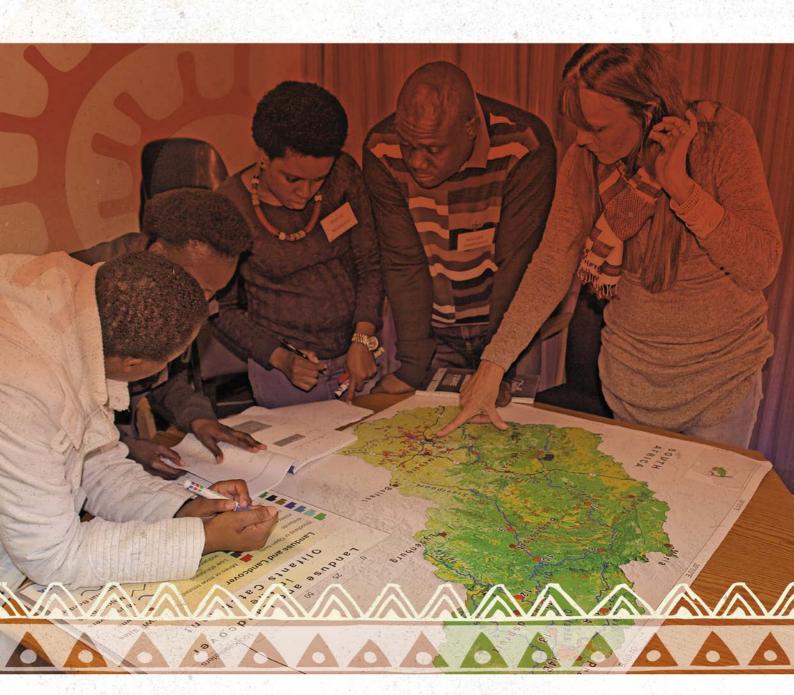
Embedding Climate Change in Municipal Planning and Actions



FINAL REPORT March 31, 2020







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About USAID: RESILIM

USAID's Resilience in the Limpopo River Basin (RESILIM) program addresses ongoing degradation in the Limpopo River Basin in southern Africa, where people are facing water shortages, increased floods and declines in crop productivity as climate change further stresses an already water-limited region.

The two components of the program are:

- RESILIM-B operating at the scale of the entire Limpopo River Basin, implemented by USA-based Chemonix across the four SADC member states that share the Limpopo Basin, namely South Africa, Botswana, Zimbabwe and Mozambique.
- RESILIM-Olifants (RESILIM-O) covering the Olifants River Basin (shared by South Africa and Mozambique), implemented by the Association for Water and Rural Development (AWARD). The Olifants is the largest contributor of water to the Limpopo Basin, and is of particular concern because of the wide-scale threats to biodiversity and the ecosystem services that support people's livelihoods.

The RESILIM-O program aims to reduce vulnerability to climate change in the Olifants Basin by improving transboundary water and biodiversity governance and management, through science-based strategies and systemic and social learning approaches that enhance the resilience of people and ecosystems.

The RESILIM-O program comprises 26 projects in total which address AWARD's core focus areas of climate, water and land "systems". Twelve of these projects were implemented by partners through sub-grants.

About AWARD

The Association for Water and Rural Development (AWARD) is a non-profit organisation specialising in multidisciplinary, participatory, research based project implementation aimed at addressing issues of sustainability, inequity and poverty. We have been in existence for over 20 years. Informing our work are the values of trust, dignity for all, justice, fairness, non-discrimination, unity and learning through practice. Our approach involves thinking across disciplines, boundaries and systems.

While working collaboratively with other organisations and developing strong and rich professional networks, we strive to build natural resource management competence in civil society, government agencies and private enterprise. We believe this will help provide a foundation for robust and sustainable development policy and practice in South Africa that can stand up to an increasingly complex world.

Our main, although not exclusive, geographical area of focus is the catchments of north-eastern South Africa, including the Olifants River Basin.

For further information, see http://www.award.org.za



The Olifants Catchment: An Overview

The Olifants River Catchment falls within the Limpopo River Basin, which is part of an international drainage basin that stretches across South Africa, Mozambique, Zimbabwe and Botswana. The Olifants River contributes nearly 40% of the water that flows in the Limpopo River making it important for the basin as a whole.

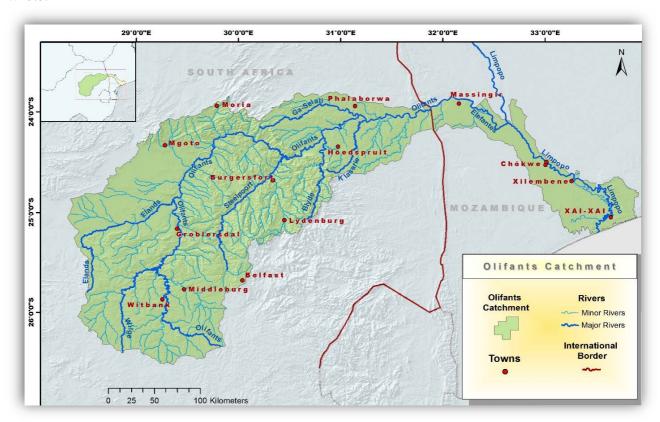


Figure 1: Olifants Catchment

The Olifants River is a vital artery that flows for 560 km through South Africa and into Mozambique, where it is known as the Rio dos Elefantes. This mighty river originates in South Africa's Highveld, traversing three provinces (Gauteng, Mpumalanga and Limpopo) before flowing through the iconic Kruger National Park and into Mozambique before reaching the Indian Ocean near Xai Xai, just north of Maputo. The main tributaries are the Wilge, Elands, Ga-Selati, Klein Olifants, Steelpoort, Blyde, Klaserie and Timbavati Rivers. The Olifants Catchment occupies an area just short of 55 000 square kilometres and is home to about 3.5 million people in South Africa and 0.7 million people in Mozambigue.

From both an aquatic and terrestrial perspective, the Olifants Catchment is a rich and diverse landscape. It is home to areas of endemism and high biodiversity, particularly along the Drakensberg Escarpment which includes the Blyde and Legalameetse Nature Reserves and some tributaries of the Olifants. The Olifants River flows into the Limpopo River and the Maputoland-Tongoland Ecoregion, an area of rich biodiversity and endemism which includes the Limpopo River estuary. Currently, the Olifants River is the only tributary that sustains flows of the Limpopo River in the dry season.

Large areas of the catchment have been substantially modified and the upper catchment is almost totally transformed through agriculture and mining with the latter increasing significantly in the last decade even across former agricultural areas. A number of ecosystems are considered either critically endangered or endangered and many more are vulnerable. Declining water quality and decreased flows threaten aquatic systems along the entire Olifants River within South Africa and to the Xai Xai estuary in Mozambique.



In Mozambique, the estuarine area is classified as a *National Maritime Ecosystem Priority* area. Equally, the mainstem of the Olifants River is regarded as critically endangered from its source to the protected areas in the Lowveld. Likewise almost all westerly-flowing rivers in the high and middle-veld are critically endangered. Intact river systems are limited to the Blyde and some tributaries of the Steelpoort and the lower Olifants.

Unchecked pollution, inappropriate land and resource use, poor enforcement of regulations and poor protection of habitats and biodiversity impact on the livelihoods of all the catchment's residents. With over 600 former or existing mines (coal and platinum in particular), impacts are felt in both the terrestrial and aquatic systems and on human livelihoods. The discharge effluent from many of the 100 plus waste-water treatment works (public and private), many of which are struggling to meet national standards, impacts on the aquatic systems downstream and again on peoples' livelihoods. Indeed AWARD's work suggests that the most vulnerable livelihoods in terms of the direct dependencies on ecosystem services are in the former "homelands" which cover about half of the catchment. Between 6,000 and 10,000 small-scale farmers as well as the mangrove ecosystem at Xai Xai are dependent on flows into Mozambique. These connections highlight the importance of the systemic approach adopted by AWARD.

Conceptual Background to this Report

MERL principles & approach: how we measure success

The "hybrid" framework for ongoing monitoring, evaluation, reporting and learning (MERL) in RESILIM-O informs our approach to evaluating the success of our projects and the program as a whole. Our MERL approach combines monitoring against indicators with reflective process monitoring and more open-ended processes for obtaining explanatory data and evaluative insights. It includes formative evaluation and aims

to stimulate learning and enable strategic adaptive management.

Success at the program level is measured by whether project activities contributed to reducing vulnerability to climate change and improving transboundary water and biodiversity governance and management in the Olifants River Catchment. These programmatic outcomes are intended to enhance the resilience of people and ecosystems in the longer term (the program impact). Improved water and biodiversity governance and management is expected to take place through institutionalisation of collaboratively developed tools, guidelines and policies, and through building the capacity of individuals and organisations in the catchment. Capacity development is understood as any activity that enhances one or more of the following five aspects of capacity:

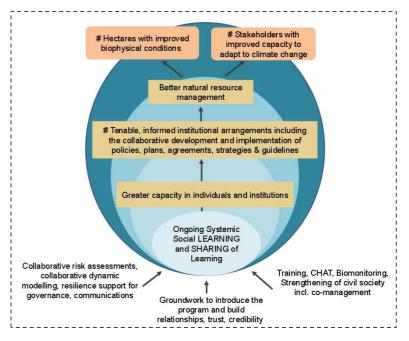


Figure 2: RESILIM-O theory of change showing the relationships between the high-level USAID indicators (coloured boxes) against which the program is reported



Individual capacity and competence (skills, behaviours, attitudes e.g. conflict resolution, application of tools and technologies, decision-making, management skills, systems thinking)

- 1. Organisational capacity (systems, processes for management, budget etc.)
- 2. Presence of "enablers" (e.g. policies, software, tools, maps, infrastructure)
- 3. Capacity for collective action (ability to work together, ability to build consensus, within and outside the organisation)
- 4. Capacity for appropriate communication (within and outside of the organisation)

The theory of change emphasises systemic, social learning as foundational to the program, both as a mechanism and an outcome. The concentric, shaded circles depict the non-linear way in which system-wide social learning is expected to spiral out from and inform all program activities. Desired outcomes (e.g. collaborative development and implementation of policies and plans) are a result of social learning but also contribute to further social learning.

The RESILIM-O program is structured under seven key result areas (KRAs), with the following objectives and outcomes:

Objective 1 (KRA 1):

To institutionalise systemic, collaborative planning and action for resilience of ecosystems and associated livelihoods through enhancing the capacity of stakeholders to sustainably manage natural resources of the Olifants River Catchment (ORC) under different scenarios

Objectives

Objective 2 (KRA 2): To enhance long-term water security and protection by supporting collective action, informed adaptation strategies and practices and tenable institutional arrangements for transboundary IWRM

Objective 3 (KRA 3):

To conserve biodiversity and sustainably manage high-priority ecosystem by supporting collective action, informed adaptation strategies and practices and tenable institutional arrangements

Objective 4 (KRA 4):

To reduce vulnerability to climate change and other factors by supporting collective action, informed adaptation strategies and practices and tenable institutional arrangements

Objective 5 (KRA 5): To facilitate the

sharing of experiences and lessons within the ORC and with other basins

Objective 6 (KRA 6):

To strengthen organisational learning, integration and coherency through continuous reflective and collaborative processes

Objective 7 (KRA 7):

To ensure good programmatic governance through developing and maintaining organisational capacity and effectiveness through tenable management systems and subcontract management

Outcomes

Capacity development and Institutionalization of systemic and collaborative planning and action in support of resilience

Integrated water resources management and governance

Biodiversity protection, management and governance

Climate adaptation strategies and practices

Involvement in networks at multiple scales to share experiences and learning

Development and implementation of appropriate and tenable MERL system

Develop and implement appropriate management systems

The capacity of stakeholders of the ORB to manage natural resources under uncertainty and climate change has been enhanced through improved skills, communication, and tenable, collaborative and multi-scaled risk-adaptation plans and actions

Outcome:

Tenable, collaborative, systemic and **multi-scaled NRM governance arrangements and practices** (IWRM and BD) have been developed and institutionalized through improved institutional arrangements, informed adaptation strategies and actions so as to contribute to enhanced NR and livelihood security for the ORC

Outcome:

An increased knowledgesharing. networking and exchange of experience with catchments

Outcome:

Effective organisational governance including monitoring, evaluating, reflection and learning that supports the programmatic objectives and organisational policies



Important Terminology:

- Indicators tell you if you are getting where you want to be; what you will measure to indicate success (indicators are NOT statements of what you want to achieve). Should be specific and measurable.
- Outputs: products, goods, tangibles immediate and intended (e.g. training courses, tools, documents).
- Outcomes: results or effects (immediate effects arising from the project activities). Can be positive or negative.
- **Impacts**: longer-term results or effects (can be positive or negative).

Systems thinking for understanding complex systems

Systems thinking recognises that many environmental and social problems are interconnected across different areas of interest (food, water, land, livelihoods, climate) and across space and time. While referencing real features of the world, a system is essentially a socially constructed entity with particular boundary choices which suit the particular purpose. We recognise that so-called 'social' and 'ecological' systems are more usefully seen as interacting, co-evolving and complex socio-ecological systems (or SES).

Systems thinking requires a shift from a reductionist view to a complexity frame of reference which recognises variability, uncertainty and interactions between components. Researchers working within the complex social-ecological system conceptual tradition argue that it is necessary to 'live' complexity thinking in order to truly take part in action research and reflexive learning. Increasing engagement with systems thinking is usefully described by Shelley and Ison's three categories of 'systemic sensibility', 'systems literacy', and 'systems thinking in practice'.

AWARD strongly supports the need for a systemic basin-wide approach to natural resources governance. It is this commitment that underpins our transboundary approach, be it across administrative, political, social or economic 'boundaries'. Our integrated approaches for collaborative action recognise the integrated nature of socio-ecological systems.



What is social learning? And why social learning?

Social learning is not just learning in a social context. This would make any interaction a learning process. What distinguishes social learning from other forms of learning is that the aim is to transform and change practice. It is also a case of learning about that which is not yet there.

Social learning is defined as a change in understanding that goes beyond the individual and spreads throughout communities or groups through social interactions between people (Reed, et al 2010). Arjen

Wals (2007) suggests important 'stages' in the process of social learning where one critically analyses one's own beliefs, norms and values (deconstruction), confronts those of others, and makes new meanings (reconstruction). Ison (2010) describes social learning as a process of socially constructing an issue with actors through which their understanding and practices change, leading to transformation of the situation through collective and concerted action. In the illustration, S2 refers to the situation, S3 to its modified solution, and Sn to the result of further iterations of modifying the situation, (SLIM 2004). Social learning is thus a feature of knowing and doing and at the same time an emergent property of the process to transform a situation (ibid).

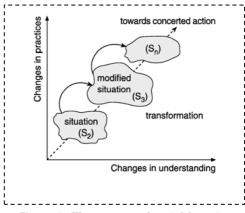


Figure 3: The process of social learning (Ison 2010)

These perspectives on learning have significantly influenced AWARD's way of working so that we are attentive to processes that foster a 'safe' learning space where people participate with each other to create new ideas or meanings. Most complex problem-solving around natural resources management requires action beyond the individual, making collective 'meaning-making' and collective action of central importance.

Resilience

Resilience is an ability to recover from or adjust easily to misfortune or change. The Resilience Alliance (www.resalliance.org) adopts a definition of resilience as the capacity of a social-ecological system to absorb or withstand perturbations and other stressors such that the system remains within the same regime, essentially maintaining its structure and functions. It describes the degree to which the system is capable of self-organization, learning and adaptation.

The following system features are important for building resilience (adapted from Biggs et al. 2015):

- 1. Diversity combined with overlapping function (e.g. if NGOs and government offer an extension service and one of these sources fails to deliver, the system can remain resilient)
- 2. Connectivity and flow of information into an otherwise isolated system can help with change.
- 3. Feedbacks if things start going wrong, for corrective action; or in positive situations, for continuation. Slow variables (like the effect of education) can take a long time to provide feedback.
- 4. Complex systems understanding to help avoid expectations of simple 'silver bullet' solutions.
- 5. Learning at all levels in a way that encourages the discussion of options, experimentation and mistakes.
- 6. Participation even across dissenting boundaries or "siloes".
- 7. Polycentric governance or a healthy multi-level network of governance (not only government).
- 8. Equity to enhance participation and reduce exclusion.



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Acronyms & Abbreviations

AWARD Association for Water and Rural Development

CCA Climate change adaptation

CoGTA Department of Cooperative Governance and Traditional Affairs

CSA Conservation South Africa

DARDLEA Mpumalanga Department of Agriculture, Rural Development, Land and

Environmental Affairs

DEA National Department of Environmental Affairs

DEFF National Department of Environmental Affairs, Forestry and Fisheries

DICLAD Dialogues for Climate Change Literacy and Adaptation

DM District municipality

EbA Ecosystem-based Adaptation

Deutsche Gesellschaft für Internationale Zusammenarbeit GIZ

IDP Integrated Development Plan

KRA Key Result Area

LEDET Limpopo Department of Economic Development, Environment and Tourism

LED Local Economic Development

LGCCSP Local Government Climate Change Support Program

LM Local municipality

MSI Municipal Support Initiative

MSI-LUP Municipal Support Initiative: Land-use Planning

NCCRP National Climate Change Response Policy

ORC Olifants River Catchment

RESILIM-O Resilience in the Limpopo Basin Program (RESILIM): Olifants Catchment

SALGA South African Local Government Association

SDF Spatial Development Framework

UNFCCC United Nations Framework Convention on Climate Change

USAID United States Agency for International Development





Executive Summary

The project, Embedding climate change in municipal planning and actions, was developed and implemented to address an identified gap in capacity development of local government within the Olifants River Catchment on climate change adaptation. This gap was a concern because, in the current policy and practice of the South African government's action on climate change, local government is regarded to be at the forefront of implementing plans and strategies.

Therefore, the project aim was to support municipalities' efforts towards transformation through skilling, training, sharing climate information for collaborative sense-making about climate change adaptation and embedding climate change adaptation into municipal planning and actions (e.g. Integrated Development Plans). This project was piloted in Maruleng Local Municipality (LM), Ba-Phalaborwa LM and Mopani District Municipality (DM).

For the Theory of Change, we attributed the lack of climate change considerations in the planning processes of local government to the limited capacity of the technical staff in the pilot municipalities to integrate climate change into their Integrated Development Plans (IDPs). Therefore, building the capacity of staff involved in the preparation of inputs for IDPs to embed climate change through a sense-making process using social learning principles, should result in climate change being included in the IDPs to support climate change adaptation projects. Stakeholders included IDP Managers, Town Planners, GIS Officers, Local Economic Development (LED) Managers, Disaster Managers, Environmental Officers, and Operations and Maintenance Managers.

Our activities focused on sourcing and communicating localised climate change information and finding an approach to integrate climate change into IDPs. This included the following:

Aligning and engaging with a larger program - Local Government Climate Change Support Program (LGCCSP) - that was rolled out by the Department of Environment, Forestry and Fisheries (DEFF) during the implementation of the project;

- Engaging with Municipal Managers, Directors of various directorates and some potential climate change champions to secure their buy-in for establishing a climate change task team in each pilot municipality;
- Facilitating capacity development workshops with the climate change champions in the two pilot LMs to address key concepts and terminologies related to climate change and CCA, climate change vulnerability assessments, technical tools to access and use climate information and climate change projections for planning purposes, and key entry points to introduce CCA considerations into the planning processes of the municipalities;
- Establishing and maintaining a close communicative relationship with national and provincial government stakeholders who are involved in CCA capacity building for local government.



The main outcomes and impact of this project were as follows.

Outcomes

- The emergence of potential climate change champions in Maruleng and Ba-Phalaborwa LMs, as well as a strong relationship between this core group and AWARD staff.
- The enhanced capacity of Maruleng and Ba-Phalaborwa climate change champions with regards to climate change, their expressed desire to include climate change considerations in the situational analysis of their IDPs, and the individual feedback of increased appreciation and understanding of how climate change is relevant for their work.
- Our contribution towards the integration of climate change into situational analysis in IDPs for Maruleng and Ba-Phalaborwa LMs, which included developing several enablers and AWARD being seen as an "information hub" in terms of technical knowledge related to risk analysis, access to other informed stakeholders via AWARD's networks, and ultimately, access to information about the work that AWARD and the municipality do together.
- The rapport AWARD built with key CCA stakeholders in provincial and national government for future collaboration and networks through which to share information and lessons learned on capacity development.

Reflecting on our experience and that of our stakeholders, we concluded that initiatives to integrate CCA into the planning processes of municipalities are profoundly impaired by the following challenges:

Challenges

- Fragmented institutional and legislative support for CCA;
- The predominance of a sector-oriented approach to CCA;
- Limited capacity of government entities to advance the mainstreaming of CCA;
- The persisting lack of an institutional structure for CCA at the level of local government;
- The lack of discourse around climate change and CCA at the ground-level and within local government because of a lack of awareness, ecological and climate literacy, as well as difficulties of translating climate change and related concepts into local languages; and
- A lack of agency to take action and adapt to climate change, because the challenge of climate change impacts seems so immense and removed from one's immediate sphere of influence that there is a sense of inability to change the future, which is further enforced by technical capacity limitations and lack of buy-in from political figures who control many critical decisions.

These challenges would need to be addressed first to create a more enabling environment if CCA is to be integrated into planning at the local government level in any meaningful and effective way.



As an example of how to address this recommendation in practice, we implemented follow-up and linked activities under the RESILIM-O program. We reconceptualised the current project to a project that aims to promote an emergence of agency for integrative CCA planning and actions through training key AWARD staff to facilitate climate change dialogues, and engaging stakeholders across sectors in collaborative meaning-making and integration of CCA actions horizontally and vertically. This project, Dialogues for Climate Change Literacy and Adaptation (DICLAD), took off in 2017 where this project ended in 2016 (see the final project report on DICLAD for more details). Furthermore, we captured some of these insights and observations (particularly the challenges listed in section 5.3.2), in a letter of comment submitted to the DEFF (including the Directorates of Climate Change Mitigation and Climate Change Adaptation) on 8 August 2018 regarding the draft Climate Change Bill (published in the government gazette 41689, notice no. 636). We also continued to voice these concerns as based on our experiences at the national and provincial platforms we attended beyond the lifespan of this project.

The insights gained and relationships built under this project also supported further activities with these stakeholders under the RESILIM-O program.

Introduction

South Africa is an Annex I Party to the United Nations Framework Convention on Climate Change (UNFCCC) and a signatory of other major international agreements on climate change including the Kyoto Protocol, Copenhagen Accord, Cancun Agreements and the Paris Agreement (UNFCCC 2014; UNFCCC 2016). These agreements bind the South African government to commit to working with other Parties to limit average global temperature increases and address the impacts of climate change. In recognition of this need to address impacts, South Africa has included adaptation as an important element in its institutional framework on climate change. In fact, the National Development Plan 2030 incorporates climate change as a major challenge to the country's development goals (National Planning Commission of South Africa 2012).

The South African government has already developed several key policies and other supporting documents to direct and implement adaptation. Of these, the National Climate Change Response Policy (NCCRP)¹ is the central document that describes the South African government's responsibilities to address climate change (DEA 2011). Gazetted as a White Paper in 2011, it is framed by a vision to transition the country to a lower carbon economy and climate resilient society. To achieve this vision, cross-sectoral collaboration and participation from local government is emphasised. Indeed, local government is seen as the key implementer at the ground-level of South Africa's climate change policies, strategies and plans on adaptation.

However, the NCCRP has not yet been integrated vertically and laterally into the full institutional structure and practices of government (Ziervogel et al. 2014).

¹ Available at http://www.gov.za/documents/national-climate-change-response-white-paper Accessed on 9 December 2015.



There are several institutional barriers to South Africa's implementation of integrated climate change adaptation including:

1	2	3	4	5	6
Limited capacity for the necessary personnel resources & expertise	of staff within government departments	understanding of & expertise	The positioning of climate change as an environmental issue rather than as a development issue	Conservative financial management practices	Poor communication & coordination between departments & between different levels of government, especially from national & provincial to the local level (Ziervogel et al. 2014)

Within this context, we conducted a review of climate change adaptation options, policies and projects in the Olifants River Catchment in 2015, and found that of the existing adaptation projects with active project sites in the catchment, none were specifically aiming to support the transformation of practices in local government (Kong et al. 2016). The review process also engaged us with an initiative by the DEFF at the provincial level to develop climate change adaptation strategies and to roll out the Let's Respond Toolkit² in municipalities to assist them in integrating climate change adaptation into their IDPs.

Therefore, the project, Embedding climate change in municipal planning and actions, was developed and implemented to address the identified gap in capacity development of local government within the Olifants River Catchment, and to align with and reinforce the activities of government to address this gap and continue to develop necessary climate policies and plans.

² The Let's Respond Toolkit was published in 2012. It is a guideline for municipalities to address climate change adaptation and mitigation as part of the constitutional and legislative obligations of local government. Available at http://www.letsrespondtoolkit.org/



Project Objectives 3

RESILIM-O KRA objective 3.1

The project, Embedding climate change in municipal planning and actions, was implemented under the RESILIM-O Key Result Area (KRA) 4, which supported the programmatic objective to reduce vulnerability to climate change and other factors by supporting collective action, informed adaptation strategies and practices and tenable institutional arrangements within the Olifants River Catchment (ORC). The KRA 4 project activities constitute the "climatic system" within the overall scheme of the RESILIM-O program (see Figure 4). These project activities were developed to facilitate stakeholders to collaboratively make sense of climate change impacts and integrate that understanding into their praxis in managing natural resources in the ORC, as well as embedding climate change and climate change adaptation (CCA) across all other projects under the RESILIM-O program and KRAs related to the "water system" and the "land system" of the ORC.

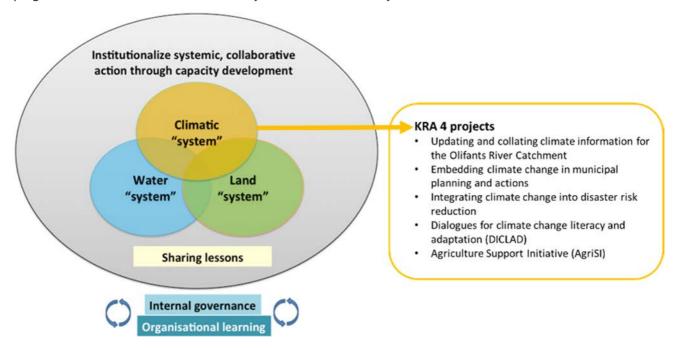


Figure 4: Overview of RESILIM-O indicating key areas of work in Phase II, as well as projects under KRA 4 (as adopted from Pollard 2015).

Project objectives

The project aim for Embedding climate change in municipal planning and actions was to support municipalities' efforts towards transformation through skilling, training, sharing climate information for collaborative sense-making about climate change adaptation and embedding climate change adaptation into municipal planning and actions (e.g. Integrated Development Plans). This project was piloted in Maruleng LM, Ba-Phalaborwa LM and Mopani DM in 2016.



The aim was supported by the following objectives:

To identify potential climate change task team members in Maruleng and Ba-Phalaborwa LMs

To enhance the capacity of the Mopani, Maruleng and Ba-Phalaborwa climate change task team members with regards to CCA

change into situational analysis in IDPs for Maruleng and Ba-Phalaborwa LMs

The project is directly linked to the objective of KRA 4. The rationale for the linkage is that by building the capacity of local government officials to integrate climate change considerations into municipal planning and actions, we will increase the adaptive capacity of communities to reduce their vulnerability to climate change. This is because municipal officials are mandated by legislation to deliver many of the basic services (e.g. water, energy and waste management), planning for spatial and economic developments, coordinating local disaster responses and managing infrastructure and local resources that are impacted by climate change. Therefore, if municipalities can anticipate and implement adaptive measures to reduce the impacts of climate change on these important functional areas, they will reduce the vulnerability of communities to climate change.

Links to other RESILIM-O projects

The current project incorporated the outputs from the sister KRA 4 project *Updating and collating climate* information to inform activities, especially regarding downscaled localised projections for climate change to inform planning.

The aim, objectives and activities of the current project were aligned with the activities of other projects directly involved with local government in the mentioned LMs and DM under the RESILIM-O program. The projects engaged the same or similar stakeholders and addressed different but complementary factors in regards to resilience building within local government.

Municipal Support Initiative (MSI)

• This project aimed to support the development of resilient local government structures and functions by designing an institutional learning process to support practitioners and council regarding policy development for climate change adaptation, landuse planning, wastewater treatment works, and water conservation and demand management.

Integrating Climate Change into Disaster Risk Reduction

 This project aimed to assist in building and enhancing networks for learning, collaboration and coordination amongst public, private and community stakeholders to support disaster management, involving local Disaster Management Advisory Forums at the LMs and DM.

Furthermore, experiences with implementing the current project contributed towards our improved understanding of the local context of climate change adaptation capacity and informed the development of the DICLAD project.



KRA1 Municipal Support Initiative (MSI): support the development of resilient local government structures

Overlap of stakeholders

and function

Complimentary capacity building activities on adaptation

KRA4 Embedding climate change in municipal planning and actions: support municipalities' efforts towards transformation through skilling, training, sharing climate information for collaborative sense-making about climate change adaptation and embedding climate change adaptation into municipal planning and actions

KRA4 Integrating climate change into disaster risk reduction: aimed to integrate and upscale the embedding of climate change adaptation in disaster management practices.

KRA4 Dialogues for Climate Change Literacy and Adaptation (DICLAD): to build stakeholders' sense of agency for taking climate change adaptation actions through: (a) a social-learning process of collaborative mean-making of the impacts of climate change and adaptation options with stakeholders; (b) supporting stakeholders to plan for tenable CCA options; and (c) sharing lessons of our systemic, social learning approach for building climate literacy.

(Other projects under the RESILIM-O program, see final project report of DICLAD)

- · Review of climate change policy, impacts and adaptation options
- Provide localised historical climate trends and downscaled climate change projections
- Developed initial internal communication skills and facilitation processes for climate change

KRA4 Updating and collating climate information: to collate and update relevant climate information for the ORC as a basis for capacity development activities, awareness raising, knowledge network and embedding climate change into other projects under the RESILIM-O program.

Figure 5: Links of the current project to other projects under the RESILIM-O program.



Approach/Process/Activities

Project theory of change

The vexing problem that the KRA 4 project, *Embedding climate change into municipal planning and actions*, aimed to address was that climate change considerations and adaptations are not in the IDPs for most of the municipalities in the ORC. This was a problem because local government has an important role to play in building community resilience to climate change. LMs and DMs have legislative mandates for delivering many of the basic services (e.g. water, energy and waste management), planning for spatial and economic developments, coordinating local disaster responses and managing infrastructure and local resources that are impacted by climate change. The degree to which municipalities can anticipate and implement adaptive measures to reduce the impacts of climate change on these important functional areas, is the degree to which they will reduce the vulnerability of communities to climate change. We decided to pilot the project in Maruleng LM, Ba-Phalaborwa LM and Mopani DM because these were the sites of the RESILIM-O program's MSI and Integrating Climate Change into Disaster Risk Reduction projects.

Our original understanding of the factors contributing to the vexing problem is illustrated in Figure 6. We attributed the problem to limited capacity of technical staff in the pilot municipalities to integrate climate change into IDPs3. This limited capacity referred to both the lack of localised climate change information and the poor understanding of how to integrate this information in the existing IDP process. Climate information includes climate projections, climate change impacts and adaptation options for these impacts.

We developed our work plan using a Theory of Change that was based on this understanding of the vexing problem. Our original Theory of Change focused on building the capacity of municipal technical staff to embed climate change into IDPs through a sense-making process by using social learning (see Figure 7). Our stakeholders consisted of technical staff who are involved in the preparation of and inputs for IDPs. These include IDP Managers, Town Planners, GIS Officers, LED Managers, Disaster Managers, Environmental Officers, and Operation and Maintenance Managers. Our main activities were to source and communicate localised climate change information⁴ and find an approach to integrate climate change into IDPs.

³ This was based on our own observations and reviews, as well as consulting available literature such as Ziervogel et al. 2014. 4 For more information on the sourcing of localised climate and climate change information, please see the final project report for project *Updating and collating climate information* under the RESILIM-O program.



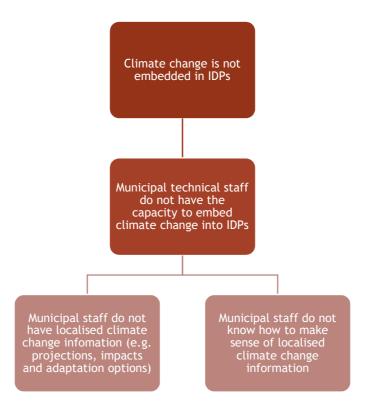


Figure 6: Our original understanding of the vexing problem with regards to the project Embedding climate change in municipal planning and actions.

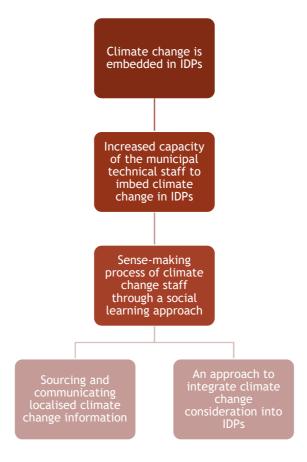
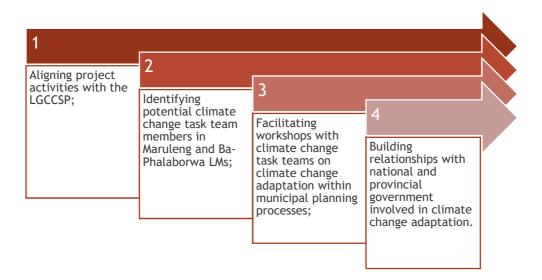


Figure 7: Our original Theory of Change with regards to the project Embedding climate change in municipal planning and actions. On the right, our original understanding of the vexing problem with regards to this project.



4.2 Summary of activities

Activities for the current project focused on the following which are detailed in the subsections.



4.2.1 Aligning project activities with the Local Government Climate Change Support Program

We wanted to align the project with a larger program - the Local Government Climate Change Support Program (LGCCSP) - that was rolled out by the DEFF⁵ during the implementation of the project⁶. There were multiple reasons for our decision to align with the LGCCSP.

Firstly, we wanted to leverage the strategies and actions of the national government to avoid duplication of efforts. As part of the LGCCSP, the South African Local Government Association (SALGA) had already developed a set of tools (i.e. Let's Respond Toolkit) and an approach to help municipalities to integrate CCA and mitigation into their IDPs. Additionally, DEFF and SALGA held workshops in Limpopo and Mpumalanga in 2015 and early 2016 to introduce the Let's Respond Toolkit to municipalities in these provinces. Following the introductory workshops, DEFF contracted a service provider, Urban Earth, to provide training workshops to the local government in Northwest, Limpopo and Mpumalanga provinces on climate change vulnerability assessment and response planning in 2016. We attended all of these workshops that were held for the pilot municipalities to assess the nature and extent of support provided, so as to determine what additional capacity development and advisory support we needed to provide to our stakeholders.

Secondly, we wanted to draw impetus from the LGCCSP to encourage our stakeholders in the pilot municipalities to participate in the Embedding climate change into municipal planning and actions project.

⁵ Previously known as Department of Environmental Affairs (DEA)

⁶Between 2009 and 2016, DEFF implemented the LGCCSP in collaboration with South African Local Government Association (SALGA), Department of Cooperative Governance & Traditional Affairs (CoGTA) and Gesellschaft für Internationale ^Zusammenarbeit (GIZ). The LGCCSP is part of the Climate Support Program (CSP) that aims at developing an institutional framework for CCA in South Africa. See http://www.letsrespondtoolkit.org/



At the time of the project, there was no legislation in South Africa giving explicit mandate for local government to plan for CCA7. Therefore, we needed to take advantage of government-sanctioned opportunities to increase awareness and interest of municipal technical staff in climate change adaptation as relevant to their work.

Finally, we also attended the LGCCSP workshops to identify potential climate change task team members in the pilot municipalities (see the following section for more details on this).

With these reasons in mind, our activities between January and June 2016 focused on attending the LGCCSP workshops in the pilot municipalities to see how we could build synergy with their work with local government (Table 1).

TABLE 1: LIST OF LGCCSP WORKSHOPS WHICH AWARD ATTENDED IN 2016.

DATE	THEME OF WORKSHOP
25-26 February 2016	Let's Respond Integrated Development Plan Toolkit Training: Mpumalanga local municipalities
20 April 2016	Let's Respond Toolkit Phase 2 Workshop: Limpopo Province
3 May 2016	LGCCSP Vulnerability Assessment and Response Plan Workshop $1^{\rm st}$ Round: Ehlanzeni DM and LMs
17 May 2016	LGCCSP Vulnerability Assessment and Response Plan Workshop 1st Round: Mopani DM and LMs
22 July 2016	LGCCSP Vulnerability Assessment and Response Plan Workshop 2^{nd} Round: Ehlanzeni DM and LMs
16 August 2016	LGCCSP Vulnerability Assessment and Response Plan Workshop 2 nd Round: Mopani DM and LMs

4.2.2 Identifying potential climate change task team members in Maruleng and Ba-Phalaborwa LMs

By attending the LGCCSP workshops and engaging with stakeholders, we learned that most municipalities have not created institutional structures for including CCA in their planning processes (see Figure 8). None of the pilot municipalities for the RESILIM-O program had staff assigned with the responsibility of planning for CCA and mitigation.

DEFF tried to overcome the challenge of a lack of institutional home for climate change at local government level by nominating a climate change champion for each municipality. However, throughout the LGCCSP training process, ambiguity persisted on who these climate change champions were and if they had been assigned with any supporting authority in the pilot LMs and DM (see section 5.4.2.1 for more details regarding this challenge).

In collaboration with the MSI project team, we arranged and participated in eight meetings with Acting Municipal Managers, Directors of various Directorates and some potential climate change champions to secure their buy-in for establishing a climate change task team in each pilot municipality (see Table 2).

⁷A draft Climate Change Bill for South Africa was gazetted in 2018 which does address the role and responsibility of local government in CCA (DEA 2018). However, at this time, the Bill was yet to be finalised and implemented.



These efforts included:

- Engagements with directors and municipal managers to secure their support for the task teams and champions; and
- Attending REP Forum meetings for baseline scoping. Furthermore, we addressed letters to the key decision-makers to formally request clarity on the climate change champions, as well as to permit municipal staff members to participate in the local LGCCSP workshops (see Appendix 8.2).

Despite our efforts, progress was delayed because critical engagements with the leadership of LMs were postponed or cancelled several times (see Appendix 8.3 for an example). Our progress in Mopani DM stalled completely. It never clearly emerged who was the "climate change champion(s)" of Mopani despite efforts of our team, the MSI project team and technical staff at the DM who supported the initiative⁸.

It was only in June 2016 that we managed to persuade a number of potential climate change champions in Maruleng LM and Ba-Phalaborwa LM to meet with us to start the discussion on whether they want to integrate CCA into their IDPs, the challenges they face, and the support they would need from RESILIM-O to overcome some of these challenges9. This was done by taking advantage of the growing good relationships with stakeholders under the MSI and Integrating Climate Change into Disaster Risk Reduction projects.



Figure 8: Stakeholders from Maruleng LM (including the disaster officer, senior town planner and senior municipal valuation officer) participating in a group activity to consider the vulnerability of their municipality to climate change at the LGCCSP Vulnerability Assessment and Response Plan Workshop (1st Round) on 17 May 2016 for the Mopani DM and LMs. Two of these stakeholders became core members of the Maruleng climate change task team.

4.2.3 Facilitating workshops with climate change task teams on climate change adaptation within municipal planning processes

In total, we facilitated five capacity development workshops with the climate change champions in the two pilot LMs to cover the following themes:

- i) Conduct a needs assessment for CCA within the planning processes of the municipalities (see Figure 9);
- ii) Create a common understanding of key concepts and terminologies related to climate change and CCA (see Figure 10);

⁸ See the monthly reports of May, June and August 2016

⁹ See the monthly reports of May and June 2016



- iii) Discuss an approach and implementation of a climate change vulnerability assessment within the IDP process;
- iv) Facilitate training on technical tools to access and use climate information and climate change projections for planning purposes; and
- V) Identify key entry points to introduce CCA considerations into the planning processes of the municipalities (see Table 2).

Furthermore, we made efforts to align project activities with partner organisations addressing similar objectives in the LMs. This included inviting Limpopo Department of Economic Development, Environment and Tourism (LEDET) and DEFF representatives to some of these engagements, in order to develop their capacity to support municipal officials. We also shared lessons at a reflective partner and stakeholder workshop on 14 June 2016 to develop a common understanding of the purpose and scope of a proposed ecosystem-based adaptation (EbA) project in the Maruleng LM by the Department of Rural Development and K2C.

During some of the first engagements, the task team members were requested to complete an informal questionnaire on their current awareness of climate change within local government (see Appendix 8.1). Responses indicated that overall, officials have had very little exposure to climate change within the context of their work and institutions. The officials in Ba-Phalaborwa and Maruleng LMs indicated that they had heard about climate change before, but reported that they mostly:

- did not have access to relevant climate change information;
- are not aware of CCA options for their sector;
- have not engaged with CCA interventions before and have no existing plans to do so;
- are not aware of collective actions or initiatives that have been or are planned to be implemented with other institutions or departments on CCA; and
- are not aware of any tools, plans, guidelines, standards or strategies to address climate change.

A few task team members at Maruleng LM did remark that the Spatial Development Framework (SDF), IDP, Hoedspruit Precinct Plan, Tourism Strategy, LED Strategy and previous engagements on energy efficiency were potential tools, plans, guidelines, standards or strategies to address climate change. All the task team members from both LMs thought that climate change does impact their work, at least partly.



Figure 9: Taryn Kong (AWARD) presenting during the first engagement with the Maruleng Climate Change Task Team on 26 July 2016.



TABLE 2: LIST OF MEETINGS THAT AWARD ATTENDED TO SECURE BUY-IN FOR THE IDENTIFICATION OF CLIMATE CHANGE CHAMPIONS AND THE ESTABLISHMENT OF CLIMATE CHANGE TASK TEAMS IN MARULENG LM, BA-PHALABORWA LM AND MOPANI DM.

DATE	EVENT	MUNICIPALITY
10 March 2016	Baseline and scoping interview with Director of Community Services, and Assistant Director of Planning	Ba-Phalaborwa LM
16 March 2016	Attended the REP Forum Meeting as part of gathering information for baseline and scoping, as well as establishing relationship with LM.	Ba-Phalaborwa LM
21 April 2016	Attended REP Forum Meeting as part of gathering information for baseline and scoping, as well as establishing relationship with LM.	Maruleng LM
05 May 2016	CHAT workshop on land-use planning, accompanied this workshop to connect with stakeholders from Development and Planning	Ba-Phalaborwa LM
25 May 2016	MSI and land-use planning workshop, accompanied this workshop to connect with stakeholders from Development and Planning	Maruleng LM
01 June 2016	Facilitated workshop with stakeholders from LMs as an initial meeting of potential climate change champions	Maruleng and Ba-Phalaborwa LM
14 June 2016	Reflective partner and stakeholder workshop facilitated by K2C to develop a common understanding of the purpose and scope of a proposed EbA project in the Maruleng LM	Maruleng LM
30 June 2016	Meeting with key decision-makers from Mopani DM (including Acting Municipal Manager, and Director of Community Services) to initiate process to identify CC champions	Mopani DM
12 July 2016	Face-to-face interviews with Maruleng's IDP officer and Ba- Phalaborwa's Assistant Director of Development and Planning to gain a better understanding of the IDP process	Maruleng and Ba-Phalaborwa LM
26 July 2016	Follow-up workshop with potential climate change champions	Maruleng LM
27 July 2016	Follow-up workshop with potential climate change champions	Ba-Phalaborwa LM
31 August 2016	Planned joint workshop with potential climate change champions from LMs on technical aspects of accessing and using climate and climate change information, as well as further planning of including climate change vulnerability assessments in the existing IDP process	Maruleng and Ba-Phalaborwa LM
25-26 October 2016	This 3-day workshop focused on Land-use planning (LUP). Climate change was one of the agenda items to provide input on climate change impacts and adaptation interventions within the context of LUP. We shared with stakeholders some of the results from a study undertaken by RESILIM-O to identify priority areas for climate resilience.	Ba-Phalaborwa LM (Maruleng LM was invited, but did not send any representative.)





Figure 10: Ancois de Villiers (AWARD) and Dr Taryn Kong (AWARD) giving an interactive demonstration of the greenhouse effect as a core concept of climate change during the first workshop with the Ba-Phalaborwa Climate Change Task Team, on 27 July 2016.



Figure 11: On the left, Ancois de Villiers (AWARD) presenting the draft climate change vulnerability assessments and response strategies for Mpumalanga and Limpopo, and on the right, Dr Taryn Kong (AWARD) leading an activity during the Climate Change Task Team technical workshop on 11 August 2016.

Building relationships with national and provincial government

In addition to the capacity development workshops, we maintained a close communicative relationship with stakeholders at the national and provincial government level who are involved in CCA capacity building for local government (see Table 3). This assisted us in aligning our activities with major policy developments, as well as providing feedback from the ground level of implementation (see Figure 9). We participated in the Limpopo Climate Change Working Group, Limpopo Climate Change Summit, Mpumalanga Climate Change Forum and the National Committee on Climate Change meeting. We also supported the district level initiative by LEDET and DEFF to increase awareness and collaboration on environmental and climate issues within local government by initiating a Mopani Environmental Management Forum.



Furthermore, our team attended the 2nd Southern African Adaptation Colloquium (SAAC) to connect with other practitioners working on climate change. Through these engagements, we provided support and inputs on climate change policy development at the local, provincial and national level, as well as the Terms of Reference and Constitutions of these forums and working groups as they were being established.

TABLE 3: EVENTS ATTENDED BY AWARD TO MAINTAIN A CLOSE COMMUNICATIVE RELATIONSHIP WITH STAKEHOLDERS AT THE NATIONAL AND PROVINCIAL GOVERNMENT LEVELS WHO ARE INVOLVED IN CCA CAPACITY BUILDING FOR LOCAL GOVERNMENT.

DATE	EVENT
11 February 2016	Meeting on draft national strategy framework and implementation plan for EbA in South Africa†
19 April 2016	Limpopo Climate Change Working Group meeting
4 May 2016 A meeting for scoping EbA project ideas by Conservation South Africa (C 3 June 2016 Limpopo Climate Change Working Group meeting	
21 June 2016	Mopani Environmental Forum
8-9 July 2016	2nd Southern African Adaptation Colloquium (SAAC)
12-13 July 2016	Mpumalanga Climate Change Forum meeting
28 July 2016	National Committee on Climate Change meeting
18 November 2016	Provincial consultations workshop on South Africa's draft National Adaptation Strategy: Mpumalanga

^{*}Our team presented the RESILIM-O Program at this event

†We submitted comments on this policy document, see the project archive.



Figure 12: Dr Taryn Kong (AWARD) presenting the RESILIM-O Program at the Limpopo Climate Change Summit on 9 June 2016.



5 Results

5.1 Project outcomes

Our activities achieved the following outcomes, of which three were expected, and one emerged from the process of implementation. These outcomes corresponded with four deliverables under the Embedding climate change in municipal planning and actions project. These deliverables have been completed (Table 4). The outcomes and impacts are detailed below.

> Identified potential climate change task team members in Maruleng and Ba-Phalaborwa LMs

Enhanced the capacity of the Mopani, Maruleng and Ba-Phalaborwa climate change task team members with regards to CCA

Contributed towards the integration of climate change into situational analysis in IDPs for Maruleng and Ba-Phalaborwa LMs

Established relationships between AWARD and national and provincial bodies addressing climate change policy development and capacity development

The project's contribution to the RESILIM-O program's overarching themes of systems thinking, social learning and collective action, and resilience are detailed in Box 1 to 3.

The impact of the project's outcomes was considered at the individual level and institutional levels, as well as its contribution to providing meaningful localised information on climate change within the pilot LMs.

At the individual level, stakeholders expressed an increased appreciation and understanding of how climate change is relevant for their work. As a municipal staff member stated "It felt like what they [AWARD] were sharing with us was eye-opening for the municipality. To know how we can improve our day-to-day job ... because you tend to realise that as a municipality we're still lacking and this is where we're supposed to improve. So it helped to identify where we are and give us direction about where we're supposed to be."10 AWARD is seen as an "information hub" in terms of technical knowledge related to risk analysis, access to other informed stakeholders via AWARD's networks, and ultimately, access to information about the work that AWARD and the municipality do together.

¹⁰ Burt, J. 2016. Evaluation Case Study: Municipal Support Initiative. p. 18.



At the institutional level, notable impacts include the following.

The emergence of potential climate change champions in Maruleng and Ba-Phalaborwa LMs, as well as the strong relationship built around climate change between our team (and other AWARD staff) and this core group, to facilitate further collaboration on resilience building activities under RESILIM-O.

The enhanced capacity of Maruleng and Ba-Phalaborwa climate change champions with regards to climate change and their expressed desire to include climate change considerations in the situational analysis of their IDPs.

The rapport AWARD built with key CCA stakeholders in provincial and national government for future collaboration and networks through which to share information and lessons learned.

We provided summaries of relevant climate change information to municipal officials through the following communication materials. These were also provided to our colleagues working on the MSI project to support their activities. These enablers were the foundation for climate change information being included in the 2017/2018 IDP situation analysis of Maruleng LM, and the review of the Mopani SDF in 2018 (see the final project report of MSI for more details on this).

- A presentation on local climate change projections, some content on the core concepts of climate change, and overview of climate change impacts relevant for municipalities
- A handout to support the technical training on accessing localised climate information and resources
- A step-by-step guide to the Climate Information Portal, as a resource for localised climate information
- A 2-page flyer on the Let's Respond Toolkit, to create more awareness of the LGCCSP and to assist efforts to engage with municipal managers on identifying climate change champions and support the climate change task teams

An additional outcome was the established relationship between AWARD and national and provincial bodies addressing climate change policy development and capacity development. The rapport AWARD built with these key stakeholders will support future collaboration and networks involved in capacity development and implementation of climate change adaptation.



The social learning process created a space for stakeholders to become aware of and express their inherent systemic sensibility to engage meaningfully with the multiple and interrelated impacts of climate change which by its nature is systemic. In other words, to discuss climate change naturally brings forth a person's systemic sensibility.

Furthermore, systemic literacy was addressed by the learning themes addressing accessing and making sense of climate change information, and collectively discussing the practice of climate vulnerability assessments for IDPs which is cross-sectoral. It addresses the "what" of climate change impacts, "how" these are connected and "why".

These should all be seen as initial steps towards establishing more systemic understanding amongst the climate change champions in local government who participated in the project.

Having a climate change task team has created at least an initial "institutional home" for climate change in the LMs within a context of persistent lack of clarity on climate change legislation. This is a necessary step towards improving the institutional capability of the LMs to address climate change, as well as to facilitate collective planning and action.

- By bringing stakeholders from different sectors and departments together around a common focus (i.e. embedding climate change considerations into the IDP), the project was expected to support the emergence of collective action and collaboration (i.e. connectivity) on planning for adaptive activities within local government.
- Learning was addressed by creating a space for collective exchange of knowledge and experience through the social learning process and by addressing stakeholders' need to improve their ability to access and make sense of climate change information.
- We were able to develop several enablers to capture the content of the social learning process, including localised information on climate and climate change to inform the municipal planning processes after the project ended.

Social thinking and collective action

- Having a core group of climate change champions who represent important planning processes within the municipalities across departments, creates clarity on who should be involved and creates a space for these individuals to meet and engage on a common goal. This is a fundamental step towards collective action and collaboration (i.e. connectivity), creating opportunities for information exchange and shared experiences (i.e. learning), and at least some joint decision-making and planning (i.e. collective governance within the LMs). The climate change champions also used the task team as a platform to express a sensitivity for all voices to be included in vulnerability assessments and climate change response plans (i.e. participation), and ways to support more inclusion in the planning processes for climate change.
- The enhanced capacity of Maruleng and Ba-Phalaborwa climate change champions with regards to climate change speaks to their increased understanding of climate change including its core concepts, impacts and adaptation interventions that are both relevant to the individual's work but also systemically demonstrated across departments and sectors. This allows climate change champions to more effectively initiate and engage in collective and collaborative initiatives (i.e. connectivity) and collective governance, and be more aware of the subtle impacts of climate change and the implications for planning (i.e. slow changes and feedback loops).
- Addressing stakeholders' limited access to and ability to make sense of climate change information increases their understanding of slow changes and feedback loops within the context of planning.
- Opportunities for learning and connectivity were enhanced through AWARD's role as an "information hub" for these stakeholders, to support further partnerships on building resilience under and beyond RESILIM-O.
- By having built rapport with key CCA stakeholders in provincial and national government, AWARD is also supporting connectivity, learning and participation across the spheres of government.



TABLE 4: DELIVERABLES RESULTING FROM THE EMBEDDING CLIMATE CHANGE IN MUNICIPAL PLANNING AND ACTIONS PROJECT.

OUTCOME	DELIVERABLES	TYPE	PROGRESS
Established relationship between AWARD and national and provincial bodies addressing climate change policy development and capacity development	Networks on climate change and CCA, for knowledge sharing and collaboration with AWARD	Collective actions	Done
Identified potential climate change task team members in Maruleng and Ba- Phalaborwa LMs	Identify core group of potential climate change task team members in Maruleng and Ba-Phalaborwa LMs	Institutions (3) / Enabler	Done
Enhanced the capacity of the Mopani, Maruleng and Ba-Phalaborwa climate change task team members with regards to CCA	Enhanced capacity of the Mopani, Maruleng and Ba-Phalaborwa climate change task team members with regards to climate change	Individuals (24)	Done*
Contributed towards the integration of climate change into situational analysis in IDPs for Maruleng and Ba-Phalaborwa LMs.	A summary of localised climate change information as a basis for CCA planning to support integration of climate change into situational analysis in IDPs for Maruleng and Ba-Phalaborwa LMs.	Enabler	Done

^{*}The capacity development of these individuals continued under other projects under the RESILIM-O program, including MSI, MSI: Landuse-Planning (LUP) and Integrating Climate Change into Disaster Risk Reduction.



5.2 Indicator data

TABLE 5: PROJECT CONTRIBUTION TO USAID INDICATORS

INDICATOR ID	INDICATOR NAME	TARGET	ACHIEVED (LIFE OF PROJECT)
EG.10.2	Biodiversity		
EG.10.2-1	Number of hectares of biologically significant areas showing improved biophysical conditions as a result of USG assistance	NA	NA
EG.10.2-2	Number of hectares of biologically significant areas under improved NRM as a result of USG assistance	NA	NA
EG.10.2-5	Number of laws, policies, or regulations that address biodiversity conservation and/or other environmental themes officially proposed, adopted or implemented	NA	NA
AWARD	Number of institutions with improved capacity to address NRM and biodiversity conservation issues as a result of USG assistance	NA	NA
EG.10.2-4	Number of people trained in sustainable NRM and/or biodiversity conservation as a result of USG assistance	NA	NA
EG.11	Climate Change - Adaptation		
AWARD	Number of stakeholders (individuals) with increased capacity to adapt to the impacts of climate change as a result of USG assistance	7	7 ¹
EG.11-2	Number of institutions with improved capacity to assess or address climate change risks supported by USG assistance	3	3 ²
EG.11-3	Number of laws, policies, regulations, or standards addressing climate change adaptation formally proposed, adopted, or implemented as supported by USG assistance	NA	NA
EG.11-1	Number of people trained in climate change adaptation supported by USG assistance	14	14
	Cross-cutting		
AWARD	Number of people reached by the Our Olifants campaign including social media	-	30
STIR	Science, Technology and Innovation / Research		
STIR-12	Number of peer-reviewed scientific publications resulting from USG support to research and implementation programs	0	0

¹ Incl. 3 males and 4 females

 $^{^{\}rm 2}\,{\rm Incl.}$ Maruleng Local Municipality, Ba-Phalaborwa Local Municipality, and LEDET



5.3 Successes and challenges

5.3.1 Success

Below are the main successes which we achieved in implementing the project.

5.3.1.1 Established a learning partnership with climate change task teams

The success here for the project team was in creating the necessary space and rapport for open communication, active participation and reflection of task team members during engagements as based on social learning principles for capacity development. Task team members provided valuable inputs regarding their lived context as officials in LMs, which for outsiders like ourselves would be very difficult to gain. This resulted in a true partnership of learning with each partner providing a key set of information, knowledge and experience - our team on climate change, and the task teams on existing political, social and planning processes and context within local government. The inputs of the task team members were used to guide the development of the project's strategy and activities, as well as other projects under the RESILIM-O program. Our insights regarding lessons-learned and recommendations came directly from the shared experiences of task team members (see sections 15 and 25).

Task team members were open to discuss their challenges, as well as providing insights on pathways to address these¹¹. The following paragraphs provide a bit more detail on this.

Task team members were open to discuss challenges

During task team engagements, members spoke very openly about their challenges. Notably, they shared that there is a lack discourse on climate change within the municipality. They expressed concern about some climate trends and are aware that their LMs will be impacted by climate change. However, they do not know how to mitigate this impact. There was also an expressed concern with the lack of vulnerability assessments (including considering climate change impacts) used in the planning of development and infrastructure projects.

Task team members expressed sensitivity and motivation for more stakeholder inclusion

Our team observed an emerging internal peer pressure by task team members to motivate their colleagues to attend engagements. They noted the absence of their colleagues from the engagements, and remarked that they had "reminded" them to come and that they "should have been here". Furthermore, task team members expressed and reflected on the lack of climate literacy within their institution and in the communities. They expressed both the interest and need to engage with other stakeholders on climate change, for climate change to be effectively embedded within planning processes.

Task team members provided insights into which pathways to follow to integrate climate change into local government planning

During workshops, task team members provided insights into which pathways to follow to embed climate change into local government planning processes. They proposed Disaster Management Plans and SDFs as the initial entry points to introduce climate change into the planning processes of the LMs. By including climate change adaptation in these plans, climate change could then be included more easily in the IDPs.

¹¹ See the documentation of engagements with the climate change task teams from 1 June 2016 to 31 August 2016, as well as the monthly reports for June, July and August.



Other creative entry points for the IDP that were proposed were as follows.

- Developing questions to source information for the climate change vulnerability assessment from communities as part of the analysis phase of the IDP.
- Integrating the issues of climate change and service delivery, to use climate change as a vehicle to support the urgency for basic services delivery which is already an existing priority for communities in the LMs and a focus of IDPs.

Task team members also provided insights on how to engage with other stakeholders. This included discussion on how to engage with community members on climate change regarding their beliefs and languages. Task team members also emphasised that it is critical to secure the buy-in from key decisionmakers (e.g. directors, municipal managers, traditional authorities and politicians). Without this support, it will be very difficult to influence internal policies and acquire internal funding for CCA projects to be included in the IDP.

5.3.1.2 Established relationships with National and provincial bodies addressing climate change policy development and capacity development

By actively participating in national and provincial initiatives on climate change capacity development for local government, we established key and influential relationships with several stakeholders in DEFF, SALGA, LEDET and the Mpumalanga Department of Agriculture, Rural Development, Land and Environmental Affairs (DARDLEA)¹². This provided insights on the greater context of capacity and policy development on climate change, and an entry point to feed back to the higher levels of government the realities, challenges and opportunities at the local level to influence the development and implementation of policies. This included engaging in the public consultation on the draft National Strategy Framework and Implementation Plan for EbA and submitting comments on this document¹³.

The relationships and contacts were beneficial for the activities and impact of the RESILIM-O program as a whole, and we further developed these relationships under other KRA 4 projects.

5.3.2 Challenges

Our activities in working with the climate change task teams as well as engagements with initiatives at the provincial and national level on climate change capacity and policy development, revealed several challenges to integrating climate change into the planning processes of local government in the current context¹⁴. These challenges have the cumulative effect of climate change mostly remaining an unspoken, overlooked, unfunded and unskilled mandate without legislative gravitas. This persistent context impairs meaningful action and impact of capacity development initiatives, especially in rural district and local municipalities within the Olifants River Catchment.

Based on these insights, we revised our understanding of the vexing problem as originally captured in the project's Theory of Change. Figure 13 shows the revised concept map with considerably more factors contributing to the problem.

¹² See the documentation of meetings and workshops with stakeholders at the national and provincial government level as well as the LGCCSP, as well as the monthly reports throughout the project

¹³ See the project archive subfolder *Feedback on EbA Strategy Implementation* for these comments.

¹⁴These observations are captured in the meeting and workshop documentation of the climate change task teams, LGCCSP, and other engagements with national and provincial bodies on climate change



5.3.2.1 Persistent lack of institutional and legislative clarity on climate change within local government

The persistent lack of institutional and legislative clarity on climate change within local government results in no clear mandates for officials to plan and implement climate change actions. The mandate of local government with regards to CCA has largely been inferred from the strategy objectives of the NCCRP, and the Durban Adaptation Charter for Local Governments and the Constitution. Among the NCCRP strategic objectives, there is prioritisation of mainstreaming climate change considerations and adaptation into all relevant sectors and planning regimes including IDPs. As a signatory of the Durban Adaptation Charter for Local Governments, South Africa has pledged commitments to undertake climate change vulnerability assessments, adaptation for the vulnerable communities and sustainable economic development in local government. Furthermore, under the Constitution, local government has key mandates - including water, energy and waste demand management, planning and urban development and local disaster response - that are critical in developing climate responses at local level.

This is despite provincial and national government recognising local governments to be at the forefront of implementation¹⁵. Some strategies and plans have been developed at the national and provincial level that can provide guidance. This includes the provincial climate change adaptation strategies for Limpopo and Mpumalanga (Kong et al. 2016). However, at the local government level, officials are still unaware of these documents.

With this lack of clarity, any mandates, roles and responsibilities regarding climate change planning and implementation cannot be officially assigned, and officials remain confused on who should be doing what. This can be seen in our reported experiences of struggling to contact the allegedly designated "climate change champions", the position being assigned to individuals more as a token than with any meaningful authority or responsibility, and the poor attendance and awareness of LGCCSP workshops. In addition, incentives for action and accountability are undermined by the lack of monitoring and evaluation processes for the development of CCA plans and implementation of projects, as well as an overall lack of consequences for inaction on climate change. This makes it difficult for the public and government itself to hold local officials accountable for not including adaptation in, for example, projects in IDPs.

This all results in an absence of institutional, political and public pressure to address climate change. Without this pressure, clear obligation, or at least an official institutional home for climate change, local government officials find it difficult to justify allocating energy and resources to it when there are so many other competing "pressing" priorities and demands of them. Along with the persistent perception that climate change is an "add on" to their existing workload, government officials are simply not encouraged nor supported to address it.

Within the context of LGCCSP, DEFF tried to overcome the challenge of a lack of institutional home for climate change at local government level by nominating a climate change champion for each municipality. They extended invitations for the LGCCSP workshops to these nominees, who are typically IDP Managers, Town Planners, Waste Managers, Disaster Managers and Environmental Health Officers. Despite DEFF's strategy, we noticed that many of the LGCCSP workshops were poorly attended. For examples, some municipalities such as Ba-Phalaborwa LM and Maruleng LM did not send any representative to attend at least one of the workshops. In addition, the representatives sent by municipalities were not always the same individuals at each workshop. In the vulnerability assessment and response planning workshops held by Urban Earth, some stakeholders expressed their concern that not all the relevant staff were present to provide a meaningful and comprehensive assessment and planning.

¹⁵ This was expressed at the LGCCSP related workshops, and can also be observed in the draft Climate Change Bill.



These were signs that DEFF did not take into consideration the local government buy-in for their nominated climate change champions and the LGCCSP. It is imperative for DEFF to obtain proper buy-in from local government and political processes because the role of climate change champions is not formalised due to a lack of remit for CCA in local government. However, there was much ambiguity on who should assume the role of climate change champions and what such role entails.

Some DEFF representatives adapted their original recommendation by suggesting two climate change champions, namely, a "technical" champion to address the managerial and practical aspects of CCA within a municipality, and a "political" champion to lobby CCA at senior decision-making levels and the political system, per municipality. However, this suggestion seemed to have reinforced the existing ambiguity rather than dissipate it as attendees at even the advanced stages of the LGCCSP workshop series were still not sure if their municipality had a climate change champion or who it was.

It was against this backdrop that we struggled to identify climate change champions to work with in the pilot municipalities. For example, we failed to establish any engagements with potential climate change champions at the Mopani District Municipality, despite the expressed interest and support from technical staff. In addition, the described institutional and legislative context raises concerns regarding the sustainability of the institutional impact of the project (see section 5.2). See the quotes below from the project documentation to further support this reported challenge.

> "Overall, climate change is institutionally not well captured in the LMs according to the stakeholders. Stakeholders can access information on climate and climate change, but are concerned about the implementation of this information because of a lack of skills/experience for environmental management (e.g. the lack of an environmental unit in Maruleng LM), and legislation/policies to support this implementation. They can take the information, but there are no channels to apply it."

> > Observation by AWARD team, 31 August 2016, B2O, Maruleng and Ba-Phalaborwa climate change task team technical workshop

"Maruleng Local Municipality, senior town planner: Climate change is not captured well in the local municipality. There are no policies to address issues around climate change. It is all good and well to get information but again how do you then address the issues? How go to the ground where we need to have mitigation systems in place to deal with the effects."

> Notes captured by AWARD team, 31 August 2016, B2O, Maruleng and Ba-Phalaborwa climate change task team technical workshop



5.3.2.2 Limited climate literacy

Another revelation that came out of discussions with the climate change task teams was the impact of the generally low level of climate literacy among communities, including traditional authorities. There has been no political pressure from communities and traditional authorities on the local government to plan for CCA in their IDPs because climate literacy among these groups is extremely low and climate change is often seen as an environmental issue alone. Communities do not realise that climate change is a cross-cutting issue that has impacts on virtually all basic municipal services, local economic and developmental planning, livelihoods and human well-being.

Furthermore, our engagements with the task teams revealed that the level of climate literacy amongst municipal officials is also much lower than we had anticipated. It is not simply that municipal staff do not have access to localised climate change information or do not know how to make sense of localised climate change information, but several task team members struggled with basic concepts and technical skills related to climate change vulnerability and adaptation.

This limited climate literacy means that climate change is simply not part of the discourse within local government and in engagements with communities and undermines the agency to act on climate change.

5.3.2.3 Government's limited capacity to do capacity development

Initially, our intention was to align our activities with the greater capacity development programs from local government which were being implemented during the timeframe of the project. However, our engagement with these processes, and feedback which we received from our stakeholders, revealed several impairments in the capacity development process of the LGCCSP (this feedback was shared with the service provider who facilitated the LGCCSP workshops, see Appendix Section 8.4).

We noticed that these training workshops were designed to focus on generating outputs such as vulnerability assessments and climate change response plans, instead of building participants' capacity to think critically about vulnerability and CCA. For example, participants were given a value for sensitivity and adaptive capacity based on their answers to two questions without understanding the conceptualisation of vulnerability and examining whether the questions could appropriately assess sensitivity and adaptive capacity. During the training, participants were not provided with information on localised climate projections or given opportunity to discuss what these projections may mean for vulnerability in their context. On the adaptation planning, participants were given a list of generic options for each vulnerable sector without discussion on key concepts underpinning adaptation and transformation, as well as steps to customize the generic options into actionable projects.

Furthermore, it was apparent that the attending stakeholders did not have all the knowledge and experience required to meaningfully answer the questions for all the sectors for the vulnerability assessment. This is related to the poor representation of district and local municipalities at these events, as well as all the relevant sectors and departments that should have been there. This is again linked to the lack of clarity of roles and responsibilities regarding climate change.

Finally, these workshops did not address participants' capacity needs for consensus building and securing political buy-in from decision-makers in local government to support CCA.

These observed weaknesses may have stemmed from limited capacity within DEFF, SALGA, and their service providers to do capacity development. This limited capacity may explain the need for DEFF to commission a service provider to run the training workshops for LGCCSP and DEFF's limited ability to critically examine the effectiveness of the workshops. These entities may also be unfamiliar with or too removed from the realities municipal officials face on the ground, i.e. their actual capacity needs.



Furthermore, we also experienced a limited ability in some of the provincial bodies involved in capacity development for CCA to establish and maintain a community of practice to support and coordinate CCA capacity development and interventions across sectors. We encountered very little knowledge about approaches and frameworks that are commonly used in building a multi-stakeholder platform and developing climate change adaptation within some of the provincial entities involved.

As a result, we think that some of the aspects of these initiatives have been ineffective in developing CCA capacity, which limited the emergence of an enabling environment for our activities and a lost opportunity for synergy between our project and the LGCCSP.

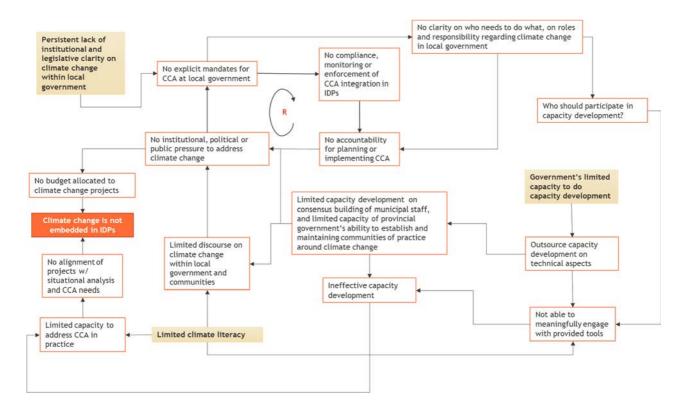


Figure 13: Concept map of vexing problem, as based on our revised understanding.

Sustainability and impact

There are three main factors that may promote or impair the sustainability of the project's impacts.

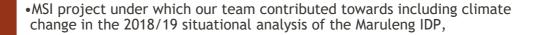
Firstly, changes in the overall institutional and legislative context of climate change within government will significantly determine the viability and growth of the impacts (see section 5.4.2.1 for more details on this). The current context impairs meaningful capacity development and action within local government as it does not provide clear mandates, roles, or responsibility to justify the use of resources for climate change action. This legislative context limits the required institutional, political and public pressure to implement and account for climate change actions within local government (see section 5.3.2.1 for accounts of how we struggled to secure buy-in for the climate change champions). As an immediate consequence of this, the formation of the climate change task teams in Maruleng and Ba-Phalaborwa LMs was not formalised at the end of the project, and they continue to exist only informally.

However, recently, climate change is receiving more political attention which may open opportunities in the future for securing more buy-in within local government, as well as provide the necessary legislative clarity on climate change.



There is some evidence that support for climate change is gaining more gravitas in national government (e.g. the gazetted draft Climate Change Bill in 2018), and in our social-political context (e.g. climate change being explicitly mentioned in the 2019 election manifestos of several political parties, including the three dominant ones)¹⁶. In this changing context, the climate change task teams (or at least a similar institutional entity) may be resurrected and officially formalised.

Secondly, the effectiveness of capacity development initiatives that follow this project will also determine if the progress made under the current project will be sustained or undermined. It is not clear at this time if there will be any follow-up or further capacity development initiatives to follow the LGCCP, nor if the capacity of DEFF, SALGA, LEDET or DARDLEA has increased to oversee or implement such initiatives. However, the current project was designed to be interlinked and aligned with several other initiatives under RESILIM-O which address capacity development on CCA from different angles within the context of local government. These projects will continue to work with the climate change task team members, continuing AWARD's role as an "information hub" and further developing their capacity and growing the relationships that have been built. For more information on this, see the final project reports of the following projects:



•MSI-LUP project under which our team contributed towards including climate change in the revised Mopani Spatial Development Framework

•Integrating Climate Change into Disaster Risk Reduction project under which our team worked with several of the climate change task team members in Maruleng on CCA specifically within the context of disaster risk reduction and re-establishing the LM's Disaster Management Advisory Forum

Thirdly, whether the previously mentioned points will sustain or reduce the impact of the project will also be determined by the extent to which the broad scale lack of climate literacy will be addressed (see section 5.4.2.2). This includes the limited level of climate literacy within government institutions and communities, which contributes to the lack of political pressure to address climate change.

¹⁶See https://www.dailymaverick.co.za/article/2019-04-23-no-tomorrow-part-one-gwede-mantashe-climate-suicide-the-ancs-2019-election-manifesto/



5.5 Key learnings

5.5.1 More engagement with the political nature of the IDP process

It was through our engagement with the climate change task teams that we gained a greater appreciation for the political nature of the IDP process. Until then, we were under the impression that the strategic focus areas (SFAs) and projects in IDPs are informed by the situational analysis in an IDP. However, further discussions with the technical staff revealed that the formulation of SFAs and projects in their IDPs, as well as the budgeting process are often dominated by the political interests and dynamics of the Executive Committee (Exco) and Councillors. In other words, even if there is a climate change vulnerability assessment and adaptation priorities in a situational analysis, CCA does not necessarily get embedded in SFAs or projects if CCA is not a priority for the Exco and Councillors. This means that there is a disjuncture between the situational analysis - largely driven by technical staff - and projects, which are largely shaped by political figures and higher-level decision-makers. We have had limited engagement with the latter group, who were not included in our original concept map of the problem and Theory of Change.

In our original understanding, we overestimated the institutional power and authority of the technical staff and underestimated the influence of political power even in the very technical aspects of local government.

A key lesson here is therefore also to build the consensus-building skills of stakeholders and the project team within the context of local government. It is not effective for capacity development initiatives to only focus on technical staff and their technical skills on climate change. This is indeed the aspect which the MSI project team tried to address in alignment with the current project's activities. However, within the context of a lack of clear mandates for climate change and a local government facing deep institutional challenges, it was difficult to make progress.

5.5.2 Climate literacy of all stakeholders should be a starting point

Building the cumulative general level of climate literacy amongst all stakeholders (including municipal technical staff, key decision-makers, community members, traditional authorities, councillors and political leaders) should be addressed as a first step, or at least in alignment with other capacity development activities such as addressing access to localised climate change information, vulnerability assessments, and the development of strategies or plans for interventions.

Within the current context of local government, initiatives for capacity development on climate change are impaired amongst other things by the following.

- The lack of discourse around climate change and CCA at the ground-level and within local government because of a lack of awareness, ecological and climate literacy, as well as difficulties of translating climate change and related concepts into local languages.
- A lack of agency to take action and adapt to climate change, because the challenge of climate change impacts seems so immense and removed from one's immediate sphere of influence that there is a sense of inability to change the future, which is further enforced by technical capacity limitations and lack of buy-in from political figures who control many critical decisions¹⁷.

¹⁷ As we implemented a sister project, *Updating and collating climate information for the Olifants River Catchment*, we gained insights and learnings on the psychological complexities and obstacles for humans to address climate change.



In our original Theory of Change, we underestimated the scale and impact of the generally low level of climate literacy amongst stakeholders, which limits the level of priority and institutional, social and political support for climate change.

5.5.3 Using existing channels for planning within local government

Using existing channels was strongly recommended by task team members, and in our experience would also counter the restraining perception of climate change being an "add on" responsibility on top of an already overwhelming workload. Officials attending provincial and district workshops as part of the LGCCSP also expressed that there are already many existing structures and policies to take advantage of, without having to burden officials with requirements to develop additional plans and strategies.

As a first step, climate change can be integrated into the development of an established document (e.g. Disaster Management Plans and Spatial Development Frameworks) and the situation analysis on which the IDP content is based. This would introduce climate change as a risk to be managed as the municipality addresses its mandate for service delivery. This would be easier to manage and implement for stakeholders and would introduce new ideas and perspectives in a familiar structure, rather than embarking on the development of a whole new process and line of documentation for climate change.

5.6 Communication materials

The main communication materials that were produced under this project are captured in Table 6.

TABLE 6: LIST OF THE COMMUNICATION MATERIALS PRODUCED UNDER THE PROJECT.

ТҮРЕ	MEDIA AND COMMUNICATIONS MATERIAL	FILE LOCATION IN KRA4 ARCHIVE	
WORKSHOP MATERIALS Workshop presentations for the climate change task teams, and handouts during workshops: i) a handout to support the technical training on accessing localised climate information and resources; and ii) a step-by-step guide to the Climate Information Portal, as a resource for localised climate information		KRA4_Files_Embedding CC in LM → Meetings_ClimateChangeChampionsLMs	
PRESENTATION	A presentation on local climate change projections, some content on the core concepts of climate change, and overview of climate change impacts relevant for municipalities	KRA4_Files_Embedding CC in LM → Presentations	
FLYER	A 2-page flyer on the Let's Respond Toolkit, to create more awareness of the LGCCSP and to assist efforts to engage with municipal managers on identifying climate change champions and support the climate change task teams	KRA4_Reports&Communi → Flyer_Lets Respond Toolkit	



5.7 Other outputs

Activities and results of this project contributed towards outputs in connected projects under the RESILIM-O program. This included the following.

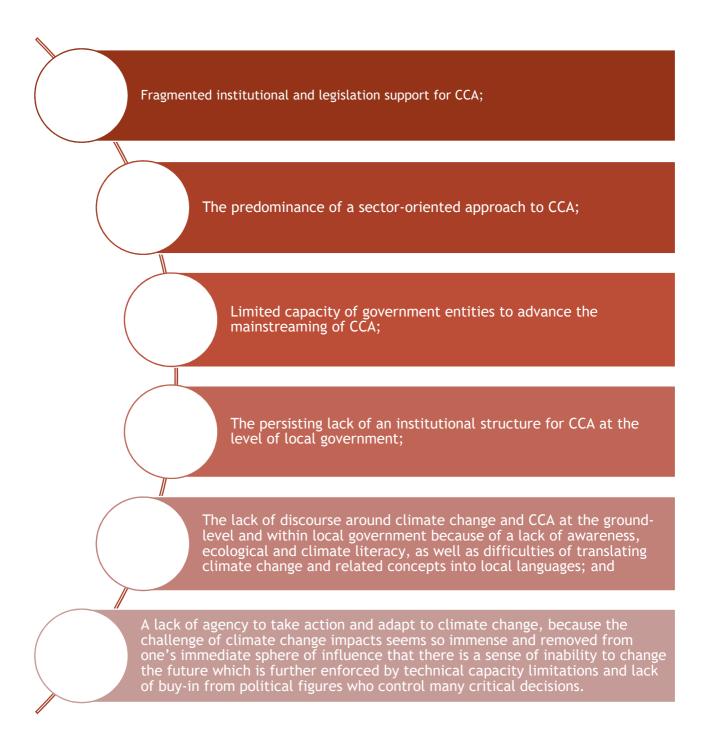
- Climate change information which was included in the 2017/2018 IDP situation analysis of Maruleng LM, and the review of the Mopani SDF in 2018 (see the final project report of the MSI project).
- Experiences under this project were used to inform a letter of comment submitted to DEFF on the draft Climate Change Bill in 2018. See the final project report on *DICLAD* for more information regarding this.



Conclusions & Recommendations 6

The project aim for Embedding climate change in municipal planning and actions was to support municipalities' efforts towards transformation through skilling, training, sharing climate information for collaborative sense-making about climate change adaptation and embedding climate change adaptation into municipal planning and actions.

Reflecting on our experiences and that of our stakeholders, we concluded that initiatives to integrate CCA into the planning processes of municipalities are profoundly impaired by the following challenges:





These challenges would need to be addressed first to create a more enabling environment if CCA is to be integrated into planning at the local government level in any meaningful and effective way.

As an example of how to address this recommendation in practice, we implemented follow-up and linked activities under the RESILIM-O program. We reconceptualised the current project to a project that aims to promote an emergence of agency for integrative CCA planning and actions through training key AWARD staff to facilitate climate change dialogues, and engaging stakeholders across sectors in collaborative meaningmaking and integration of CCA actions horizontally and vertically. This project, Dialogues for Climate Literacy and Adapatation (DICLAD), took off in 2017 where this project ended in 2016 (see the DICLAD final project report for more details). Furthermore, we captured some of these insights and observations (particularly the challenges listed in section 5.4.2), in a letter of comment submitted to the DEFF (including the Directorates of Climate Change Mitigation, and Climate Change Adaptation) on 8 August 2018 regarding the draft Climate Change Bill (DEA 2018). We also continued to voice these concerns as based on our experiences at the national and provincial platforms we attended beyond the lifespan of this project.

The insights gained and relationships built under this project also supported further activities with these stakeholders under the RESILIM-O program.



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8 Appendices

8.1 Baseline Questionnaire

This questionnaire was used informally, mostly to capture responses at the start of the project engagements.



RESILIM-O questionnaire

Purpose: We need your help to complete this questionnaire to help us evaluate the impact of our project. Your participation is completely voluntary and your response will be completely confidential. We will ask you to complete the same questionnaire at the end of our project.

Instructions: Please check the appropriate box below each question and provide additional explanation wherever possible.

Full name:	Date:	
Email:	Mobile:	
1. Have you heard of climate change?		
Yes. No. Partly.		
2. Is climate change happening? If yes, what do y	ou see as an indication that climate change is happening?	
No.		
Yes		
3. Do you have access to information on climate of you go to get this information?	change as related to your work? If yes, who or where do	
None.		
Yes, my information source is:		



4.	Doe	es climate change impact your work? If yes, how?
		No.
		Partly
		Yes
5.		your sector, are there adaptation options for climate change? If yes, what do you think these aptations should be?
		No, there is none for my sector.
		Yes
_		
6.		ase provide examples of work that you have done, are planning to do, or would like to do with ards to climate change adaptation.
		None.
		Partly
		Yes
7.		at collective actions or initiatives are on-going or have been implemented with other institutions or partments on climate change?
		None
		Yes
8.		at tools, plans, guidelines, standards and strategies are there to help you address climate change in ur work?
		None.
		Yes



8.2 Letters submitted to MMs

Below is an example of one of the letters that were send to Municipal Managers to formally request their staff members to attend the LGCCSP workshops as well as to participate in AWARD's capacity development process.



10 MAY 2016

Dear Sir/Madam,

As part of the Municipal Support Initiative, we have offered to provide capacity development to your municipalities on climate change integration. We want to align our capacity development with a programme that is currently being implemented by SALGA, DEA and LEDET to help municipalities to integrate climate change into their IDPs using the Let's Respond Toolkit. This Toolkit provides a step by step guide on how to integrate climate change into an IDP, as well as some useful tools for each step.

Per the Toolkit, the first is to identify a Climate Change Champion. This Champion will interface with SALGA to help coordinate the efforts within a municipality to implement the steps outlined in the Toolkit. We also understood that SALGA will give training to the Champion on the Toolkit in a series of workshops by Urban Earth. SALGA usually suggest that the Champion could be an IDP manager, disaster manager, town planner, or environmental officer.

On the 17th of May (Tuesday), SALGA, DEA and LEDET have organized a District Level workshop to assist officials in the Mopani District Municipality and its associated local municipalities to conduct vulnerability assessments and develop climate change response plans. This workshop is part of the Local Government Climate Change Support Programme (LGCCP) and will be held at Ba-Phalaborwa Local Municipality.

SALGA and DEA has motivated for IDP managers, town planners, disaster managers and environmental officers to take part in the LGCCSP workshop as well as the related climate change champion teams. At present, LEDET has identified Marothi Mokogomola as the Champion for Ba-Phalaborwa Local Municipality.

Your confirmation of who should attend the LGCCSP workshop and who should be part of the climate change champion team for Ba-Phalaborwa Local Municipality will enable us to identify whom we need to work with in the climate change component of the Municipal Support Initiative.

Your feedback on this matter will be greatly appreciated.

Warmest Regards,

On behalf of Taryn Kong

Systems and Climate Change Researcher

Tebogo Mathebula

Local Government Facilitator



Record of attempts to meet with Ba-Phalaborwa MM 8.3

Here follows a brief recollection of our attempts to meet with Ba-Phalaborwa's Municipal Manager (MM), as documented on 31 May 2016. We arranged three meetings which were all cancelled because the MM was reportedly not available although all these meetings were confirmed beforehand. This summary is presented as an example of the difficulties in engaging with the key decision-makers at the LMs on climate change initiatives. We wanted to discuss the following with the MM:

- The Local Government Climate Change Support Program (LGCCSP), particularly it's aims, how it is engaging with local government (in reference to workshop for Mopani District's local municipalities to be held on 17 May 2016 at Phalaborwa) and how AWARD's projects will link with it;
- A general introduction to AWARD's climate change and disaster risk reduction projects and engagements;
- The importance of key staff members (e.g. LED, IDP, disaster management, and town planners) participating in these initiatives, particularly to get confirmation and support from the MM for who the climate change champions for Ba-Phalaborwa should be; and
- Any questions that the MM may have regarding these initiatives.

TABLE 7: SUMMARY OF ATTEMPTS MADE TO MEET WITH THE BA-PHALABORWA MM IN 2016.

TABLE 7. SOMMANT OF ATTEMPTS MADE TO MEET WITH THE BATTHALADON MAIN 10 2010.		
DATE	ACTION	
5 MAY	 Tebogo had previously arranged a meeting with the MM at 2pm. However, when we arrived, Jacqueline (PA for MM) informed us that the MM had just rushed out to drive to a different meeting. It was not clear if he would be available at any other time for that day or the rest of the week. 	
5 MAY	- [Meeting Cancelled]	
9-11 MAY	 I contacted Jacqueline who gave me a preliminary meeting date for 24 May 2016 at 9am. However, to confirm the meeting, she requested some formal documentation. I contacted Phumudzo (LEDET) to acquire a copy of the invitation letter to Mopani District's workshop. It took me a day and a half to get the signed letter from LEDET because there was something wrong with their email network. This involved several phone calls. Sophy, Phumudzo's colleague, finally faxed the letter to me. 	
11 MAY	 I emailed the following to Jacqueline: i) a letter compiled by Tebogo, Taryn and myself that briefly describes the context of the climate change project, how it links with the LGCCSP and why it is important for us to discuss these matters with the MM (e.g. confirming the climate change champions); and ii) a signed copy of LEDET's invitation letter for Mopani District's workshop. Jacqueline stated that this documentation is in order. The meeting with the MM on 24 May 2016 at 9pm was confirmed in this email exchange. 	
23 MAY	 I called the MM's office to check if the meeting with MM on 24 May 2016 is still confirmed. A stand-in PA answered who told me that Jacqueline was away on "training" for the next week or so. She had no record of the agreed meeting. She also confirmed that the MM was fully booked for the week. After several phone calls, we re-scheduled for 31 May 2016 	
24 MAY	- [Meeting Cancelled]	
27 MAY	- I called the MM's office. The stand-in PA confirmed my meeting for Tuesday (31 May 2016) at 9am.	
31 MAY	 Stand-in PA called the office to inform me that the MM will be out for the whole day. I tried to reschedule for tomorrow (1 June 2016) when Taryn and I will be in Phalaborwa for a different meeting, but was told that the MM will not be in office either. Stand-in PA gave me the MM's email and the office's email so that I can send a letter to him directly. She said she will get back to me later if she can find alternative dates and times. 	
31 MAY	- [Meeting Cancelled]	



8.4 Feedback to LGCCSP facilitators

Below is an excerpt of feedback we emailed to the service provider who facilitated the LGCCSP workshops. Here follows some of the observation made by the stakeholders.

- Stakeholders felt that they have gained a better understanding of the impacts of climate change (CC) at the local level from the Urban Earth workshop series. For example, one stakeholder said that she had "never before thought to put CC in the IDP" while others have called it an "eye opener" to get them thinking about CC. They felt that they have the knowledge to start addressing CC adaptation (CCA) but need support for implementation, mentioning challenges related to funding and information sharing.
- Stakeholders felt that some of the presentations were too technical and that it would have been better to present scenarios of CC impacts or to use visual representations of vulnerability like maps.
- Stakeholders reflected on and discussed how the vulnerability assessment could be adjusted to more directly address the adaptation needs and context of the individual LMs. They particularly wanted to add depth and complexity to the questions regarding adaptive capacity.
- On budgets and resources, stakeholders expressed a lack of clear coordination between national, provincial and municipal departments on who can provide what and who is doing what. There is a level of disconnect, of different stakeholders not knowing what the other is planning.
- Stakeholders suggested creative entry points to embed CC in existing planning processes. This included developing questions related to CC vulnerability as part of the community surveys during the analysis phase of the IDP.
- Stakeholders emphasised a top-down approach regarding engaging on CCA. All decision-making positions appear to have strong political persuasions which stakeholders did not feel that they could influence. Furthermore, they remarked that there appear to be notable gaps between the results of the needs assessment and review of the IDP, and the strategies/projects finally included in the IDP. Therefore, stakeholders stated that there should be some legislative mandate that obligates municipalities to address CCA in their plans including penalties if they do not. In addition to secure buy-in, they expressed that if other stakeholders (e.g. community members, traditional authorities, politicians, municipal managers, directors) are not "educated" about CC — if they do not understand CC — it will be an impossible task to achieve.



8.5 Folder layout of project archive

Table 8 and Table 9 provides an overview of the subfolders and their contents within the KRA4 archive, and the project's folder. This archive captures all the relevant documents for the project.

> TABLE 8: A SUMMARY OF THE SUBFOLDER LAYOUT OF THE PROJECT'S FOLDER: KRA4_FILES_EMBEDDING CC IN LM.

FOLDER CONTENT

FINAL PROJECT REPORT	This subfolder contains the final draft of the final project report, as well as the images used in this report
MEETINGS_LGCCSP	Chronologically listed subfolders of all the workshops and meetings attended related to the LGCCSP, including notes, attendance registers, presentations and handouts, B2O reports, photographs, reflection notes, invitations and agendas.
MEETINGS_CLIMATECHANGECHAMPIONSLMS	Chronologically listed subfolders of all the workshops and meetings attended related to engagemetrs with the climate change champions in the pilot LMs, including notes, attendance registers, presentations and handouts, B2O reports, photographs, reflection notes, invitations, agendas and facilitator agendas.
MEETINGS_PROVINCIAL&NATIONAL	Chronologically listed subfolders of all the workshops and meetings attended by AWARD attended to maintain a close communicative relationship with stakeholders at the national and provincial government level who are involved in CCA capacity building for local government related to the LGCCSP, including notes, attendance registers, presentations and handouts, B2O reports, photographs, reflection notes, invitations and agendas.
MEETINGS_OTHER	Chronologically listed subfolders of additional workshops and meetings attended by AWARD in regards to other climate change related projects as well as the climate change working group at the RESILIM-O steering committee meeting on 13 September 2016. This includes notes, attendance registers, presentations and handouts, B2O reports, photographs, reflection notes, invitations and agendas.
BASELINE QUESTIONNAIRES	The blank baseline questionnaire, as well as copies of questionnaires completed by stakeholders
MONTHLY REPORTS	All the monthly reports of the project, capturing the progress on activities and reflections on emerging challenges and opportunities.
DOCUMENTATION CLIMATE CHANGE CHAMPIONS	Documentation including formal letters, and copies of emails regarding the identification and engagement with climate change champions at the local municipalities.
MUNICIPAL DOCUMENTS	Documentation relevant to the local municipalities engaged, including contingency plans and IDPs.
SUPPORTIVE DOCUMENTS (LGCCSP)	Documentation related to the LGCCSP for context, including the draft climate change response plans for local municipalities developed by the service providers.
FEEDBACK ON EBA STRATEGY IMPLEMENTATION	Copy of the email capturing feedback which we submitted to SANBI on the draft National Strategy Framework and Implementation Plan for EbA



TABLE 9: A SUMMARY OF OTHER RELEVANT SUBFOLDERS WITHIN THE KRA4 ARCHIVE.

SUBFOLDER CONTENT KRA4_RESOURCES Contains resources used for the project and KRA4's climate change work as a whole. This includes: toolkits and technical reports, published literature, websites, and legislation. KRA4_REPORTS&COMMUNI Contains all the reports and communication materials developed under KRA4's climate change adaption aspects, including the media and communications materials listed in this final project report.



AWARD is a non-profit organisation specialising in participatory, research-based project implementation. Their work addresses issues of sustainability, inequity and poverty by building natural-resource management competence and supporting sustainable livelihoods. One of their current projects, supported by USAID, focuses on the Olifants River and the way in which people living in South Africa and Mozambique depend on the Olifants and its contributing waterways. It aims to improve water security and resource management in support of the healthy ecosystems to sustain livelihoods and resilient economic development in the catchment.

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About USAID: RESILIM-O

USAID: RESILIM-O focuses on the Olifants River Basin and the way in which people living in South Africa and Mozambique depend on the Olifants and its contributing waterways. It aims to improve water security and resource management in support of the healthy ecosystems that support livelihoods and resilient economic development in the catchment. The 5-year programme, involving the South African and Mozambican portions of the Olifants catchment, is being implemented by the Association for Water and Rural Development (AWARD) and is funded by USAID Southern Africa.

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