funding requirements. Through these initiatives, local communal farmers are believed to have been empowered to achieve financial independence and transition towards sustainable commercialisable operations. For instance, the implementation of solar irrigation systems is projected to enhance farmer productivity without relying on external funding for power, given their solar-based nature. Furthermore, the establishment of the pack house is anticipated to provide farmers with access to quality markets, thereby increasing their income potential. While ongoing support, such as working capital provision, may be necessary to sustain pack house operations initially, it is expected that local farmers and their related farmer groups will gradually assume responsibility for its maintenance as their financial situation improves through enhanced market access.

Regarding early warning systems, specifically the fire early warning system, ongoing financial support, possibly from the municipality, may be required to compensate service providers for equipment usage, as outright ownership may not be feasible. Sustaining the impacts facilitated by the early warning systems would necessitate continual payment to service providers for their services. This could be done possibly through Memorandums of Understanding (MOUs) that ensure continuous data input into the system, supported, and maintained by the uMDM.

Overall, the URP's choosing of the uMDM as the executing entity (EE) for the project was a deliberate strategy aimed at enhancing the sustainability of project outcomes beyond its lifecycle. This decision was predicated on the close and continuous interaction between the Municipality and community members. It was anticipated that municipal staff would acquire essential knowledge on climate change, alongside adaptive management skills and experience, to perpetuate the project's activities over the long haul. Given its governmental status, the Municipality's engagement with communities vulnerable to climate change and its access to necessary resources were considered advantages. However, accessing these resources within the Municipality has been challenging, raising concerns about certain aspects of the project's long-term sustainability.

### Rating

Taking the aforementioned factors into account, the evaluation assesses the sustainability of the URP in terms of financial and economic considerations as '**Moderately likely**.' This suggests that there are moderate risks affecting this aspect of sustainability, notably because there has not been explicit commitment from funders regarding ongoing support for key project interventions, such as the early warning systems, beyond the URP funding period. Although some interventions may have elements of self-sustainability, the necessity for continued funding, particularly for critical components like the fire early warning systems outlined in Outcome 1, remains significant and cannot be overlooked.

## Socio-political

In the context of the URP, understanding and addressing socio-economic project related delays is crucial for the successful implementation of its objectives. These delays, often rooted in complex social and economic factors, can significantly hinder the project's efforts to enhance climate resilience and support sustainable development in vulnerable communities (Ismail etal, 2014). As the project aims to mitigate the impacts of climate change and

improve livelihoods, comprehending the underlying causes and consequences of socio-economic delays is essential. The URP notably excelled in establishing strong relationships between the project team and the local communities, largely attributed to the team members living within these communities and effectively balancing their fieldwork with office responsibilities. This proximity aided significant trust and engagement, laying the groundwork for the project's success. It is important to note that this was not part of the original project design. Initially, office-based Community Liaison Officers were included, but based on stakeholder feedback and requests during project implementation, space for Community Facilitation Officers was created in the budget and implementation arrangements. Similarly, the Community Resilience Committees were conceptualised during the project rather than being part of the original design. However, the project faced challenges in the integration and absorption of staff within the municipal framework, a situation that could have benefitted from more foresighted planning, particularly concerning the project's transition from the Community Services Division to the Economic Development and Planning Division. Not all of the URP staff have been absorbed into the Municipality. Additionally, while sustainability at the community level was a highlight, with community members keen on continuing the project's interventions, the need for a more strategic approach to ensure the project's sustainability, including securing ongoing funding and institutional support, was identified as a critical area for improvement.

Some of the social risks identified during the implementation of the project, in the Vulindlela area of Msunduzi Local Municipality, is that there have been disagreements among local leaders since the second year of the project. This led to a temporary stop of the project work as everyone tried to better understand the issues and talk to the community. Leaders and the community worked together to find a way for the project team to continue their work. By the third year, people began to understand the project better, distinguishing it from usual municipal projects, which reduced conflicts and work stoppages. This improvement continued into the fourth year, thanks to ongoing talks with the community through a group called the Community Resilience Committee, formed by the project. To avoid risks, the project decided in the third year, after talking with community leaders, to reduce the planned work in Vulindlela. They decided to continue with environmental restoration work but moved the infrastructure strengthening work to another area, Nhlazuka, based on the needs shown in studies. This move was to avoid conflicts over choosing which infrastructure to strengthen in Vulindlela.

Furthermore, the stakeholder engagements also revealed some socio-political sustainability risks and impacts associated with the URP. Initially, in communities like Swayimane, there was resistance from community members towards project initiatives, posing a risk to sustained cooperation and participation. However, continuous engagement efforts by the project team led to the gradual establishment of trust, resulting in improved collaboration. Nevertheless, the decline in enthusiasm among youth groups over time in participating in some agricultural related interventions and capacity building exercises that formed part of the project poses a risk to project sustainability in the long run. The stakeholder engagements revealed a shift in enthusiasm levels within the youth groups involved in the project, with initial genuine enthusiasm gradually diminishing over time. This decline in participation led to a decrease in the number of youths involved, eventually leaving only elderly women engaged in the project. There is a recognition of the need to make similar projects more attractive and inclusive, particularly to encourage diversity and social inclusion, especially among youth groups. Also, the observation that the youth participants would leave the project when alternative opportunities outside of agriculture arose stresses the need for ongoing efforts to incentivise and retain youth engagement.

*"Many young people engaged in agriculture activities because they lacked other opportunities. Some had recently completed their education but were struggling to find employment or lacked funding for further studies. Joining the*

*project provided them with a way to stay active and potentially earn income. However, when opportunities for education or employment arose, some participants would leave the project." –* ***Project team member***

Overall, the project successfully achieved the target of conducting 15 training sessions to build the capacity of relevant officials in mainstreaming climate change adaptation into policies and plans. These training sessions equipped officials with the necessary knowledge and skills to effectively integrate climate adaptation considerations into policies and planning processes. This achievement demonstrated a practical effort to enhance climate resilience and ensured that climate change was a central consideration in policy and planning decisions. By educating officials on integrating climate change considerations into their planning and policies, this approach helps policymakers foster a culture of climate awareness. This creates a sustainable and enduring method of ensuring that climate change challenges are tackled over the long term.

### Rating

The evaluation evaluates the socio-political sustainability of the URP as '**Moderately likely**.' While the majority of communities in project areas like Swayimane and Vulindlela are increasingly embracing project interventions such as capacity building and agricultural initiatives, there are lingering tensions in the Nhlazuka community concerning the limited progress observed in infrastructure interventions pursued by the project. The lack of significant community involvement during the design phase of certain project interventions, especially those related to outcome 2, raises concerns. This is particularly noteworthy given the various issues raised by community representatives, including those from the municipality.

## Institutional framework and governance

The URP was designed with a clear governance structure involving the municipality as the executing entity, sub-executing entities responsible for specific components, and oversight from the NIE, which was SANBI. Each sub-executing entity had defined responsibilities within the project. Besides the UKZN (which was supposed to be responsible for component 3), other sub-executing entities were planned to be involved, such as WESSA (responsible for Component 4), BESG (responsible for Component 2.1), Department of Environmental Affairs (DEA) Natural Resources Management (responsible for Component 2.2), and Umgeni Water and Working on Fire (responsible for Component 1). Also the uMDM was also meant to be the sub-executing entity for Component 2.3. As already stated, these various sub-executing entities were designated to handle specific components of the project, such as capacity development, built environment support, ecological infrastructure management, and fire protection. However, several changes and challenges arose at project inception and during implementation. For example, the DEA, which was supposed to implement Outcome 2.2, faced challenges due to findings by the Auditor General. This led to the municipality taking on a larger role in implementing that component. But this is believed to have negatively impacted the progress of the entire project. Insights from the UKZN project team indicate that Component 2, focusing on climate-resilient infrastructure, was originally envisioned as the foundation of the URP. However, delays resulting from changes in sub-executing entities significantly impeded the implementation progress of Component 2 interventions, thereby affecting the overall advancement of the project. The delay in Component 2 also hindered the progress of other interventions, as they were designed to align and complement the core activities (i.e. Component 2 activities). For instance, all project interventions, including agricultural interventions forming part of Component 3, were intended to support Component 2. This prioritisation of Component 2 is even evident in the URP budget allocation, underscoring its critical role as the core of the project.

The Working on Fire, originally designated to implement certain aspects related to fire protection, was unable to be contracted for the project. Instead, the RPA was identified as an alternative to carry out the fire early warning system. Also, the WESSA and BESG could also not come on board during project inception yet they had been key in the conceptualisation of their respective project components/sub-components. According to the engaged project management, the WESSA only came on board through a short contract in year 1 to develop some documents, which ultimately were never used in the project's entire eight-year cycle, which had significant implications in terms of the delivery of Component 4. Overall, the changes in subcontracting occurred due to various factors, including financial constraints and organisational viability assessments conducted by SANBI consultants. According to the UKZN project management team, the changes had implications on the project, especially the first three years of the project. The team believes that the project never fully recovered from the lost three years.

On the other hand, it is evident that the governance of the URP within the municipality encountered several challenges, significantly impacting project progress and effectiveness. Several key insights gleaned from stakeholder engagements shed light on the complexities and shortcomings within the project's governance structure. Structural issues within the municipality emerged as a fundamental obstacle to project management. The placement of the project within the municipality's organisational hierarchy led to vulnerabilities, particularly during leadership transitions. The departure of supportive municipal managers disrupted project operations. The project faced substantial challenges due to a high turnover rate among the Heads of Department (HODs) within the municipality. The municipality itself grappled with unique issues, programmes, and mandates. Throughout an eight-year span, the municipality encountered no less than seven different HODs, some only serving temporarily. The high turnover of HODs posed significant challenges, leading to disruptions, delays, and operational inefficiencies. However, these periods of transition also presented opportunities for strategic adjustments and rapid advancements through engaged leadership. The frequent introduction of new HODs necessitated repeated project briefings, significantly slowing project progress. Each transition required the project team to re-explain the project's objectives, accomplishments, and future needs to newly appointed HODs. The acting HODs, already familiar with the project from their previous roles, could manage more effectively, alleviating some of the disjointedness caused by leadership changes. Despite this, the project experienced significant delays due to the time taken to bring new HODs up to speed. Ultimately, the governance structure of the URP underwent changes and adaptations during implementation, driven by practical challenges and the need to ensure project viability and effectiveness.

Financial management disputes further exacerbated tensions within the project, particularly concerning the handling of funds and reimbursement procedures. Differences in financial protocols between project stakeholders highlighted broader concerns regarding financial accountability and control, straining relationships, and impeding progress.

Bureaucratic inefficiencies within the municipality posed significant hurdles to project implementation. Lengthy approval processes for memos and procurement requests led to delays, affecting timely execution of project activities, and fostering frustration among project staff.

Moreover, mismatched expectations between the project's objectives and community perceptions exacerbated project challenges. Community members anticipated tangible outcomes akin to traditional municipal projects, contrasting with the URP's focus on behavioural change and resilience-building. This disparity in expectations

strained stakeholder relationships and underlined the importance of aligning project goals with community needs and preferences.

In the end, the decision to transfer project management functions from the municipality to the UKZN appears to have effectively addressed some of the immediate challenges encountered by the URP. This transition is believed to have had a significant impact on managing community expectations. By dissociating the project from municipal ties, communities may have gained a clearer understanding of the project's objectives, leading to a more positive reception and acceptance of its offerings. This shift is anticipated to have long-term positive implications, as communities are expected to acknowledge and embrace the benefits of the project moving forward, reducing resistance based on unmet expectations.

Moreover, leveraging UKZN's pre-existing relationships with communities, especially in areas like Swayimane, is poised to enhance the project's sustainability. The university's continued presence and engagement in these communities for various projects and interventions serve to reinforce trust and familiarity, facilitating ongoing collaboration and support for the URP. This established rapport strengthens community engagement and participation, fostering a conducive environment for the project's long-term success and impact.

### Rating

The evaluation rates the sustainability of the URP in terms of institutional framework and governance considerations as 'Likely,' indicating minimal or no risks affecting this dimension of sustainability. This assessment is based on the fact that most of the governance issues mentioned were resolved by transferring project management to the UKZN, thus mitigating potential risks.

## Environmental

The uMDM is characterised by a mix of formal and informal settlements, many of which are situated in low-lying areas with high population densities. These settlements often lack planning, with no clearly defined roads, stands, or building regulations, leading to a haphazard arrangement of homes. A significant portion of the uMDM's terrain is steep (around 30% of the area has a slope greater than 1:3) or situated within flood-prone lowlands. From site visits and observations by the evaluation team, climate change poses a substantial risk to the vulnerable communities, especially through the increased frequency and intensity of rainfall, leading to flooding and erosion. The informal and formal settlements, particularly those inappropriately positioned within river floodplains, are at heightened risk of asset and life loss due to riverine floods. The absence of formal drainage exacerbates the potential for localised flooding and erosion, affecting both the settlements and the natural environment, especially water bodies. This situation is worsened in informal settlements by the lack of proper sanitation facilities.

Henceforth, the environmental risks that continue to pose significant challenges to the project's objectives are mainly around the threat of floods and storm, particularly considering that some of the project's climate-resilient infrastructure related interventions are yet to be finalised. However, with the flood early warning system now finalised and operational within the project scope, this risk is substantially mitigated. Nevertheless, floods and storms remain a potential hazard, posing risks to both agricultural and infrastructural outcomes, impacting not only immediate operations but also long-term sustainability. This highlights the ongoing importance of maintaining and utilising the flood early warning system to safeguard against environmental risks and ensure the project's resilience in the face of natural hazards.

### Rating

The evaluation assesses the sustainability of the URP regarding environmental considerations as 'Moderately likely.' This assessment takes into account that the infrastructure interventions intended to alleviate damage from disasters like floods have not been completed, leaving the potential for flood-related damages still possible.

## Uncertainties on climate change impacts—baselines

The proposal submitted to the AF by the URP indicates that prior to formulating a climate change response strategy for the district, a thorough project-specific vulnerability assessment was conducted by the uMDM. The vulnerability assessment was commissioned following the development of the (URP) project concept, but prior to the detailed project design process. The assessment was undertaken by independent consultants, Golder Associates, with assistance from the UKZN and the Duzi uMngeni Conservation Trust (DUCT). The vulnerability assessment informed the selection of the project areas for URP interventions. The process drew on the stakeholder consultations undertaken in preparation of the uMDM Strategic Environmental Assessment (SEA) and Strategic Environmental Management Plan (SEMP) as well as the uMDM Climate Change Response Strategy and Plan. Ultimately, the assessment managed to identify the quaternary catchments with communities most likely to be affected by the predicted impacts of climate variability and change.

Given the involvement of established independent consultants and the application of appropriate methodologies, the evaluation team has no concerns regarding the appropriateness of the vulnerability assessments that shaped the design and implementation of the URP. This stresses that the vulnerability assessment was conducted in a scientifically sound and methodologically rigorous manner.

### Rating

No concerns were raised regarding uncertainties on climate change impacts -baselines; therefore, the sustainability rating of the URP based on this aspect is deemed '**Likely**.'

## Overall rating

The table below indicates that the evaluation team considers three out of the five sustainability areas assessed in the study to have a moderate likelihood, while the remaining two are likely. As a result, the overall sustainability likelihood attributed to the project is 'Moderately likely.' This suggests that while the project has the potential to make an impact, there are some obstacles that need to be addressed or mitigated to ensure that these impacts are maximised and sustained over time.

| Sustainability aspect | Assigned rating | Overall rating |
|---|---|---|
| Financial and economic | *Moderately likely* | **Moderately likely**<br>(there are moderate risks that affect overall sustainability risks) |
| Socio-political | *Moderately Likely* | |
| Institutional framework and governance | *Likely* | |
| Environmental | *Moderately likely* | |
| Uncertainties on climate change impacts - baselines | *Likely* | |

# 5. EVALUATION OF PROCESSES INFLUENCING ACHIEVEMENT OF PROJECT RESULTS

This section evaluates the processes that influenced the achievement of the URP results.

## Preparation and readiness

In this sub-section, the evaluation team reflects on the scoping of the URP project, acknowledging its comprehensive and ambitious nature. The team appreciates the initial project design, which involved a wide range of stakeholders, including the project team (NIE, EE, and SEEs), community members, NGOs, and government departments, etc. This consultative approach helped in developing the project's concept and design. However, it should be noted that the inclusivity also made the project complex and detailed, as it aimed to address various issues identified by stakeholders.

Based on the feedback from the engaged project stakeholders, the evaluation team picked a design shortcoming related to meaningful consultation, particularly in the early stages of project identification. The gathered inputs emphasised the importance of considering the social and political dynamics of the targeted areas, which may differ from the perspectives of administrators and government officials. This calls for better consultation with councillors and community representatives at the early stages to address issues related to project implementation. While the consultative approach was important in developing a comprehensive project design, improved and meaningful consultations at the early stages of the project could have further aligned community needs and local dynamics.

Regarding project management, the project underwent a significant shift from its intended structure. Originally, the project management unit was planned to operate within the uMDM, with UKZN serving as a sub-executing entity reporting to the uMDM. However, due to capacity challenges within the uMDM, UKZN had to assume primary responsibilities that were initially designated for the uMDM. In simpler terms, this deviation from the original design led to SANBI and UKZN taking the lead in spearheading the project, while the uMDM assumed a seemingly supportive role.

## Country ownership

Based on the inputs from stakeholder engagements, the project concept of the URP aligned closely with national sectoral and development priorities and plans of the country. Government buy-in was evident across different levels and departments, indicating alignment with national agendas. Engagement with local government departments, particularly within the Department of Cooperative Governance and Traditional Affairs (COGTA), underscored the project's integration into local development planning processes. Collaboration with provincial government departments, such as Environmental Affairs and Agriculture, further reinforced alignment with broader development priorities. The project's participation in interdepartmental platforms like the KZN Climate Change Compact facilitated knowledge sharing and adoption of best practices, highlighting its contribution to national and provincial initiatives. Additionally, involvement of government representatives in specific project components, such as Component 2.2 in Nhlazuka, signifies active participation and endorsement of project outcomes at various levels. The project's emphasis on legacy initiatives, such as climate change adaptation plans for municipalities, underscores its contribution to long-term development objectives beyond its immediate scope. Furthermore, the engagement of civil society stakeholders and local communities in project activities

demonstrates a participatory approach, ensuring that interventions are responsive to local needs and priorities. Overall, the URP's alignment with national development priorities, engagement with relevant government representatives and civil society, and promotion of interdepartmental cooperation reflect its meaningful contribution to advancing country-level development objectives.

Also, since its inception, the URP has prioritised the inclusion and active participation of women, as outlined in its Gender and Social Action Plan within the Project Proposal. This plan was developed with the goal of promoting equity and ensuring the integration of vulnerable groups into the project's scope. It involved conducting assessments within the communities where the URP operates to establish specific participation targets for groups, including those with disabilities. However, the development of this plan faced setbacks due to institutional and contractual challenges, causing delays, though efforts to finalise the plan are currently in progress. The URP has notably achieved its gender-related objectives, with sex-disaggregated indicators enabling detailed monitoring and demonstrating that women have been the primary beneficiaries of the project. This gender-focused approach has yielded comprehensive data, revealing a predominant participation of women, particularly in agricultural activities within the communities. For instance, in Ward 8 of Swayimane, 688 farmers benefited from these practices, consisting of 540 females and 148 males. In Ward 8 of Vulindlela, 123 farmers benefited, including 92 females and 31 males. In Ward 5 of Nhlazuka, 152 farmers benefited, with 113 females and 39 males. These achievements represented a substantial positive impact on local agriculture, particularly among female farmers, and demonstrated the project's effectiveness in promoting climate-resilient farming practices in the target areas.

## Stakeholder involvement

There is evidence highlighting several shortcomings in meaningful stakeholder involvement and consultation within the URP, raising concerns about the sustainability of some of the project's interventions. Firstly, the evident lack of meaningful community involvement during both the project design and execution phases is portrayed by some few unfortunate instances associated with the project. One notable instance occurred when the project clashed with local communities during an intervention aimed at clearing black wattle invasive species. Due to what appears to be limited community engagement, the project overlooked the fact that the black wattle served as a crucial resource for the community, primarily for firewood. Consequently, the project's attempts to clear the black wattle were resisted by the community. In Swayimane, the Chief and the local council also highlighted the absence of meaningful involvement or consultations in the URP, as they were not provided with the design specifications of a pack house project. This lack of consultation resulted in the erection of a pack house with female and male toilets positioned in ways contrary to local cultural practices. As a result, there have been calls for the pack house to be redesigned to ensure that the female and male toilets are not located in close proximity to each other or in the same direction. The chief and the council also expressed dissatisfaction with the quality of the fence for the pack house project. In the end, the failure to consult with local community members suggests a disconnect between project organisers in some instances and the people the project aims to benefit.

The evaluation team gathered from the engagements that a notable challenge appeared to be the lack of clear communication from the political leadership and some officials of the uMDM regarding the specifics of the funds allocated for each component of the project. This led to a misconception among the community members, who initially believed that the entire budget for the URP would be dedicated to their villages. This misunderstanding caused some discomfort and confusion. Nevertheless, as the project advanced, efforts were made to correct this

misconception, helping to clarify the actual allocation and use of the budget, thereby addressing the community's concerns.

Moreover, there has been some political principals who expressed some frustration with the lack of meaningful consultation during the project's execution phase. According to them, the failure to convene meetings effectively sidelined the involvement of community representatives, depriving them of opportunities to provide input and feedback on project activities. This lack of engagement resulted in delays, rushed implementation, and overall dissatisfaction within the community.

Overall, the inputs suggest that the project's community liaison component did not adequately involve relevant stakeholders in decision-making processes, leading to inefficiencies, dissatisfaction, and tensions.

## Financial management

It is essential to emphasise some key insights from the midterm evaluation. The evaluation observed that legislative processes had been established and followed by the EE in accordance with SANBI guidelines. It was underlined that SANBI as the NIE had safe audit trails, as well as follow-up and management systems. The report also found variances between actual expenditure and the planned budget. Furthermore, the evaluation raised concerns regarding the uMDM's financial arrangements. Although the hiring of a Financial Coordinator and capacity building were considered to have resulted in improvements, there was still a need for additional financial structure improvement.

The evaluation team was also given access to the project financials (see Figure 3), which detailed the actual and budgeted expenses for each year. The project's total expenditure remained below the budgeted levels, with only a few years showing higher budget utilisation. Year 7 and Year 4 reached 56% and 52% of their respective budgets, while Years 8 and 9 performed better, with 84% and 100% utilisation, respectively. Earlier years, such as Year 1, Year 2, and Year 5, saw much lower spending, with expenditures ranging from 22% to 38% of the planned budgets. The later years demonstrated improved budget management and expenditure alignment.

It was stated by one of the respondents that there was a separation of funds received by the UKZN and the municipality. Whilst the municipality was responsible for the overall budget, UKZN would sub-execute certain activities which had a separate budget and financial reporting structure. SANBI was responsible for the provision of funds to both the uMDM and the UKZN. This was also confirmed in the mid-term review that there was a separation of accounts and disbursement of funds between the two entities.

When the mid-term evaluation is compared to the present findings, the discrepancy between actual spending and projected budget appears to be similar. The fund disbursement between UKZN and the municipality was also revealed to have been conducted by SANBI, with the latter serving as the main responsible financial institution.

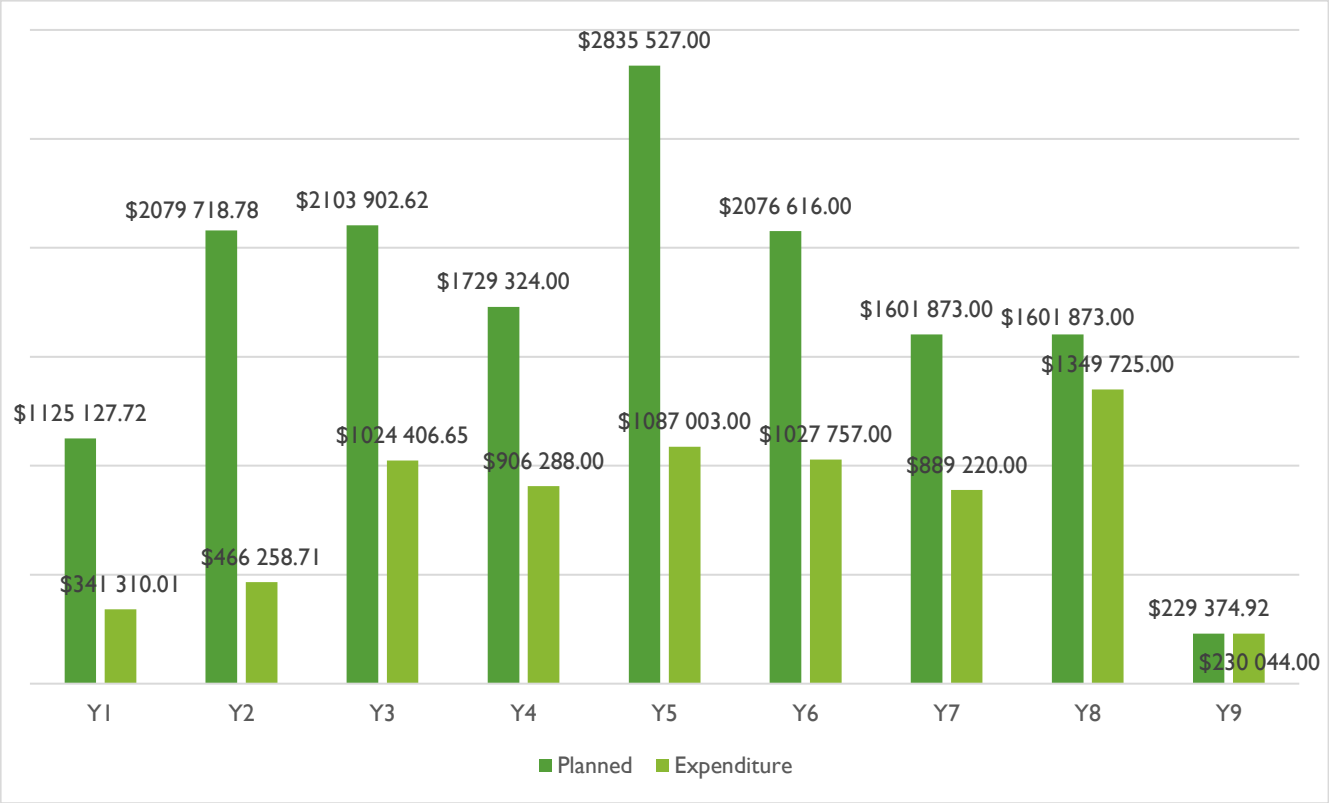


**Figure 3: URP project expenditure.**

Furthermore, according to the mid-term review, the project had carried out its due diligence to guarantee that financial mechanisms were put in place to prevent uncertainty and project delays. Although this may have been the case, some respondents emphasised that there were delays because of the Council's approval procedure for the financing approval as the overall budget was overseen by the municipality. It was also raised as a concern that although there were procedures in place to double-check the accuracy and validity of the financial and procurement plans and reports, reports and plans submitted were not verified or audited by management within uMDM. This statement was, however, different from another respondent who stated that there were structures in place within uMDM and that any financial reports were accounted for by the project manager and the finance manager. The difference in responses may highlight that there was a need to further strengthen the financial structures within uMDM.

In examining the project reports provided, the following was revealed: According to the Year 1 project report, the National Treasury implemented measures that required the EE and sub-EE to be registered on the Central Suppliers Database (CSD), which resulted in delays in project funding. Due to changes in the municipality's leadership in Year 2, deviations in the financial budget were not permitted. It was also mentioned that there was very little to no flexibility in adjusting the budgets due to the misalignment of the financial year plans for uMDM and URP. In Year 3, the project had delays due to the municipality's procurement procedures since certain orders were withdrawn without the project management's awareness. Year 4 also showed that, although arguably necessary, the many levels of governance delayed the project's plans for contract and payment approval, which in turn caused a delay in the project's execution. The mid-term review also confirmed and noted that there had been several challenges with uMDM finances. It is evident that while the availability of funds remained

unaffected, the many financial structures currently operating had procedures that caused delays in the timely flow of funds, which in turn caused delays in the project's implementation.

Overall, based on information gathered through engaging key project stakeholders, the URP had robust mechanisms in place to ensure effective management of funds. The SANBI management highlighted the adherence to established policies and procedures outlined in project contracts, with a focus on closely monitoring financial transactions, especially those exceeding a certain threshold. This ensured compliance with internal financial management protocols and served as due diligence for proper financial stewardship.

Furthermore, the financial management structure of the URP involved various stakeholders and processes, including overall budget responsibility lying with the municipality, collaboration with contracted entities like UKZN for budget development and approval, and rigorous financial controls to track project funds separately. The municipality had a dedicated team overseeing financial aspects, including a project manager and financial manager, who ensured compliance with relevant regulations and worked closely with UKZN to review financial reports and ensure transparency.

Moreover, the project's rigorous quarterly and bi-annual technical reporting procedures, as outlined in the Year 7 report, contributed to effective financial management. These reports included financial statements and ledgers related to expenses, with checks to confirm appropriate fund usage and pre-approval required for significant disbursements. Annual audits complemented oversight, ensuring accountability and transparency in financial management.

## Implementing Entity supervision and backstopping

The South African National Biodiversity Institute (SANBI), acting as the NIE, played a pivotal role in overseeing and ensuring accountability within the URP. It was tasked with reporting back to the project funder, necessitating at least an annual report to provide updates on project progress and expenditure. SANBI's involvement commenced with the initial project proposal, where careful planning was undertaken to delineate the project's trajectory, budget allocation, and targets across its components, outcomes, outputs, and activities.

Throughout the implementation phase, SANBI's responsibilities extended beyond mere oversight, encompassing rigorous monitoring, evaluation, and verification of project outcomes. This comprehensive approach aimed to ensure that the project delivered tangible and verifiable results in alignment with its objectives. SANBI scrutinised annual reports submitted by the project team, verifying each result with appropriate evidence. Additionally, SANBI required the completion of an annual Environmental and Social Dashboard by the uMDM/UKZN, ensuring that all environmental and social impacts were appropriately documented. SANBI also thoroughly reviewed quarterly financial and technical reports against the annual plans submitted by uMDM/UKZN. Funding was disbursed based on approved financial reports, and the reporting templates evolved to incorporate adaptive management practices, transitioning to 6-monthly technical reporting. This adaptive approach ensured continuous alignment with project goals and effective management of resources.

Furthermore, SANBI conducted physical verification checks, including site visits to project areas, to firsthand verify reported data, demonstrating a hands-on commitment to ensuring genuine and accurate project progress reporting. Overall, SANBI's structured approach not only ensured adherence to established guidelines but also

facilitated effective communication with stakeholders and strategic planning to achieve project objectives over its extended duration.

Despite these efforts, SANBI encountered challenges during the execution of its roles and responsibilities as the NIE. One significant challenge highlighted by SANBI management was the issue of local ownership and leadership within the project management team. Fluctuations in engagement and prioritisation resulting from changes in leadership within the executing entity, uMDM, posed obstacles to maintaining project focus and momentum. Moreover, the turnover in leadership within uMDM further contributed to delays and disruptions in governance, requiring extensive efforts to onboard new leaders.

In response to these challenges, SANBI took proactive measures, intervening in the workings of uMDM and UKZN to ensure project continuity and progress. Despite facing governance issues, SANBI remained committed to mitigating risks and supporting the project's objectives to the best of its abilities. Additionally, SANBI acted as a liaison between various stakeholders, including government departments, facilitating collaboration and involvement in URP-related initiatives.

## Delays in project start-up and implementation

Delays within the URP were multifaceted, stemming from various organisational, administrative, and community-related challenges. These delays significantly impacted project timelines, success, and the achievement of desired outputs and outcomes. Several key stakeholders involved in the project highlighted various factors contributing to these delays.

One significant factor contributing to delays was the cumbersome procurement and recruitment processes within the uMDM, the EE in the URP. The bureaucratic nature of these processes, coupled with tight timelines, led to prolonged delays in hiring service providers and consultants. Additionally, delays were exacerbated by changes in municipal leadership, resulting in stalled approvals and hindered progress on various project aspects. The shift in support and cooperation under new leadership further complicated matters.

Moreover, delays were attributed to issues with sub-executing entities, with four entities unable to be contracted despite their involvement in developing the URP's initial work plans. This setback led to delays in finding alternatives to fulfill their roles, further impeding project progress. According to the project management team from the UKZN, such setbacks costed the project of its first three years. In the Vulindlela area, community mobilisation against the project caused significant delays, requiring extensive efforts to address community concerns and gain support before implementing project activities.

The involvement of business forums during the construction phase of the project's climate resilient infrastructure intervention also caused delays, ultimately leading to the termination of initial contractors. The termination process itself was time-consuming, lasting approximately six months due to threats and challenges faced by the contractors. As a result, there was a considerable period of inactivity on the project site, significantly impacting the project timeline.

The COVID-19 pandemic also contributed to delays, particularly in the movement and procurement of necessary equipment. However, despite these challenges, efforts were made to progress with implementing irrigation systems, engaging with farmers, and working with youth groups.

The cumulative effect of these delays had adverse implications for project outcomes and sustainability. The gap between the project's intended deliverables and community expectations contributed to ongoing frustrations within the community, leading to prolonged discussions and delays in project progress. Additionally, delays in implementing flood prevention measures and early warning systems hindered timely intervention in flood-prone areas, potentially affecting community safety during flood events.

The delays also led to a widening gap between the project's objectives and the evolving requirements on the ground, further complicating project implementation and hindering its overall effectiveness. Timely completion of tasks was hindered by challenges with community procurement processes and other issues related to community involvement, highlighting the importance of accountability and smoother project initiation to optimise the use of allocated time and resources.

# 6. EVALUATION OF CONTRIBUTION OF PROJECT ACHIEVEMENTS TO THE ADAPTATION FUND TARGETS

## Contributions towards AF Goal

The URP contributes immensely towards the realisation of the AF goal around *assisting developing-country Parties to the Kyoto Protocol that are particularly vulnerable to the adverse effects of climate change in meeting the costs of concrete adaptation projects and programmes, to implement climate-resilient measures*. Notably, South Africa is a developing country that is party to both the United Nations Framework Convention on Climate Change (UNFCCC) and its Kyoto Protocol. The country acceded to the Convention in 1997 and ratified the Kyoto Protocol in 2002. A review of the URP proposal submitted to the AF shows that South Africa, and specifically the URP area in uMDM, matches the climate change vulnerable profile of the developing nations targeted as part of the AF goal. According to the information presented in the URP proposal, several climate change studies identified the KwaZulu-Natal Midlands area, encompassing the uMDM, as a region facing significant climate change risks, and as one of three climate change hotspots in South Africa. Consequently, it is anticipated that through the URP's four outcome areas, the project might have achieved concrete adaptation measures and increased some of the targeted areas' resiliency to climate change related disasters.

### Rating

Considering the above and what is also presented in Table 5 below, the evaluation team believes the URP's contribution towards the AF goal is '**Highly Satisfactory**'.

### Table 5: Adaptation Fund Core Impact Indicators

| **Adaptation Fund Core Impact Indicators** | | | | |
|---|---|---|---|---|
| Date of Report | June 2024 | | | |
| Project Title | Building Resilience in the Greater uMngeni Catchment | | | |
| Country | South Africa | | | |
| Implementing Agency | South African National Biodiversity Institute | | | |
| Project Duration | 5 years | | | |
| | **Baseline** | **Target at project approval** | **Adjusted target first year of implementation** | **Actual at completion** |
| Number of Beneficiaries (absolute number) | | | | |
| Direct beneficiaries supported by the project | 0 | 3,855 | N/A | Available data for Component 1 alone shows that the project surpassed the set target – with total noted beneficiaries of 102 855 |
| Female direct beneficiaries | 0 | 2,110 | | The noted female beneficiaries (53 572) |

| | | | | |
|---|---|---|---|---|
| | | | | for Component 1 alone also surpasses the set target |
| Youth direct beneficiaries | 0 | 384 | | The available project information is not disaggregated as per direct/ indirect, or youth/ adult demographics |
| Indirect beneficiaries supported by the project | 0 | 21,785 | | |
| Female indirect beneficiaries | 0 | 11,304 | | |
| Youth indirect beneficiaries | 0 | 1,694 | | |
| Early Warning Systems | | | | |
| **Adopted Early Warning Systems** | | | | |
| Flood/Storm EWS | | | | |
| (1) risk knowledge, | 0 | 4 | | 4 |
| (2) monitoring and warning service, | 0 | 4 | N/A | 4 |
| (3) dissemination and communication, | 0 | 3 | | 4 |
| (4) response capability. | 0 | 3 | | 3 |
| Fire EWS | | | | |
| (1) risk knowledge, | 3 | 3 | | 4 |
| (2) monitoring and warning service, | 0 | 3 | | 5 |
| (3) dissemination and communication | 0 | 3 | | 5 |
| (4) response capability. | 0 | 3 | | 4 |
| Agro-meteorological EWS | | | | |
| (1) risk knowledge, | 2 | 3 | | 4 |
| (2) monitoring and warning service, | 2 | 3 | | 4 |
| (3) dissemination and communication, | 0 | 4 | N/A | 4 |
| (4) response capability. | 0 | 4 | | 4 |
| **Hazard** | | | | |
| Flood/Storm EWS | None | Floods, severe storms | | Floods, severe storms |
| Fire EWS | None | Extreme temperatures | | Extreme temperatures |
| Agro-meteorological EWS | None | Drought | | Drought |
| **Geographical coverage** (km2) | | | | |
| Flood/Storm EWS | 0 | 126 | | 75 |

| | | | | |
|---|---|---|---|---|
| Fire EWS | 0 | 103 | | No information on coverage in km2 found,b ut available information shows that the coverage is for the Nhlazuka and Swayimane areas |
| Agro-meteorological EWS | 0 | 32 | | 32 |
| **Number of municipalities** | | | | |
| Flood/Storm EWS | None | 1 District and 1 Local | | 1 District and 1 Local |
| Fire EWS | None | 1 District and 1 Local | | 1 District and 2 Local |
| Agro-meteorological EWS | None | 1 District and 1 Local | | 1 District and 1 Local |
| **Assets Produced, Developed, Improved, or Strengthened** | | | | |
| Sector | None | Rural development | N/A | Multi-sector |
| Targeted Asset | None | Physical assets - strengthened | | Physical assets strengthened |
| Changes in Asset | None | 300 households<br>10 km stormwater channels<br>5 pedestrian bridges | | 263 households<br>1.8 km stormwater channels<br>5 pedestrian bridges |
| **Increased income, or avoided decrease in income** | | | | |
| Income Source | sale of agricultural produce | sale of diversified agricultural produce | N/A | Sale of diversified agricultural produce, beneficiation of agricultural produce |
| Income level (USD/month) | 76 | 228 | | 243 |
| Number of households | 200 | 200 | | 200 |
| **Natural Assets Protected or Rehabilitated** | | | | |
| Natural Asset or Ecosystem | None | Land asset (grassland and riparian environment)<br>Biological asset (removal of alien invasive plants) | N/A | Land asset (grassland and riparian environment)<br>Biological asset (removal of alien invasive plants) |
| Change in state | None | Restored (grassland riparian environment) | | Restored (grassland riparian environment) |

| | | | | |
|---|---|---|---|---|
| | | Removed (alien invasive plants) | | Removed (alien invasive plants): **Fully improved** |
| Total number of natural assets or ecosystems protected/rehabilitated | None | 200 ha grassland<br>100 ha of cleared alien invasive plants<br>12 km or riparian environment | | 206 ha grassland<br>100 ha of cleared alien invasive plants<br>5.47 km or riparian environment<br>106 km of firebreaks |

## Contributions towards AF Impact

Although the precise impact of the URP may not be fully evident yet considering that the project has recently concluded and impacts typically require time to be noticeable, it is possible to anticipate the contributions of the URP's intervention towards the realisation of the AF impact *around increased resiliency at the community, national, and regional levels to climate variability and change*. This anticipation is based on the general progress already observed in the project's diverse interventions. Through the successes in most of the the URP's interventions, the Evaluation Team believes that the project significantly contributed to increasing resilience at the community, national, and regional levels to climate variability and change. The development of early warning systems for floods/storms, fires, lightning, and agro-meteorological events is a notable achievement. These systems enhance preparedness and response mechanisms, thereby contributing to increased resilience to climate-related disasters. Additionally, significant progress was reported in capacity development, with engagement with municipal planners and community members resulting in better-informed decision-making processes. Effective engagement with farmers and incorporation of climate-smart agriculture techniques has been also reported, supporting agricultural resilience by facilitating adaptation to climate variability.

Furthermore, the project's focus on incorporating climate change education into school curricula is commendable. By ensuring that climate change topics are integrated into formal education programmes, the project fosters a culture of climate resilience among future generations. This sustained awareness and action on climate change issues contribute to long-term resilience at the community level.

Nonetheless, stakeholder engagements also highlighted challenges and risks to attaining increased resilience. Despite the successful technical development of early warning systems, sustainability remains uncertain due to the lack of integration into municipal systems. This raises concerns about the continuity of these systems beyond the project's duration and underlines the importance of ongoing support and funding. Similarly, ensuring continued engagement with farmers and institutional support for integrating climate change considerations into municipal planning processes are essential for sustaining and further enhancing resilience. Addressing these challenges requires ongoing commitment and collaboration among project stakeholders.

### Rating

As previously mentioned, it may be premature to determine the precise impact of the URP since the project recently concluded. However, the evaluation team assesses that the project's contribution to enhancing community resilience has been '**Highly Satisfactory**.' This evaluation is particularly based on the anticipated impact stemming from successful URP interventions such as the completed floods/storms, fire, lightning and

agrometeorological early warning systems, and the various smart agricultural infrastructural and capacity building interventions.

## Contributions towards AF Objective

The URP made significant strides in reducing vulnerability and increasing adaptive capacity to respond to the impacts of climate change. Through a combination of infrastructure development, capacity building, and community engagement, the URP contributed towards the AF objective in the following ways:

**Reducing Vulnerability to Climate Change Impacts:**

- The project is reported to having directly benefited over 102 000 community members, with interventions aimed at reducing risks from floods/storms, fires, and droughts. Specifically, pedestrian bridges and stormwater drainage channels (although not as per the set target) were constructed to withstand climate change-driven extreme weather events.
- Natural resource assets have been maintained and improved across various areas, including restored grasslands, rehabilitated riparian zones, and removal of alien vegetation to prevent bush encroachment. Additionally, extensive firebreaks were established to mitigate the risk of wildfires.
- The implementation of climate-resilient agricultural practices is reported to having resulted in increased yields from farms and community home gardens, contributing to food security and reducing vulnerability to climate-related shocks.

**Increasing Adaptive Capacity:**

- Small-scale farmers in target areas have benefitted from improved agro-meteorological forecasts, empowering them to make informed decisions about agricultural activities.
- Training of extension officers and raising awareness among community members about climate change adaptation options have enhanced local capacity to respond effectively to climate-related challenges.
- The project supported the development of three strategies that incorporate adaptation considerations as a result of knowledge generated through the project.

The URP has made a significant contribution to the AF objective. However, further enhancement of its impact could have been achieved through the implementation of additional key interventions, such as addressing climate-resilient infrastructure.

### Rating

In alignment with earlier discussions, the evaluation team believes that the URP has also made a '**Highly Satisfactory**' contribution to the objectives of the AF. Through its interventions, the project has effectively aided communities in mitigating vulnerability to climate change effects while enhancing their ability to adapt.

# 7. EVALUATION OF M&E SYSTEMS

This section assesses the quality of the URP's M&E systems according to the following four dimensions: (1) M&E plans; (2) indicators, (3) baselines; and (4) alignment with national M&E frameworks.

## Monitoring and Evaluation (M&E) plans

The following paragraphs discuss the design and implementation of the URP's M&E plans.

### Design

A Monitoring and Evaluation (M&E) plan was included in the project proposal submitted to the AF. The plan outlined various M&E activities to monitor project progress, including forecasting, reporting, and general M&E activities. It included clear budget allocations (with a total cost of USD 321 679), time frames, and designated responsible parties for activities such as inception workshops, baseline verification, annual project implementation reports, progress reports, mid-term evaluation, terminal evaluation, project terminal report, annual audits, field site visits, and broader knowledge management and ongoing project monitoring. Also, the URP also had an M&E framework with indicators and targets as outlined in an earlier baseline section.

While there is evidence showing that the URP had a clear M&E plan and framework from the outset, some of the findings of the MTE pertaining to the URP's M&E systems and the current inputs from the stakeholder engagements revealed some of the weaknesses in the design of the plan, including the people who were working on the ground not knowing that they have targets; "… they were not aware of the numbers that they need to achieve this".

The absence of a designated M&E officer in the project was one of the key design weaknesses, which was later addressed post MTE. According to one of the engaged key project stakeholders "Before the hiring of the M&E official, there was a lack of clarity and awareness regarding project targets and progress tracking within the URP". This was supported by a former project manager with the uMDM who remarked that the project primarily conducted progress monitoring on an annual basis. This approach was driven by the requirement to submit an annual report to the NIE for the Adaptation Fund. Quarterly reports were also submitted but focused primarily on narrative and financial aspects rather than assessing progress towards project targets. The annual M&E process provided a retrospective overview of project achievements but lacked the granularity needed for real-time decision-making and course correction. According to another project official, many team members were unaware of the specific targets they were working towards and the milestones they were expected to achieve. This suggests a deficiency in the monitoring and evaluation processes prior to the M&E official's involvement.

Recognising the limitations in the M&E design, the project needed a more frequent monitoring to track progress against targets more effectively. The later decision to contract an M&E specialist within the project management team led by the UKZN was a strategic response to the above M&E design shortfall, enabling the project to conduct regular progress monitoring on a quarterly basis. As will be discussed in the succeeding sub-section, this shift allowed for more timely identification of challenges and opportunities, fostering a more adaptive and responsive project management approach.

The MTE also noted that the then monitoring tools primarily focused on activities and outputs, such as age and gender, rather than outcome monitoring. This gap in outcome monitoring was recognised by uMDM Management, Project Staff, and SANBI Management, underscoring the need for incorporating outcome

monitoring into the M&E system. The MTE also stressed the need for the adaptation interventions to be built on frameworks, tools, and M&E practices to analyse real-time change. According to the MTE, such frameworks and tools needed to be viewed as means to help communities understand climate change and plan for interventions, rather than as short-term solutions to complex socio-ecological problems.

### Rating

The evaluation considers the URP's M&E system throughout its lifespan as '**Satisfactory**'. The project had a clear and actionable M&E plan, but with some deficiencies, of which some were rectified post MTE.

### Implementation

The implementation of the URP's M&E plan demonstrates considerable progress, with most of the outlined activities being successfully carried out (Refer to the table below for details).

**Table 6: Implementation progress of the URP M&E plan**

| Planned M&E activity | Time frame | Evaluation team assessment |
|---|---|---|
| Inception Workshop and Report, Component Launch Workshops | Within first two months of project start up | Inception workshops reported in reviewed reports. |
| Verification of baselines | In first year | Evidence from the MTE shows that a zero baseline was assumed. |
| Annual project implementation report | Annually | Implementation reports produced and shared with the NIE. |
| Periodic status/ progress reports | Quarterly | Progress reports were produced, with some evidence indicating that certain project team members, particularly those from UKZN involved in agricultural-related activities, were required to produce weekly and monthly reports. |
| Mid-Term Evaluation | At the mid-point of project implementation | Conducted in April 2019 and formulated recommendations that were to be incorporated prior to the finalisation of the project. |
| Terminal Evaluation | At least three months before the end of project implementation | Current exercise. |
| Project Terminal Report | At least three months before the end of the project | The project terminal report was produced, although there were some delays in its finalisation, and the verification of some of the reported progress was still in process. |
| Audit | Yearly | Audits conducted on NIE and executing entities |
| Visits to field sites | Yearly | Visits to field sites reported as part of the project's reported progress verification exercises |
| Knowledge management | Throughout the project and at mid-point, at project termination | The incorporation and actioning of recommendations from the project's M&E activities is evident. The contracting of an M&E officer |

| Planned M&E activity | Time frame | Evaluation team assessment |
|---|---|---|
| | | following the recommendations from the MTE is one notable example. |
| Project monitoring | - | Various project monitoring practices noted. These are discussed in detail in this sub-section. |

One of the major project successes with regards to M&E that happened following the finalisation of the MTE, was the contracting of an M&E official. The official was contracted in response to the following MTE recommendation "The appointment of and M&E Officer or consultant to assist in the further development and operationalisation of project M&E, particularly monitoring tools, is highly recommended." The M&E official's key responsibilities within the URP include, inter alia:

- Data Collection: They were responsible for capturing data related to project activities, ensuring that accurate and comprehensive information was collected to assess project progress and outcomes.
- Verification: The officer conducted field visits to verify the accuracy of reported information and to ensure that the work documented in reports aligned with what was actually implemented on the ground.
- Quality Assurance: They checked whether project implementation adhered to the plans and documents, such as proof of evidence files. This ensured that activities were carried out according to the project's objectives and standards.
- Custodianship: The officer served as the custodian of project files, including proof of evidence documents, maintaining records for documentation, reference, and future reporting purposes.

Based on information gathered as part of the stakeholder engagements, the M&E official played a critical role in ensuring the integrity, accuracy, and quality of monitoring and evaluation activities within the project, contributing to effective project management and reporting. The M&E official took on the responsibility of raising awareness among team members about the targets they needed to achieve, and the timelines associated with them. They (i.e. the M&E official) emphasised the importance of clear goal setting and the need for proactive problem-solving to ensure that targets were met. Ultimately, it is believed that the involvement of an M&E official improved the project's monitoring processes, although there were still some reported difficulties in the official obtaining timely and organised information from project management team members.

Besides the M&E activities implemented through the M&E official, there are other notable broader M&E practices that were pursued as part of the URP. One provincial government official provided insights into the M&E systems implemented within the project through their active participation in the Project Steering Committee. According to the official, the committee convened regularly, typically on a quarterly basis, where progress reports were presented, and any identified issues were collaboratively addressed through workshops. The official emphasised the importance of this committee as their primary avenue for M&E, expressing confidence in the project's controls for reporting and planning to facilitate informed decision-making. Despite occasional delays leading to momentum loss, they believed that the M&E processes adequately provided feedback and tracked progress.

Generally, the existence of an M&E system within the URP post the MTE, which facilitated the timely tracking of progress toward project objectives is acknowledged. However, the evaluation team unearthed some organisational challenges related to data storage and retrieval, leading to inefficiencies in managing information. According to the SANBI management, the use of Dropbox for storing results led to a disorganised system where

various folders containing different pieces of evidence were placed into one main folder. This lack of organisation made it difficult for the SANBI management to efficiently sort through the project M&E data.

Also, despite the inclusion of key M&E activities in the project proposal, such as forecasting and reporting, the actual implementation faced obstacles, particularly regarding tracking progress over time and adapting to changing needs. The SANBI management pointed out shortcomings in tracking progress towards project objectives over time. Initially, it is understood that there was a five-year plan that mapped out the expected progress each year towards overall targets. However, when the project manager at the uMDM resigned, this planning element was lost, leading to difficulties in adjusting progress to meet final targets. Despite efforts to reengage in this planning process, competing priorities ultimately hindered its implementation.

Regarding verification, the evaluation team understands that processes were in place to ensure the accuracy of reported work. The verification process conducted by the M&E official involved several steps to ensure the accuracy and completeness of the reported work, including work done by external service providers. Firstly, when external service providers completed their work, they would submit a report to the project management team for review. Before approving the report and initiating payment, the M&E official would conduct a field visit to verify the implementation of the reported activities. The on-site verification allowed the official to ensure that the reported work accurately reflected the actual activities carried out on the ground. By conducting these verification visits, the M&E official ensured that payments to service providers were based on verified and substantiated evidence of completed work. This process helped maintain the integrity and transparency of the project's monitoring and evaluation efforts, ensuring that resources were allocated effectively and efficiently. However, in some instances challenges arose in verifying some of the project related information. For example, the M&E official encountered challenges in verifying the completion of climate-resistant housing structures due to logistical constraints and discrepancies in the verification process. Due to the large scope of the project and the vast landscape of the project area in Nhlazuka, it was impractical for them to personally verify each house. Therefore, a project manager was appointed from an external service provider to conduct the verification.

#### Rating

The evaluation rates the implementation of the URP M&E system as '**Moderately satisfactory**,' taking into account the numerous challenges and shortcomings observed in the system before the MTE. Although the MTE helped to rectify some of these gaps and weaknesses, the project management acknowledged persistent issues with their M&E approach, particularly concerning monitoring and information validation.

### Budgeting and funding for M&E activities

The M&E plan was adequately budgeted for during the project's design phase, and all planned M&E activities were implemented according to schedule and in their entirety. Given these observations, the evaluation team is of the opinion that the M&E plan received sufficient and timely funding during implementation. Additionally, the M&E official's role was created and embedded within UKZN, utilising funds from the PMU.

#### Rating

The project's budgeting and funding of M&E activities are considered '**Satisfactory**,' as most activities outlined in the M&E plan were adequately funded and implemented, despite a few gaps that were not initially accounted for in the plan.

## Indicators

Information from stakeholder engagements revealed instances where certain project indicators conflicted with community expectations, necessitating the project to navigate these challenges. An example of such conflict arose when predefined indicators, like clearing 50 hectares of black wattle, clashed with the community's desire to retain the woodlot due to its value. This necessitated project flexibility, with motivations written to justify deviations from initial plans. Efforts were made to accommodate community preferences while still achieving project goals, respecting the community's decision-making authority.

Recommendations were formulated based on community input and project assessments, including re-evaluating the use of land areas considering competing interests and long-term benefits. Despite the project team's ability to provide input and recommendations based on their assessments, they acknowledged their limited authority to enforce decisions contrary to community wishes. Ultimately, decisions regarding land use and project outcomes were made within the community structures.

Also, there is additional evidence showing that the project previously conducted a review in response to challenges in achieving predefined project outcomes within the original timeline, hence justifying the need for an extension. The review led to the following significant adjustments:

- Reframing the outcome indicator for Component 1 to one integrated multi-hazard early warning system, which was positively received.
- Adjusting the indicator for Output 3.1 regarding the implementation of climate-resilient project interventions to focus on agriculturally zoned land.
- Revising Indicator 2 of Output 4.1, which measures improved knowledge among project beneficiaries, due to cost implications. The PMU also updated means of verification associated with each indicator and target, recognising that some original criteria were no longer suitable or relevant.

### Rating

The project's indicators are considered '**Satisfactory**', as only a few indicators required reworking.

## Project baselines

The MTE noted that a zero-baseline assumed when reporting the URP progress against project targets does not create a good case for measurement of progress, as the project outcomes cannot be differentiated from outcomes attributable to other interventions.

### Rating

The URP's project baselines received a '**Satisfactory**' rating, with the main identified shortcoming being the assumption of a zero baseline throughout.

## Alignment of Project M&E Frameworks to National M&E Frameworks

South Africa's national evaluation frameworks represent a structured and systematic approach to assessing the performance and impact of public policies, programmes, and projects (National Treasury, 2018). These frameworks are integral to the country's broader strategy for improving governance, enhancing public service delivery, and ensuring accountability in the use of public resources. At the heart of the national evaluation system

is the Department of Planning, Monitoring, and Evaluation (DPME), which plays a pivotal role in coordinating and overseeing the evaluation processes across various government departments and sectors. The DPME, in collaboration with stakeholders such as the South African Monitoring and Evaluation Association (SAMEA), has developed guidelines and standards that outline the methodology for conducting evaluations, including the planning, design, implementation, and utilisation of evaluation findings.

Key components of South Africa's evaluation frameworks include the development of annual evaluation plans, which prioritise evaluations for the coming year, and the maintenance of a National Evaluation Plan (NEP) that outlines significant evaluations to be undertaken over a medium-term period. These plans ensure a strategic focus on evaluations that are critical for policy and programme improvement. The frameworks advocate for a variety of evaluation types, including formative (process), summative (outcome/impact), and developmental evaluations, to address different informational needs and stages of programme development. Furthermore, they emphasise the importance of incorporating cross-cutting issues such as gender, inclusivity, environmental sustainability, and, more recently, climate change and transformation, reflecting a responsive approach to emerging national and global challenges.

The URP demonstrates alignment with South Africa's national evaluation standards and the recent guidelines set forth by the DPME and the SAMEA, particularly in addressing climate change and transformation issues. This alignment indicates that the URP is not just a project aimed at achieving climate resilience but is also a reflection of broader national and international priorities in sustainable development and environmental stewardship. The project's focus on climate adaptation and transformative approaches aligns with the current emphasis within the evaluation community on generating evidence that can guide efforts towards achieving more resilient and equitable outcomes. In addition, the project underwent a midterm evaluation, indicating a commitment to ongoing assessment and improvement, which is a key component of these national guidelines. However, a notable gap identified in the midterm evaluation process is the lack of clarity regarding the utilisation and tracking of the recommendations made, which were tracked on SANBI's side. This aspect is important for closing the feedback loop and ensuring that evaluation findings are not only acknowledged but are also acted upon to refine and enhance project implementation. Enhancing this aspect of the project's M&E framework would not only strengthen its accountability and effectiveness but also serve as a valuable model for other initiatives seeking to navigate the complexities of climate adaptation and sustainable development.

A fundamental area of concern is the project's current M&E system, which, while functional, lacks the comprehensive nature required to effectively monitor and evaluate the project's wide array of impacts. The absence of a detailed logic model is particularly notable. A logic model serves as a visual and operational tool that outlines the project's theory of change, clearly defining the relationship between inputs, activities, outputs, outcomes, and long-term impacts. For the URP, incorporating such a model would significantly enhance its ability to track progress systematically across all project dimensions. This would include not only the immediate outputs but also the more nuanced, long-term behavioral changes among stakeholders and beneficiaries that are critical to assessing the project's success.

The evaluation has highlighted the need for the URP's M&E framework to explicitly include and measure indicators that reflect both direct outputs and indirect impacts, such as community adaptation behaviors, policy influences, and environmental benefits. This would enable a more holistic understanding of the project's effectiveness and contribute to a richer narrative of its contribution towards climate resilience. Another significant issue identified is the project's organisational structure for M&E functions. Currently, the responsibility

for M&E activities is largely vested in a single official, a setup that poses considerable risks to the integrity and efficiency of the evaluation process. This concentration of duties can lead to challenges in data verification, diminish the accuracy of findings, and strain the capacity to support and critically assess the project's diverse initiatives. A robust M&E framework necessitates a dedicated team with specialised skills and resources to perform a wide range of evaluative tasks.

To enhance its Monitoring and Evaluation (M&E) framework and align with national and international guidelines, the URP should implement several key strategies. First, it is crucial to develop a comprehensive logic model that encapsulates the project's theory of change, detailing objectives, activities, expected outputs, and intended impacts, including behavioral and environmental benefits. Concurrently, establishing a multi-disciplinary M&E team is vital for ensuring a broad range of expertise in data collection, analysis, reporting, and stakeholder engagement, thereby facilitating a more thorough and nuanced evaluation process. Furthermore, the URP should invest in regular training and capacity-building for the M&E team to stay current with the latest methodologies and best practices, with a particular focus on climate change and transformation issues. Enhancing stakeholder engagement in the M&E process by involving beneficiaries, community leaders, and partners will strengthen the project's effectiveness and areas for improvement.

### Rating

The URP Monitoring and Evaluation (M&E) framework is rated as 'Satisfactory'. Recommendations for improvement include creating a detailed plan for evidence collection and use, along with strengthening the staff team for enhanced implementation.

# 8. CONCLUSIONS, LESSONS LEARNED, AND RECOMMENDATIONS

## Synthesis

The URP closely aligned with the AF and South Africa's strategic imperatives, effectively addressing community resilience to climate change and natural disasters through interventions like early warning systems and community-based initiatives. Despite implementation delays, the URP made significant strides in enhancing community resilience in the uMDM, including installing early warning systems and improving livelihoods through capacity building and climate-smart agriculture initiatives. However, challenges in translating design concepts into actionable plans, specifically as part of the climate resilient housing intervention, and delays in fully achieving targets for core outcomes highlight areas for improvement. Efficiency challenges, such as institutional inefficiencies, impeded project momentum. However, efforts were made to address these issues mostly by transferring project management responsibilities from the uMDM to the UKZN, a move acknowledged by the project's key stakeholders. Overall, the URP has been relatively successful, positioning itself as a promising initiative with important insights for future replication and expansion, contingent upon addressing efficiency challenges and ensuring effective project management for sustainable success. Notably, the project is being recognised for its forward-looking nature. It is a pioneering effort in South Africa's climate change adaptation landscape, having been conceptualised and implemented before widespread national attention to climate change concerns.

## Lessons learnt

The below various lessons can be drawn from the URP. By incorporating these lessons into future project designs and implementations, similar initiatives can enhance their effectiveness, sustainability, and impact within their respective communities.

- The project highlighted that project timelines should be realistic, with longer durations necessary for comprehensive implementation. Short project durations may not allow sufficient time for establishing necessary arrangements and achieving project objectives. Projects such as the URP require longer implementation periods, ideally spanning 7 to 8 years, to allow sufficient time for all arrangements and activities.
- The project demonstrated the critical importance of aligning project management with its conceptualisation. Addressing gaps in institutional capacity, both within executing and sub-executing entities, is paramount for future projects. Building and enhancing capabilities within these institutions is essential to effectively implement project responsibilities. The project further revealed the necessity of integrating evidence into decision-making processes at every project stage. The success of UKZN in utilising evidence to inform practice highlights the value of access to high-quality science and information. This enables adaptive management, facilitating timely updates and adaptations to project strategies. However, such capacity is often lacking in institutions that are not primarily focused on knowledge generation; hence, future projects should prioritise building institutional capacity for evidence-based decision-making and adaptive management, ensuring access to relevant information and the ability to translate it into actionable outcomes.
- The project proved that working with entities with the agility to navigate bureaucratic processes efficiently is crucial. This ensures the timely execution of tasks such as developing terms of reference, securing approvals, and recruiting personnel.

- The project showcased the need for stronger governance processes at the project management level. While the URP's Project Coordination Committee was initially well-defined, changes over time led to a loss of senior-level representation and a shift towards more informational updates rather than decision-making. Strengthening governance structures could enhance accountability and streamline decision-making processes, ultimately reducing delays and improving project efficiency.
- The favourable results stemming from UKZN's engagement in the URP, facilitated by access to student research and scientific publications, show how leveraging university partnerships can augment project outcomes and foster knowledge sharing and dissemination.
- The URP showed the need to improve relationships with the community before and throughout the course of a project. This includes meaningfully interacting with community members, traditional leaders, and gatekeepers to ensure that all parties understand the initiative's objective and that the community buys into its participation. Any inconsistent nature of community interaction, as was the case with the URP, can lead to protracted project delays.
- The project highlighted the importance of managing expectations within communities. It is imperative to manage expectations within communities, especially regarding ambitious project targets. Setting realistic goals and focusing on achievable outcomes can prevent disappointment and ensure that communities benefit from tangible results.
- The URP highlighted the transformative impact of investing in local capacity-building initiatives. Building the skills, knowledge, and leadership capacity of local communities, government agencies, and civil society organizations is essential for achieving sustainable development outcomes. By empowering local stakeholders to take ownership of project activities and decision-making processes, projects can catalyse positive change that extends far beyond their duration. Moreover, investing in local capacity leads to economic empowerment, social cohesion, and environmental stewardship within communities, contributing to long-term resilience, self-reliance and sustainability. Recognising the value of local expertise and investing in capacity-building initiatives should, therefore, be a cornerstone of future projects, enabling meaningful participation and empowerment at the grassroots level.
- The URP demonstrated the importance of adopting an adaptive project management approach. Traditional project management methodologies often rely on rigid plans and timelines, which can be ill-suited for complex, community-driven initiatives. By embracing adaptive management principles, project teams can remain responsive to evolving challenges, opportunities, and stakeholder needs. This involves regularly monitoring project progress, soliciting stakeholder feedback, and making timely adjustments to strategies and activities as necessary. Future projects should prioritise integrating adaptive management practices to enhance resilience and optimize outcomes in dynamic environments.
- The project demonstrated the importance of assigning roles to technical leads and project managers. Collaboration between these roles is vital, with technical expertise guiding project design and management skills ensuring successful implementation. Additionally, it's essential to consider the necessary capacities for project execution carefully. Specialised roles like monitoring and evaluation should be integrated into project designs to ensure robust project management and comprehensive oversight.
- The URP highlighted the urgency of minimising the time between assessment and implementation. Prompt action is essential for addressing community needs effectively. Delays in implementation can render proposed solutions ineffective as circumstances change. Therefore, it's important to expedite the

process from identifying solutions to their actual implementation to ensure timely and impactful responses to community needs.

- The URP findings emphasised the importance of shifting focus from entire wards to individual villages. Concentrating efforts on closely-knit villages rather than broader wards allows for more efficient resource management, reduces logistical challenges associated with site visits, and enables interventions to be more precisely tailored to specific community needs. Additionally, careful consideration of terrain and accessibility is crucial when planning projects in remote areas. Clustering interventions based on geographical proximity and terrain characteristics can enhance efficiency and streamline logistics for contractors and project managers. Alternatively, prioritising impact and sustainability over quantity can lead to greater overall effectiveness. By targeting a smaller number of households with more impactful interventions, projects can achieve significant improvements in quality of life while fostering longer-term resilience. The positive effects of uplifting a few households can reverberate throughout the community, contributing to lasting positive change.

## Recommendations

The following recommendations should be considered:

R1. Consider implementing a project closure phase and allocating a budget to ensure the sustainability of ongoing project interventions that still require support beyond the project's end.

R2. Document and strategise the finalisation of ongoing project interventions to ensure their successful completion, even after the project concludes. While acknowledging that there may be no budget available, it is crucial to develop a plan that outlines how to achieve the completion of key activities with limited or no financial resources.

R3. Prioritise support for outstanding key project deliverables to ensure their continuity post-project end. Although budget constraints are a significant challenge, it is essential to identify and implement strategies for maintaining critical deliverables

R4. Conduct a thorough verification exercise of outcome 2 interventions to assess their effectiveness and address any discrepancies.

R5. Clarify and finalise sustainability discussions surrounding interventions like financial support for early warning system equipment, ensuring clarity before the end of URP funding.

R6. Explore expanding the project's coverage to additional communities, leveraging the benefits experienced by current participants. However, this expansion would necessitate increased funding to support scalability and reach.

R7. Package the experiences and successes of the URP in various formats to effectively share lessons learned with other stakeholders, maximising the project's impact beyond its current scope.

R8. Future projects should adopt an adaptive management approach that allows for flexibility and responsiveness to changing circumstances. They should build in mechanisms for regular monitoring and evaluation, feedback loops, and course corrections based on lessons learned from projects such as the URP. This can improve projects' ability to adapt to evolving challenges and optimise their impact over time.

R9. Future projects similar to the URP should ensure that executing entities are not solely bureaucratic institutions. Instead, they should consider a mix of public, private, and civil society organisations that can bring diverse expertise and agility to project implementation. This can help mitigate bureaucratic hurdles and enable innovation in project execution.

# 9. BIBLIOGRAPHY


1. AfDB. (2000). *Study on bank experience in financing urban water supply and sanitation projects.*
2. Ismail, Z., Mabuza, P., Pillay, K., & Xolo, S. (2014). Infrastructure development within a regulated environment: Concerns for regulators. *Journal of Economic and Financial Sciences, 7*, 569-586.
3. National Treasury. (2019). *Budget Review 2019.* Pretoria: National Treasury.
4. SANBI and Vision (2019). Building Resilience in the Greater uMngeni Catchment Area. Midterm Evaluation Report


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## KEY INFORMANTS CONTACTED FOR THE EVALUATION

| Name | Reference | Entity | Particulars |
|---|---|---|---|
| Mandy Barnett | SANBI Management | SANBI | Virtual Meeting |
| Mike Jennings | | | |
| Lindokuhle Khanyile | Component Coordinator, uMDM | SANBI | Virtual Meeting |
| Thobile Mhlanga | Finance | uMDM | Virtual Meeting |
| James Martin | Former HOD | uMDM | Virtual Meeting |
| Nomalungelo Ndlovu | Original Project Manager, uMDM | SANBI | Virtual Meeting |
| Mmeli Ngcongo | Mayor | Richmond Municipality | Virtual Meeting |
| Professor Tafadzwa Mabhaudhi | UKZN Project Leader | UKZN | Virtual Meeting |
| Nopayi Mkhize | UKZN Coordinator | UKZN | Virtual Meeting |
| Nhlonipo Mbatha | M&E Officer | UKZN | Virtual Meeting |
| Terry Tedder | Fire Association | Richmond Fire Protection Association | Virtual Meeting |
| Claudia Loggia | RDTT | UKZN | Virtual Meeting |
| Zukiso Boyce | IPP | UKZN | Virtual Meeting |
| Lethukukhanya N Mkwanazi | IPP | UKZN | Virtual Meeting |
| Larette Schultz | | DUCT | Virtual Meeting |
| Antonio Blanco | Component Coordinator | UKZN | Virtual Meeting |
| Khethiwe Mthethwa | Extension Officer | UKZN | Virtual Meeting |
| Wendy Geza | Student | UKZN | Virtual Meeting |
| Matild Azong Cho | Student | UKZN | Virtual Meeting |
| Tinashe Dirwai | Student | UKZN | Virtual Meeting |
| Alistair Clulow | Academic | UKZN | Virtual Meeting |
| Ayanda Dube | Intern | UKZN | Virtual Meeting |
| Ian Felton | | KZN Economic Development Tourism and Environmental Affairs | Virtual Meeting |
| Swayimane Farmers | Farmers Group | Swayimane Community | Physical FGD |
| Swayimane Farmers | Group Leaders | | Physical Meeting |
| Swayimane Traditional Council | Chief's Council | | Physical FGD |
| Vulindlela Farmers | Farmers | Vulindlela Community | Physical meetings |

# ANNEX 1: TERMS OF REFERENCE FOR CONDUCTING THE EVALUATION

UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

CAES PROCUREMENT

REQUEST FOR QUOTATIONS: FOR AN INDEPENDENT FINAL EVALUATION OF THE ADAPTATION FUND PROJECT ENTITLED 'BUILDING RESILIENCE IN THE GREATER UMNGENI CATCHMENT'

NAME OF DEPARTMENT: Centre for Transformative Agricultural and Food Systems (CTAFS)

CONTACT PERSON: Prof Tafadzwa Mabhaudhi

EMAIL: mabhaudhi@ukzn.ac.za

GOODS / SERVICES REQUIRED: The University of KwaZulu-Natal's Centre for Transformative Agricultural and Food Systems (UKZN-CTAFS) wishes to procure the services of an independent Evaluator/ Evaluation team to design, plan and conduct a Final Evaluation of the project entitled 'Building Resilience in the Greater uMngeni Catchment'. The project, hereafter referred to as the 'uMngeni Resilience Project' (URP), started in October 2015 and is due to close by the end of September 2023.

These Terms of Reference (ToRs) set out the requirements for the URP Final Evaluation. The Final Evaluation will be undertaken between July and September 2023 (12 – 16 weeks), with a final report due thereafter.

DESCRIPTION/SPECIFICATIONS: The URP is funded by the Adaptation Fund, implemented by the South African National Biodiversity Institute (SANBI) as the National Implementing Entity (NIE), and executed by uMgungundlovu District Municipality (uMDM) as the Executing Entity and the UKZN as the sub-Executing Entity. The Department of Forestry, Fisheries and the Environmental (DFFE) is the National Designated Authority (NDA).

The project initially had a duration of five years (October 2015 to September 2020) and a total budget of USD 7 495 055 (approximately R108 million). The Adaptation Fund recently approved a no-cost extension to the end of September 2023.

The overall objective of the URP is to reduce the vulnerability of communities and small-scale farmers in the uMDM to the impacts of climate change. This was to be achieved through increasing climate resilience and adaptive capacity by combining traditional and scientific knowledge in an integrated approach to adaptation. This was also to be enabled by implementing a suite of complementary, gender-sensitive project interventions focusing on the following:

- Early warning and ward-based disaster response systems;
- Ecological and engineering infrastructure solutions specifically focused on vulnerable communities, including women;
- Integrating the use of climate-resilient crops and climate-smart techniques into new and existing farming systems; and
- Disseminating adaptation lessons learned and policy recommendations to facilitate scaling up and replication.

The project sites are as follows:

- Low-lying high-density settlements in Msunduzi Local Municipality;
- The rural area of Ward 8 of Vulindlela, Msunduzi Local Municipality;

- The rural farming area of Ward 8 of Swayimane, uMshwathi Local Municipality; and
- The rural area of Ward 5 of Nhlazuka, Richmond Local Municipality.

The full proposal is available here.

## 1. Objectives, Purpose and Scope Of The Evaluation

The ToR for the Final Evaluation of the URP are drawn from the Adaptation Fund Guidelines for Project Final Evaluation[1]. Subsequent to the development of these guidelines, the Adaptation Fund has developed an updated Evaluation Policy[2] and a set of draft Guidance Notes[3] that are in discussion and that should inform the project's final evaluation process.

In line with the Adaptation Fund Guidelines for Project Final Evaluation, the Evaluator/ Evaluation team will provide an independent evaluation function, to assess project performance and impact to support learning and accountability and inform future climate change adaptation interventions. The Evaluator/ Evaluation team will report the findings and lessons learned and provide recommendations.

The findings from the evaluation will primarily be used:
- By the project management team, delivery partners and other stakeholders to inform future implementation;
- By partners, stakeholders, and the Government to learn lessons from the project to replicate what works elsewhere and/or take up approaches and activities that have successfully proven to scale up the project;
- By SANBI to demonstrate accountability for the funding received from the Adaptation Fund; and
- By the Adaptation Fund to evaluate progress against set targets and derive lessons for future projects.

In particular, the evaluation will assess the following:
- The project results (outputs and outcomes), including ratings, and with particular consideration of achievements related to the proposed concrete adaptation measures (see Annex A and B);
- The results that were achieved by the project, over and above those that formed part of the project design;
- The project design;
- The sustainability of project results (outputs and outcomes) at project completion, including ratings;
- Processes influencing the achievement of project results (outputs and outcomes), including preparation and readiness, country ownership, stakeholder involvement, institutional capacity, financial management, National Implementing Entity supervision and backstopping, and project/programme start-up and implementation delays;
- Project relevance to government priorities and strategies, and the contribution of project achievements to the Adaptation Fund targets, objectives, impact, and goal, including a report on contributions to the Adaptation Fund's standard/core indicators (see Annex C); and
- The project's M&E systems.

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[1] See: https://www.adaptation-fund.org/wp-content/uploads/2015/01/Guidelines%20for%20Proj_Prog%20Final%20Evaluations%20final%20compressed.pdf

[2] See: https://www.adaptation-fund.org/wp-content/uploads/2022/07/Evaluation-Policy-of-the-Adaptation-Fund.pdf

[3] See: (i) 2023-03-06-AFBEFC.31.8-EPG-Development-final-1.pdf (adaptation-fund.org); and (ii) 2023-03-09-AFBEFC.31.8.Add_.9-EPG-Development-Annex-9-Draft-GN-Final-Evaluations.pdf (adaptation-fund.org)

The Adaptation Fund Guidelines for Project Final Evaluation provides a set of more detailed questions, rating scales and a template for the Final Evaluation report.

## 2. Approach and Methodology

The Final Evaluation should seek to be inclusive and participatory, involving principal stakeholders and beneficiaries in the analysis.

The approach to the Final Evaluation must include the following:

- A desktop review of relevant project documentation, baseline information and results as reported at completion.
- Field visits to all of the project sites for results verification purposes.
- Engagements with project stakeholders and beneficiaries for each component, including the Community Resilience Committees established though the project, at project sites where this is relevant.
- Engagements with stakeholders at the national, provincial and district levels, such as representatives from the Department of Forestry, Fisheries and the Environment: Directorate Climate Change Adaptation, KwaZulu-Natal Department of Economic Development and Environmental Affairs, KwaZulu-Natal Department of Agriculture and Rural Development, KwaZulu-Natal Provincial Disaster Management Centre, Richmond Fire Protection Association, Umgeni Water, Duzi-uMngeni Conservation Trust, Institute of Natural Resources, Built Environment Support Group, technical experts and relevant departments at uMDM and UKZN, the applicable Local Municipalities (Richmond, Msunduzi and uMshwathi), and other partners as may be identified by the evaluation management team.
- Engagements with representatives of the SANBI, the UMDM, UKZN, the URP Project Coordinating Committee and the National Adaptation Funds Advisory Body (NAFAB).
- Interviews/ focus group discussions with project staff.

Evaluators should also seek the necessary contextual information to assess the significance and relevance of the results (outputs and outcomes), to collect other data as needed to verify findings and should be sensitive to gender and diversity issues in the evaluation.

Evaluators will abide by any SANBI, uMDM and UKZN Ethical Guidelines and other policies relevant to the evaluation. These will be made available by the evaluation management team.

As noted above, the ToR for this assignment are derived from the Adaptation Fund guidelines, and evaluators should refer to the Adaptation Fund's guidelines for final evaluations for further information.

### 2.1 Inception Phase

Once the Evaluator/ Evaluation team is contracted, an inception meeting will be scheduled with the evaluation management team comprising representatives of SANBI, uMDM and UKZN to reach a common understanding of the status of the project, the priority assessment questions, available data sources, data collection instruments and an outline of the Final Evaluation report. An information management plan will also be agreed upon.

The Evaluator/ Evaluation team will then review the project proposal, work plans, project monitoring plans, annual performance reports submitted to the donor, the Mid-Term Evaluation report and management responses, meeting minutes, policy frameworks and other relevant documents that were produced through the project or by relevant stakeholders, as per guidance from SANBI, uMDM and UKZN.

Initial electronic or telephone in-depth interviews with key project informants could also be envisaged. Based on understanding the agreed scope and purpose of the evaluation, document review, briefings and initial interviews, the Evaluator/ Evaluation team will prepare an inception report with the final methodology and questions, and logistics, which the evaluation managers will review.

An Inception Report that covers the following topics will be developed: Evaluation Framework, proposed methodology and sample, detailed workplan, logistical/ communication arrangements, list of project materials that will inform the evaluation, key evaluation questions and priorities, stakeholder list and outline of the final report.

### 2.2 Data Collection Phase

The Evaluator/ Evaluation team will complete the document review process, relevant site visits, and consultations with internal and external stakeholders, as per the agreed list of stakeholders. Where relevant, the evaluation management team will support this process.
Should the Evaluator/ Evaluation team wish to engage with stakeholders beyond the agreed list, this can be discussed and agreed upon with the evaluation management team.

### 2.3 Data analysis

Based on these meetings and the document review, the Evaluator/ Evaluation team will build an initial set of findings, conclusions and recommendations.

### 2.4 Report Writing and Presentation Phase

The Evaluator/ Evaluation team will prepare and submit a Draft Evaluation Report to the evaluation management team, who will share the report with project stakeholders for their input/comments.

The Evaluator/ Evaluation team will convene a feedback and recommendations workshop at which they present the initial findings, conclusions and recommendations to SANBI, uMDM, UKZN and the Project Coordinating Committee, and at which initial feedback will be received.

The evaluation management team will consolidate and share all comments with the Evaluator/ Evaluation team. Project stakeholders who wish to communicate directly with the Evaluator/ Evaluation team can do so. SANBI, uMDM and UKZN will also submit their official management responses to the evaluation.

The Evaluator/ Evaluation team will finalise the report, considering the stakeholder comments and management responses, and submit one complete Final Report for approval by SANBI, uMDM and UKZN. The Final Evaluation Report will be written in English, in MS word and PDF formats. The Final Report will be accompanied by comments and response matrix indicating how the comments received were responded to

A PowerPoint presentation of the Final Evaluation Report will be produced for dissemination of the evaluation results. The Evaluator/ Evaluation team should make provision for two sessions at which results are presented to key stakeholders.

## 3. Report Format

The Final Evaluation Report should include the following:

- General information on the evaluation, such as the date and duration of the evaluation, places visited, who was involved, key questions, methodology and references used.
- Project data and findings at the time of the evaluation.
- Conclusions, lessons learned and recommendations.
- A copy of the ToRs for conducting the evaluation.
- An official management response from SANBI, uMDM and UKZN project management team regarding the evaluation conclusions and recommendations.

As per the guidance from the Adaptation Fund, the Final Evaluation Report should:

- Present an assessment of project results (outputs and outcomes) and achievements of project objectives in the context of Adaptation Fund strategic priorities, sector, and project indicators. Ratings must be well substantiated.
- Present lessons and recommendations supported by the evidence presented and relevant to the Adaptation Fund portfolio and future projects.
- Include the actual project costs and co-financing (totals per activity and source).
- Include an assessment of the quality of the M&E plan at entry, the operation of the M&E system used during implementation, and the extent to which M&E was sufficiently budgeted for during preparation and implementation.
- Clearly state any assumptions and comment on the quality and sufficiency of data used to inform the evaluation.
- Present data, evidence and findings clearly and explicitly.

Please see Annex D for the Final Evaluation Report template, as per the Adaptation Fund's guidelines.

## 4. Deliverables

The Evaluator/ Evaluation team will produce the following main deliverables:

- An Inception Report.
- A presentation of initial findings will be presented to SANBI, uMDM and UKZN.
- A Draft Evaluation Report that will be made available for comment.
- A Final Evaluation Report, including a 2–3-page executive summary, a set of limited and strategic recommendations (not to exceed ten recommendations total), and a response matrix addressing issues raised during the presentation and in response to the draft and the management responses of the SANBI, uMDM and UKZN.
- A summary of the Final Evaluation results in an agreed format that is appropriate for project stakeholders and beneficiaries.
- Two final presentations, to SANBI, uMDM, UKZN, the Project Steering Committee and the National Adaptation Fund Advisory Body (NAFAB).

An indicative structure of the Final Evaluation Report, including potential content, is compiled in the Adaptation Fund Guidelines for Project Evaluation (Annex D). This should be augmented as appropriate.

## 5. Required Competencies, Skills and Experience Of The Evaluator/ Evaluation Team

To deliver the required scope of work the Evaluator/ Evaluation team appointed to undertake this project should have the technical expertise and practical experience required to deliver the scope of work and evaluation outputs.

In particular, the Evaluator/ Evaluation team should demonstrate the following competencies, skills and experience:

- Proven evaluation experience, requisite expertise in the project subject matter including climate change adaptation, smallscale agriculture, early warning systems and built and ecological infrastructure.
- The team leader should have a post-graduate degree in one of the following: Monitoring & Evaluation, Project Management, Social Sciences, Development studies, Demography, Economics or related graduate qualifications in other relevant fields, such as climate change adaptation or equivalent experience.
- Preferably 10+ (minimum of 5) years of work experience in the field of Monitoring & Evaluation of development projects, ideally also in the subject matter in question.
- Experience conducting evaluations of multi-million-rand projects that involve foreign multilateral donors. Specific knowledge of the Adaptation Fund processes will be advantageous.
- Experience conducting evaluations of government-led projects in South Africa.
- Experience in mixed-methodology evaluation.
- Excellent analytical, technical report writing and communication skills.
- Excellent computer literacy skills (Microsoft: Word, Excel, PowerPoint).
- Languages: Fluency in English and conversing in isiZulu will be useful when consultations with beneficiaries are conducted.

Evaluators/evaluation teams will be:

- Independent of both the policy-making process and the delivery and management of assistance to the project they are evaluating.
- Impartial and present a comprehensive and balanced appraisal of the strengths and weaknesses of the project being evaluated.
- Sensitive to gender and diversity issues in the evaluation.

## 6. Requirements for Proposals and Evaluation Criteria

Service providers interested in this evaluation should submit a concise proposal for undertaking the assignment.

**The proposal must include:**

- A description of the process that will be followed, indicating the methodology and proposed timeframes that shall be applied and how the evaluation milestones will be achieved.
- Details, including CVs, for all proposed in the Evaluation Team, indicating relevant skills, experience and track record, responding to the main requirements and skills and competencies required as outlined above. Roles and responsibilities for all proposed in the Evaluation Team must be clearly stated.
- Evidence of previous project experience for providing similar evaluation services and the design and implementation of similar evaluation activities required by this ToR.
- Equity status of service provider (Historically Disadvantaged Individual (HDI), women and disability)
- Contact details of at least three current or recent clients.
- A budget for the time allocation to the proposed work, including VAT, that is clearly split between professional services and expenses, and that clearly indicates which project staff will be working on the assignment. Hard costs such as travel, catering and booking of facilities will be reimbursed on a cost basis and provision should be made in the budget, whereby indicative costs are set out for this.

The Evaluation Criteria are available as Annex E.

## 7. Reporting Requirements And Management

An evaluation management team comprising SANBI, uMDM and UKZN will support the process.

During the implementation of the contract, the Evaluator/ Evaluation team will report to this team, who will provide guidance and ensure satisfactory completion of the final evaluation deliverables.

The URP project team will assist in connecting the Evaluator/ Evaluation team with and in some cases setting up engagements with relevant stakeholders. In addition, the project team will provide key project documentation.

The contract between UKZN and the Evaluator/ Evaluation team will be drawn up. Invoices will be paid upon completion of planned deliverables that are produced as per the contract, and as signed off by the evaluation management team.

QUANTITY/TIMEFRAMES: It is anticipated that the Final Evaluation will be initiated in July 2023, and that the draft report will be completed by end of September 2023. This is because project staff contracts will end at the end of September 2023. Final reporting into national and sub-national governance structures will be able to happen post September 2023.

SUBMISSION DATE AND DETAILS: Proposals should be submitted by email to mabhaudhi@ukzn.ac.za by no later than 16h00 on Tuesday 4 July 2023.

ADDITIONAL COMMENTS: See Annexes A-E below.

## ANNEX 2: OFFICIAL RESPONSE FROM PROJECT MANAGEMENT TEAM REGARDING THE EVALUATION FINDINGS/ CONCLUSIONS

The response is pending.