



Annual Report

2016/2017 Financial Year

RESILIENCE IN THE LIMPOPO - OLIFANTS

10/31/2017





Acknowledgements

The USAID: RESILIM-O project is funded by the U.S. Agency for International Development under USAID/Southern Africa RESILIENCE IN THE LIMPOPO BASIN PROGRAM (RESILIM). The project is implemented by the Association for Water and Rural Development (AWARD), in collaboration with partners. Cooperative Agreement nr AID-674-A-13-00008.

All photographs used in this report have been taken by AWARD project participants unless otherwise specified.

Cover photo: Blyde Dam (photo credit: Sharon Pollard)

Association for Water and Rural Development (AWARD)

P O Box 1919
Hoedspruit 1380
Limpopo, South Africa
T 015-793 0503
W award.org.za

Company Reg. No. 98/03011/08
Non-profit org. Reg. No. 006 - 821



Contents

Director’s Note/Executive Summary	7
1 Overview	10
1.1 Introduction	10
1.2 The RESILIM-O Program.....	13
1.3 Results in numbers	16
2 Results per Key Result Area	20
2.1 KRA 1: Enhancing resilience through systems approaches and capacity development	20
2.2 KRA 2: Water Security and Water Resources Protection for Improved IWRM	24
2.3 KRA 3: Natural resources management of high-priority areas.....	31
2.4 KRA 4: Support for climate change adaptation strategies and practices.....	36
2.5 KRA 5: Sharing of experiences and lessons within the ORB and other basins.....	41
2.6 KRA 6: Monitoring, Evaluation, Reporting & Learning and Media and Communications	41
2.7 KRA 7: Internal governance.....	43



List of Figures

Figure 1: Map of the South African portion of the Olifants River Catchment indicating land transformation and areas with little to no natural cover remaining	10
Figure 2: Map of the threat level to rivers of the Olifants River Catchment within South Africa	11
Figure 3: Map of the Integrated Biodiversity Priorities	12
Figure 4: Map illustrating areas with the highest social vulnerability to reductions in flow in the lower reaches of the Limpopo Basin (source: Verde-Azul)	12
Figure 5: Schematic of RESILIM-O framework guiding activities in Phase 2	13
Figure 6: Schematic of RESILIM-O Phase 2 objectives, higher order activities and related outcomes. ORC = Olifants River Catchment, IWRM = Integrated Water Resources Management, BD = biodiversity, MERL = Monitoring, Evaluation, Reporting and Learning	15
Figure 7: CSO Indaba for the Middle Olifants held at Burgersfort in July	20
Figure 8: Changing Practice course mentorship session at Emalahleni in the upper catchment - learning to read critically	21
Figure 9: Spatial planning and economic development practitioners from Maruleng Local Municipality at the Critical Biodiversity Areas workshop in August	22
Figure 10: Water demand management and water conservation training with technical staff from the Ba-Phalaborwa Local Municipality	22
Figure 11: Process audit at one of the wastewater treatment plants.....	23
Figure 12: Dr Sharon Pollard and Hugo Retief at Skukuza on 26 May 2017 receiving an Appreciation Award for keeping the Olifants flowing during the drought	25
Figure 13: Training of OCMA staff in the social and environmental attributes of the Olifants catchment during the IWRM-DSS course	26
Figure 14: The FlowTracker mobile app which tracks river flow and dam levels in real time and gives rainfall forecasts. This allows the user to track flows against the Reserve (Environmental Water Requirements).....	27
Figure 15: Location of RESILIM-O gauges	28
Figure 16: Training technicians from SANParks on SASS5 and various indices on the Sabie River in KNP....	29
Figure 17: Thabo Mohlala with children from the Southern Cross School sampling invertebrates at a dam at Unifrutti, where the water is pumped from the Olifants River	29
Figure 18: An example of an simulation output from ResiMod - this shows the impacts on FRED (ecosystem health) over time when climate change impacts are taken into account	30
Figure 19: Blyde ecosystem restoration project area	31
Figure 20: Rosemary and Silindile using GIS to work on the invasive alien plant inventory map.....	33
Figure 21: Blyde Restoration Group partners presenting a model of the Blyde catchment they had created during the Mpumalanga and Limpopo MAREP workshop organized by DEA NRM.....	33
Figure 22: Legalameetse Nature Reserve showing focus of the work on co-management	34
Figure 23: Youth listening to one of the elders during the historicity and mapping session during the LNR Youth Engagement Workshop in September	35
Figure 24: Map showing the area covered by the Disaster Managers' Learning Network	37
Figure 25: A flood risk map drawn by the Gert Sibande group for one of the local municipalities in the district at the first Disaster Managers' network learning exchange (left); participants from Dithabaneng village reporting back on their group's temperature chart at a DICLAD workshop (right)	37
Figure 26: Map showing Agriculture Support Initiative project areas	38
Figure 27: Magdalena Malepe in Sedawa with her beautiful small garden showing trench beds, mixed cropping and mulching (left); digging erosion control / water diversion ditches (top right); construction of shadecloth tunnels (bottom right).....	39
Figure 28: Results of garden monitoring over the implementation period of the Ukuvuna sub-grant. The y-axis shows the number of gardens. "Green" gardens have 7 or more crop types, good soil and water conservation, soil cover, and evidence of enterprise, recycling	40
Figure 29: Farmers from the middle Olifants on a learning visit to the National Botanical Garden in Pretoria	40
Figure 30: Reference group meeting in April 2017	42
Figure 31: RESILIM-O brochures	43



List of Tables

Table 1: Progress against indicators for 2016/2017.	19
---	----



Acronyms and Abbreviations

Agri-SI	Agricultural Support Initiative
AWARD	Association for Water and Rural Development
CBA	Critical Biodiversity Areas
CbE	Conservation-based entrepreneurship
CMA	Catchment Management Agency
CMF	Catchment Management Forum
CoDyM	Collaborative Dynamic Modelling
CPA	Communal Property Association
CSO	Civil Society Organisation
CSO-SI	Civil Society Organisation-Support Initiative
DAFF	Department of Agriculture, Forestry and Fisheries
DEA	Department of Environmental Affairs
DICLAD	Dialogues for climate change literacy and adaptation
DRDLR	Department of Rural Development and Land Reform
DWS	Department of Water and Sanitation
GIS	Geographical Information Systems
IDP	Integrated Development Plan
INWaRDS	Integrated Water Resources Decision Support
IWQMP	Integrated Water Quality Management Plan
IWRM	Integrated Water Resources Management
KNP	Kruger National Park
KRA	Key Result Area
LEDET	Local Economic Development, Environment and Tourism (Limpopo Province)
LMC	Legalameetse Management Committee
MERL	Monitoring, Evaluation, Reporting and Learning
MSI	Municipal Support Initiative
MoU	Memorandum of Understanding
MTPA	Mpumalanga Tourism and Parks Authority
NGO	Non Governmental Organisation
NRM	Natural Resources Management
NRMPs	Natural Resource Management Programs
NWA	National Water Act
OCMA	Olifants Catchment Management Agency
PA	Protected Areas
RESILIM-O	Resiliency of the Limpopo River Basin
RSIs	Resilience Support Initiatives
SANParks	South African National Parks
USG	United States Government



Director's Note/Executive Summary

Welcome to all readers! This annual report, from October 2016 to September 2017, covers the fifth year of the RESILIM-O Programme. This marks a period of significant progress in the implementation of some twenty projects related to water and natural resources management and climate change adaptation in the Olifants River Basin. It embraces a period of deepening work with and institutionalisation of our systemic, social learning which are seen as important ways to build adaptive capacity and build resilience in the face of change and uncertainty. This approach is being supported through our Resilience Support Initiatives (RSIs) particularly to our sub-grants.

Our work in 2016/2017 has taken place during the worst drought on record (2015-2016) with many days exceeding 40°C. It is significant therefore that through our collaborative efforts with SANParks and the Department of Water and Sanitation (DWS), mediation with farmers and the use of our tools, flows in the Olifants River were maintained even though they declined to precariously low levels in September 2016 and again in August 2017. An exciting development is the completion of our FlowTracker app and associated tools which allow one to track flows and dam levels in the Olifants in real-time - to our knowledge a first for South Africa. This has provided much needed support as an early warning system of flow and water quality related problems during the drought. The system has been further enabled by USAID-funded independent flow and water quality loggers in the lower Olifants. The value of these loggers was illustrated this year when, for over three months they were the only loggers operational in the catchment and hence the only source of flow information.

Further support for planning and monitoring has been through the training for two local municipalities regarding Critical Biodiversity Areas (CBA) - accompanied by key maps - which they have resolved to use to guide land-use planning, bylaws and enforcement. Our work with these municipalities has extended to support for improved management of water demand and of waste-water discharge, and all municipalities in the catchment are involved in a learning network to plan for extreme events such as flooding and drought which are projected to increase in the coming decades. All this has been enabled through our relationship-building work of the Municipal Support Initiative.

Nonetheless, we recognise that tools are only as good as the governance system within which they are embedded. Thus AWARD dedicates great effort to enhancing and strengthening governance arrangements. However, this year's work has been characterized by a dynamic institutional context, particularly in South Africa which has faced a number of governance changes and challenges. New or emerging institutional arrangements for both land and water management have offered exciting opportunities on the one hand and challenges on the other. The emerging co-management of the Legalameetse Nature Reserve has offered an opportunity to build solid relationships between the claimant communities and government particularly in drafting of a tenable co-management agreement. This agreement has now been submitted to LEDET and the Legalameetse Management Committee (LMC) is awaiting feedback and signing. This process has been supported by capacity development of the LMC in preparation for their new role - a partnership strengthened by our relationship with the Legal Resources Centre. Following the troubling discovery that four of the CPAs still do not have finalized land claims - despite having submitted years ago - we have supported these communities over the past year in their efforts to resolve the matter. In August communities largely took charge of planning a delegation to visit the LEDET office, reflecting cohesion which was not present a year ago. Likewise the formation of the *Blyde Restoration Working Group* and the start of the *Integrated Ecosystem Restoration Strategy* to co-ordinate multiple efforts for the control of invasive alien plants in the high-biodiversity Blyde Catchment, signifies an important step towards collective action.

Our partnership with the proto- Olifants Catchment Management Agency (OCMA), firmed up this year with the endorsement and attendance at the first of our four-module training in integrated water resources



management. However and somewhat ironically, we received news about the disbanding of the CMAs during the training week in August. This is extremely disappointing given the effort invested in establishing a relationship and support, and will require careful consideration and innovation next year.

Other notable features of the year - and discussed in this report - have included the exciting *capacity development program for interns and mentors* who have greatly benefitted from their exposure to diverse situations at AWARD, and the growth and continued implementation of our innovative and robust Monitoring, Evaluation, Reporting and Learning (MERL) approach which balances qualitative and quantitative processes, and which has been adopted by projects outside of the catchment.

I would like to make mention of our work with civil society, especially the poor and vulnerable, who directly experience the effects of political uncertainty and turmoil, natural resource depletion and irregularities and of course the potential impacts of climate change. Our Civil Society Organisation (CSO) Support Initiative has worked hard to support the sector by mobilising civil society, and providing opportunities for exploring self-organisation and collective action. This year saw a deepening of our support to CSOs, with continuation of the CSO “indabas” as well as the introduction of the Changing Practice course, Water Clinics and climate change dialogues, all of which have been greatly appreciated.

An exciting innovation this year was the launch of a new approach to tackling increased capacity for climate change literacy and responsiveness through the *Dialogues for climate change literacy and adaptation* (DICLAD) project which aims to de-mystify climate change through adopting a conversational approach to making it “everyone’s business”. Staff have been trained in simple participatory and systemic approaches so as to embed climate change in all our RESILIM-O projects and early work with civil society and farmers has shown very positive results.

During this period we have started eight sub-grants with other NGOs and consultants which have involved a strong collaboration between us. In a two-way partnership, their skills and expertise have significantly added to our own, whilst our attention to systemic approaches and social learning design has, we hope, enhanced their skills at resilience-building. As always, our processes have also enabled strong co-learning with our diverse stakeholders including municipalities, communities, other NGOs as well as key government agencies (DWS, Department of Environmental Affairs [DEA], LEDET) and parastatals such as SANParks. Through these sub-grants we are supporting and strengthening our existing work in diverse ways such as:

- Support to about 270 small-scale farmers for climate-change adaptation in the middle and lower Olifants;
- Support to two municipalities for water conservation and demand management and the improvement of discharge effluent of waste-water treatment plants (which impacts on aquatic diversity into the Kruger National Park);
- Support for conservation-based entrepreneurship and beneficiation from natural resources;
- Improved management practices in the forestry sector;
- Curriculum development for resilience building in universities working in the ORC; and
- Support and mentorship for civil society through the Changing Practice course.

Last but not least, internal governance has proved both exciting and challenging, particularly in terms of staffing and staffing issues. Most notably this year was marred by the tragic loss of our dear friend and colleague Dineo Shubane who is deeply missed by all at AWARD. On a more positive note, we have seen promotions within AWARD and the reference group and our board has played a very supportive role.

We are happy to announce that we have received a no-cost extension to March 2020. Unfortunately the delays in approval and accompanying uncertainty negatively impacted AWARD in many ways including the renewal of contracts, delays in the start of a number of sub-grants, a complete halt to the sub-grant in Mozambique for the year and a reduced number of case studies for the MERL unit. Nonetheless, since



approval in August we have been able to plan with a longer-term horizon which is greatly welcomed not only by AWARD but also by stakeholders with whom we continue to engage in mediating and strengthening our fragile relationship with the catchment we live in.

I would like to take this opportunity to wish all a fruitful 2018.

Dr Sharon Pollard

Executive Director, AWARD



Dedication: Dineo Shubane tragically passed away in a car accident on the 10th of April 2017. All AWARD staff have felt her loss. In my personal capacity she was not just my Personal Assistant but also a friend to me and my family. Her efficiency was notable, but it is also her sparkly personality and reliability that will be so sorely missed. She joined us as a finance officer in 2014 and quickly became an integral member of the AWARD family. In 2015 we invited her to help Derick and myself as a Personal Assistant, which she did with her gracious commitment. It is hard to imagine being able to move forward without her. We send our deepest condolences to her family for a dear person who will never be forgotten.

1 Overview

This annual report covers the period October 2016 to September 2017¹ and is the fifth report submitted to USAID. This period is the second year of Phase 2, in which we continue to take the outputs of Phase 1 into action through testing, reflexive learning and institutionalisation.

The report starts with an overview of current conditions and threats in the Olifants River Catchment and an overview of the RESILIM-O program. It then reports progress for the year against indicators and then as a narrative against each Key Results Area (KRA). Section 3 provides a financial report whilst Section 4 concludes with a report on sub-grants.

1.1 Introduction

The RESILIM-Olifants program focuses specifically on the transboundary Olifants River Catchment which forms part of the even-wider Limpopo River Basin. The Olifants River Catchment, or ORC, is of particular concern because of the wide-scale threats to biodiversity and the ecosystem services that support peoples' livelihoods. Much of our work in Phase I focused on a basin-wide assessment which is summarised below as background to the project-specific work detailed in Section 2.

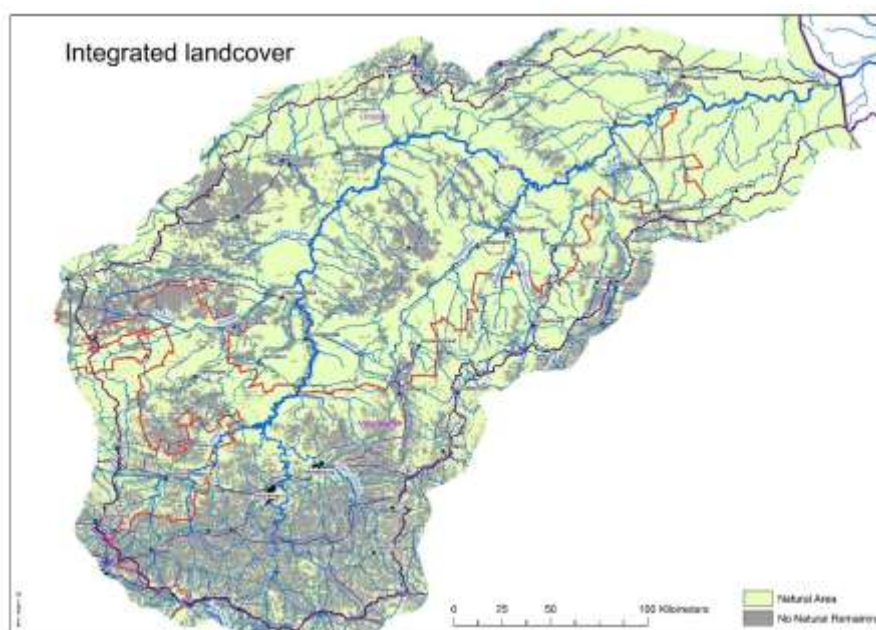


Figure 1: Map of the South African portion of the Olifants River Catchment indicating land transformation and areas with little to no natural cover remaining

From both an aquatic and terrestrial perspective, the Olifants River Catchment (ORC) 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. Through RESILIM-O, AWARD has identified a wide range of habitat types in the grassland and savanna biomes, although climate

¹ Please note that the AWARD work plan runs from January 2017 to December 2017 while the USAID period is from October 2016 to September 2017.



change is likely to see a major transformation of the already threatened grasslands to savannas. There are substantial areas of natural landcover especially in the Lowveld, along the escarpment and Blyde River Catchments. Nonetheless many of these are threatened by a range of drivers including mining, urbanization, afforestation and invasive alien plants. 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.

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 (Figure 1). A number of ecosystems are considered either critically endangered or endangered and many more are vulnerable. 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 (Figure 2). 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. 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 ORC.

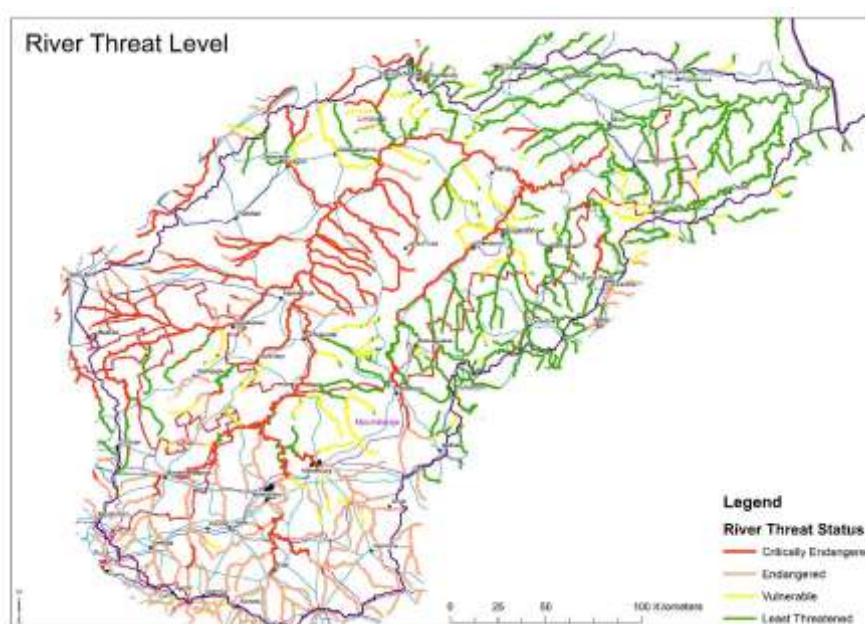


Figure 2: Map of the threat level to rivers of the Olifants River Catchment within South Africa

AWARD has identified a number of integrated biodiversity areas which track the mainstem Olifants River (after Loskop Dam) and include the Steelpoort and Blyde Catchment and the swathe of land across the escarpment into the Lowveld (Figure 3). Key elements contributing to the selection of these areas include exceptionally high values of diversity at multiple levels of biodiversity, high levels of endemism, the presence of threatened ecosystems, larger contiguous areas of intact habitats, and under-protected habitat types.

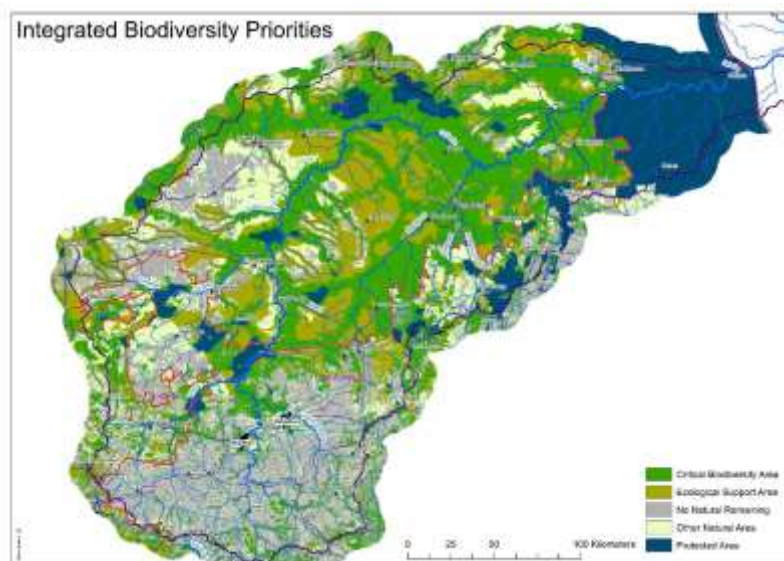


Figure 3: Map of the Integrated Biodiversity Priorities

Within the domain of water resources, the Olifants River ceased flowing for a number of days in 2005, prompting widespread concern and calls for an integrated focus on all the easterly-flowing rivers of the Lowveld of South Africa. As noted, the Olifants Catchment is a particular concern given that it is the largest contributor of flows to the transboundary Limpopo River. Despite the enabling legislative framework for water reform in South Africa introduced in 1998, most rivers in this catchment continue to degrade in both quality and quantity. Given that these rivers form part of international systems, the implications are of wider significance than for South Africa alone. Indeed flows into Mozambique support the livelihoods of between 6,000 and 10,000 small-scale farmers and the critical conservation priority mangroves (Figure 4). All these are vulnerable to changes in flow and water quality, highlighting the importance of the systemic approach adopted by AWARD.

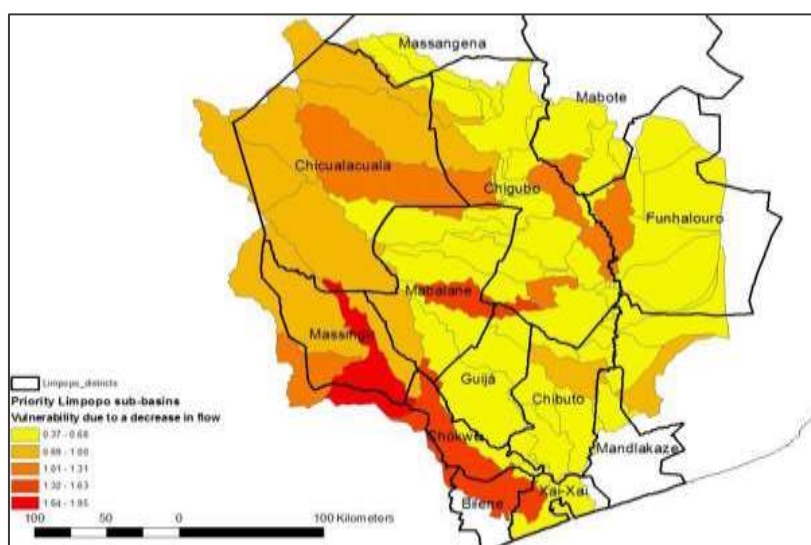


Figure 4: Map illustrating areas with the highest social vulnerability to reductions in flow in the lower reaches of the Limpopo Basin (source: Verde-Azul)



1.2 The RESILIM-O Program

The RESILIM-Olifants or RESILIM-O program, funded through USAID, focuses on the Olifants River Basin, the health of its ecosystems and the dependence of residents on these, and how people may adapt to climate change and other change factors through increased resilience.

Although RESILIM-O focuses on the Olifants Catchment, it is located within the broader context of the Limpopo Basin. Here another RESILIM program has addressed similar issues at the scale of the four SADC member states that share the Limpopo Basin (South Africa, Botswana, Zimbabwe and Mozambique). It is worth noting here that the Olifants River contributes nearly 40% of the water that flows in the Limpopo River making it an important catchment in the system as a whole.

The overarching goal of RESILIM-O remains as outlined in the original project documentation: “To reduce vulnerability to climate change through building improved transboundary water and biodiversity governance and management of the Olifants Basin through the adoption of science-based strategies that enhance the resilience of its people and ecosystems through systemic and social learning approaches”.

The program moved into Phase 2 at the beginning of the previous reporting period, which entails implementation of resilience-building endeavours in response to Phase 1. Seven Key Result Areas (KRAs) and their higher-order strategic objectives were adopted (see Figure 5 and Figure 6). These KRAs address the key strategic areas for action (KRA 1-5) as well as internal governance, monitoring, reporting and learning (KRA 6 and 7). While some of the activities have been clustered according to specific objectives, some are cross-cutting and co-dependent so that all contribute in varying degrees to the objectives and to the RESILIM-O goal.

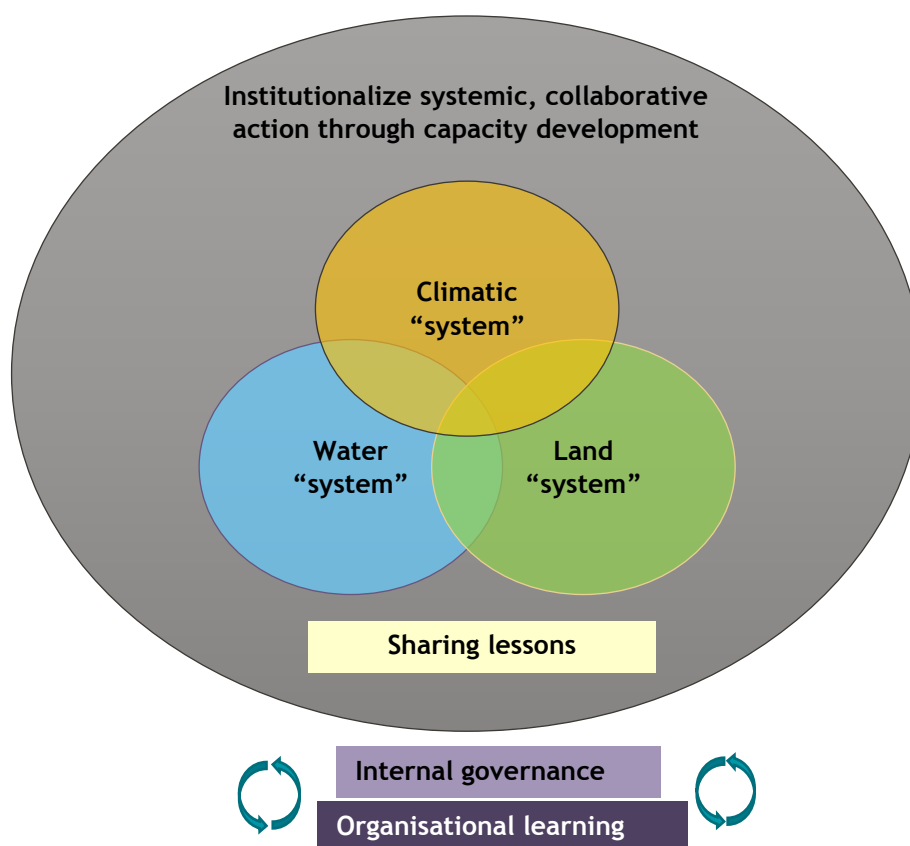


Figure 5: Schematic of RESILIM-O framework guiding activities in Phase 2



The catchment is viewed as a complex coupled social-ecological system. In such systems, social learning is not simply a pre-cursor to action; learning needs to be ongoing. Thus a re-formulation of issues and solutions can also take place to facilitate more strategic action. The relevant issues relate to climate change, biodiversity and water (natural resources), and relevant actions would be those that make the people of the catchment and the ecosystems more resilient to climate change. Systemic social learning enables stakeholders in government and civil society to plan collaboratively for action, to take action, and to learn from reflection on their actions (reflective learning and strategic adaptive management). RESILIM-O has continued to embrace the systemic, social learning approach into Phase 2. Based on Phase 1 experiences, we have developed an innovative and responsive approach to collaborative planning for action that effectively combines evidence-based information with issues identified by stakeholders.

Fundamental to building resilience is the development of capacity within the region and its institutions to carry the process of adaptive management and social learning forward. Phase 2 therefore focuses on capacity development, innovation, testing, embedding and institutionalizing resilience-based practices in various institutions. Although the project cannot hope to reverse all the processes that have been in place for a number of decades, it can make a considerable contribution by providing new ways of addressing management challenges, new strategic direction for responding to climate change, and by supporting development options that are built on sustainable resource management.

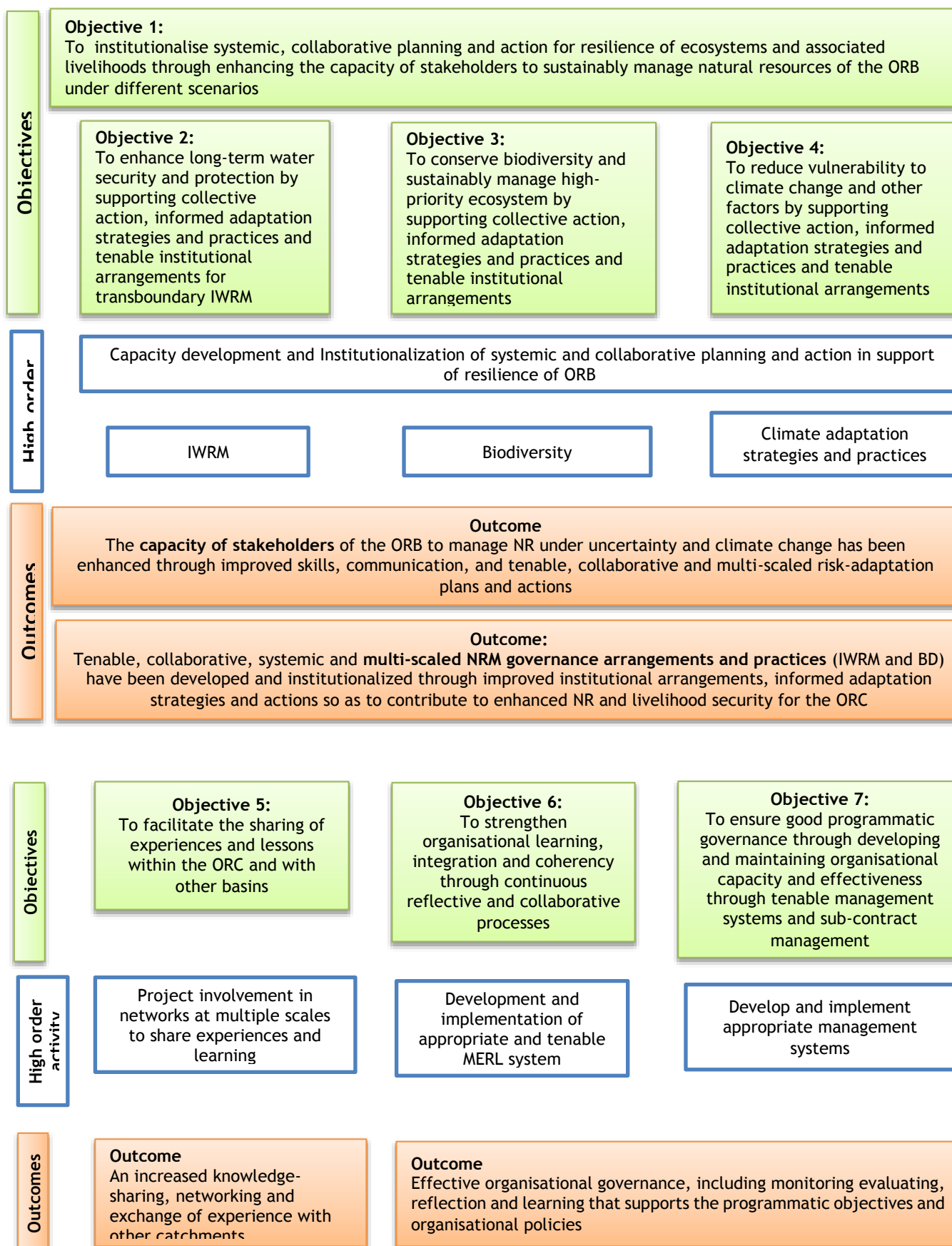


Figure 6: Schematic of RESILIM-O Phase 2 objectives, higher order activities and related outcomes. ORC = Olifants River Catchment, IWRM = Integrated Water Resources Management, BD = biodiversity, MERL = Monitoring, Evaluation, Reporting and Learning



1.3 Results in numbers

The Monitoring, Evaluation, Reporting and Learning (MERL) component of RESILIM-O aims to promote learning and accountability using a hybrid framework that includes monitoring and evaluation against intended outputs and outcomes (as quantitative indicators), but which also leaves space for more qualitative monitoring and evaluation through process documentation, case studies and qualitative indicators. This hybrid approach recognises that development work takes place in complex, open social-ecological systems, where inherent uncertainties make it difficult to track progress simply according to pre-determined targets. Progress in RESILIM-O is therefore assessed through both the quantitative data presented in this section and the narrative descriptions in Section 2.

Progress against high-level programmatic indicators is shown in Table 1 that follows. This shows progress for the year against the targets (set in January 2017 and revised in July 2017). Indicator definitions were updated by USAID in 2016 and the new definitions and indicator numbers were used for the current reporting period.

Large increases were recorded against all indicators compared to last year. Achievements include over 13,000 hectares of biologically significant land under improved biophysical condition and over a million hectares under improved management, close to 200 institutions with improved capacity and over 1,000 people trained in each of the two program areas of natural resource management and climate change. In addition, a large number of policies were developed or influenced through RESILIM-O (51 and 35 for NRM and CC respectively).

Program Area: NRM and Biodiversity

This year RESILIM-O activities contributed to improved biophysical conditions in 13,837 ha of biologically significant areas. This consisted of 2,494 ha of high-biodiversity land cleared of invasive alien vegetation in the Blyde sub-catchment (see Section 2.3) and 11,343 ha of river and riparian zone along the Blyde, Steelpoort and Olifants Rivers which benefitted from flow releases from the Blyde and De Hoop dams (see Section 2.2). Alien vegetation clearing was mainly in grassland areas and the main species cleared were pines, gums and wattles, which are all high-priority invasive species of grasslands in South Africa (CSIR national prioritisation, Le Maitre *et al.* 2012). Alien plant densities in cleared patches were reduced from 15-37% to around 0%. It is important to note that clearing is not a once-off exercise and follow-up maintenance of cleared patches is required (hence the need for long-term sustainability of clearing efforts).

We are pleased to report a large increase in the number of hectares under improved natural resource management. A total of 1,069,726 ha of biologically significant areas experienced improved management this year. The bulk of this was made up of 965,124 ha of biologically significant areas within Maruleng and Ba-Phalaborwa municipalities affected by protected area proclamations (with links to work during Phase I of RESILIM-O) and improved protection due to the Biodiversity Sector Plans and Critical Biodiversity Area (CBA) maps developed through RESILIM-O. A further 91,800 ha in the Blyde catchment experienced improved management due to better coordination and planning of alien vegetation clearing operations. River and riparian areas under improved management included the 11,343 ha of river in the Lower Olifants reported above as well as 1,459 additional ha of river flowing through two private nature reserves which has now been included in the reserve management plans (Section 2.2).

This year 1,546 people received training in sustainable natural resource management (NRM) and/or biodiversity conservation, 56% of whom were women. This is double the number trained last year, although it did not quite meet the target of 1,800 people.

Project activities increased the capacity of 183 institutions to address NRM and biodiversity conservation issues. Almost half of these were civil society organisations (CSOs) engaged mainly through the CSO Support Initiative (Section 2.1). Other organisations included municipalities (primarily Maruleng and Ba-



Phalaborwa Local Municipalities and Mopani District Municipality), wastewater treatment works, government departments at national and regional levels (DWS, DEA, Department of Agriculture, Forestry and Fisheries [DAFF]), state-led natural resource management programs (NRMPs), conservation agencies (LEDET, Mpumalanga Tourism and Parks Authority [MTPA], SANParks), private nature reserves, forestry companies, mines and industries in the Phalaborwa Mining Complex, and Communal Property Associations or CPAs. Institutions were only counted under this indicator if significant additional capacity-building occurred this year through training, mentoring or development of enabling tools and processes (as described in Section 2). Three media institutions were included due to interactions with AWARD that increased their ability to report on Natural Resources Management (NRM) and conservation issues in a systemic way. The large increase in the number of institutions from last year (29 to 183) was due partly to the increase in scope of the program this year with the addition of the sub-grants, partly to the groundwork done in previous years to build lasting relationships with our partners, and partly also to improvements in our results tracking system.

A notable success this year was the number of laws, policies or regulations addressing biodiversity conservation or other environmental themes officially proposed, adopted or implemented as a result of USG assistance. A total of 51 laws, policies or regulations was recorded, far exceeding the target of 25 (a target of 45 was set in January 2017, but this was revised downward in July). The number of separate items was 31, made up of 12 MoUs and 19 policies, strategies or regulations. The majority of these have so far only been proposed in an official forum, but 12 have been adopted and 6 have been implemented. Implemented items include a Memorandum of Understanding (MoU) with Ba-Phalaborwa Local Municipality and Kruger National Park, the De Hoop Conjunctive Release Model (for determining dam releases), Reserve Management Plans for two private nature reserves (including sections on river health), and the Lower Olifants Water Quality Protocols (which relate water quality to Thresholds of Potential Concern aligned with the Resource Quality Objectives). Further details of policies and regulations counted under this indicator are provided in Section 2.

Program Area: Climate Change

The climate change “earmark” indicator is now a custom AWARD indicator. This year, 748 people increased their capacity to adapt to the impacts of climate change as a result of United States Government (USG) assistance. This capacity development includes training, mentoring and ongoing support as well as development of enabling tools and processes. Of these, 64% were women.

A total of 1,475 people received training in climate change adaptation, 64% of whom were women. Projects in which large numbers of women were trained included the Agricultural Support Initiative (Agri-SI) (where on average 72% of participants are women) and the CSO-SI (48% women). The numbers fell slightly short of the target of 1,700 people, mainly because fewer climate change dialogues were held than planned due to a shortage of manpower and the high demands placed on the DICLAD team in the initial dialogues, especially with the Agri-SI sub-grants.

The capacity of 201 institutions to assess or address climate change risks was improved, meeting the target. Seventy-two of these were civil society organisations engaged through the Civil Society Organisation-Support Initiative (CSO-SI). In addition, the Disaster Management Learning Network for the Olifants built capacity in a large number of organisations (46), as did the Water Governance project (35). Capacity of AWARD and five sub-grant or partner organisations to run climate change dialogues was also increased. In-depth capacity-building also took place with municipal stakeholders through the Municipal Support Initiative (MSI) and with the Legalameetse CPAs. Further details are provided in Section 2.

The number of laws, policies, regulations or standards counted was again much higher than last year. This year 35 laws, policies, regulations or standards addressing climate change adaptation were proposed, adopted and/or implemented. Of the 21 separate items, 10 were MoUs and the rest were policies, regulations or standards. Three of these were implemented during this period, while 11 were adopted and the remainder proposed.



Cross-cutting Indicators

The number of people reached through the Our Olifants media campaign was calculated from social media reach statistics as well as readership, listenership or viewership figures published by the various print media, radio and television stations which have featured stories on RESILIM-O. The target for media exposure was set at around 12 million people at the beginning of 2017, based on achievements in the previous year after the successful recruitment of a Media and Communications Manager and intern. This target was revised up to 25 million in July 2017. Despite the loss of both Media and Communications staff in Q4, we still managed to reach over 20 million people, primarily through the stories aired on the Peoples' Weather TV channel in Q3.

Four peer-reviewed papers were published during this reporting period, as detailed below:

- Clifford-Holmes, J., Carnohan, S., Biggs, H., Chihambakwe, K. & Pollard, S. (2016). *Fostering collective action through exploring and communicating system behaviour in the Olifants catchment of South Africa*. Proceedings of the Fourth Annual System Dynamics Conference, Stellenbosch, Nov 2016.
- Carnohan, S., Clifford-Holmes, J., Slinger, J., Pollard, S. & Biggs, H. (2017). *ResiMod: A collaboratively-built model to assist facilitating strategic conversations in the Olifants River catchment of South Africa*. Proceedings of the 35th International Conference of the System Dynamics Society, Cambridge, Massachusetts.
- Slaughter, A.R., Hughes, D. A., Retief, D.C.H. & Mantel, S.K. (2017). A management-oriented water quality model for data scarce catchments. *Environmental Modelling and Software*, 97: 93-111.
- Chikunda, C. (2017). *Mediating sensemaking: enriching social learning for resilience in natural resources management learning*. ALARA World Congress Proceedings, Action Learning Research Association Inc.

A number of other draft papers were produced during the year which will hopefully be ready for publication next year.



Table 1: Progress against indicators for 2016/2017. All indicators refer to progress made as a result of US government assistance. Hectares indicators are only reported annually.

INDICATOR	2016/17 PROGRESS					
	Q1 Oct-Dec 2016	Q2 Jan-Mar 2017	Q3 Apr-Jun 2017	Q4 Jul-Sep 2017	Total Q1 to Q4	Annual target
Program area: Biodiversity and natural resource management						
(EG.10.2-1) No. of hectares of biologically significant areas showing improved biophysical conditions	-	-	-	-	13,837	18,100
(EG.10.2-2) No. of hectares of biologically significant areas under improved natural resource management	-	-	-	-	1,069,726	888,050
(EG.10.2-5) No. of laws, policies, or regulations that address biodiversity conservation and/or other environmental themes officially proposed, adopted or implemented	0	0	5	46	51	25
(Custom) No. of institutions with improved capacity to address NRM and biodiversity conservation issues	77	2	30	74	183	200
(EG.10.4-4) No. of people trained in sustainable natural resource management and/or biodiversity conservation	314 (135 M, 179 F)	170 (62 M, 108 F)	451 (189 M, 262 F)	611 (294 M, 317 F)	1,546 (680 M, 866 F)	1,800
Program area: Climate change						
(Custom) No. of stakeholders (individuals) with increased capacity to adapt to the impacts of climate	69 (40 M, 29 F)	0	35 (19 M, 16 F)	644 (208 M, 436 F)	748 (267 M, 481 F)	800
(EG.11-3) No. of laws, policies, regulations, or standards addressing climate change adaptation formally proposed, adopted or implemented	0	0	3	32	35	20
(EG.11-2) No. of institutions with improved capacity to assess or address climate change risks	60	3	25	113	201	200
(EG.11-1) No. of people trained in climate change adaptation	243 (89 M, 154 F)	151 (50 M, 101 F)	391 (137 M, 254 F)	690 (256 M, 434 F)	1,475 (532 M, 943 F)	1,700
Cross-cutting indicators						
Number of people reached by Our Olifants campaign including social media	103,181	533,860	20,057,443	15,081	20,709,565	25,000,100
Number of peer-reviewed scientific publications resulting from USG support to research and implementation programs	0	0	0	3	4	4

2 Results per Key Result Area

2.1 KRA 1: Enhancing resilience through systems approaches and capacity development

Key Area 1 objective: 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 Basin under different scenarios.

In order to give meaning to our systemic, social learning approaches within capacity development, AWARD has designed a number of **Resilience Support Initiatives** (RSIs) including support to municipalities, civil society and farmers (see also KRA 4). Through this we continued to provide support to key institutions through training, capacity building, and building and strengthening networks to provide technical and moral support to those wishing to bring about change, and walking alongside them in an ongoing learning process.

Since many of the effects of climate change and natural resource depletion are experienced directly by civil society, the **Civil Society Organisation Support Initiative (CSO-SI)** aims to support the sector by mobilising civil society, supporting diversity and providing opportunities for exploring self-organisation and collective action. This year saw a deepening of our support to civil society organisations (CSOs), with continuation of the CSO “*indabas*”² as well as the introduction of the Changing Practice course (see below), Water Clinics (KRA 2) and climate change dialogues (KRA 4). Of note are the following activities.

- 1) Three rounds of **indabas** were held this year for each section of the catchment (upper, middle and lower), in November 2016, May 2017 and July 2017. These included a climate change dialogues component (see KRA 4). Working groups were set up to address the following areas: legal compliance, legal procedures, local governance, media/social media and rights focus. The access to legal help and advice from the Legal Resource Centre (LRC) was appreciated by many of the participating CSOs. The



role of social media has also been strengthened especially through the Olifants Limpopo Catchment WhatsApp group. The calibre of engagement between CSOs and institutions, corporates and government has increased significantly.

Figure 7: CSO Indaba for the Middle Olifants held at Burgersfort in July

²An indaba is an important conference held by the izinDuna (principal men) of the Zulu or Xhosa peoples of South Africa. The term comes from a Zulu word meaning “business” or “matter”.



- 2) The **Changing Practice course** is supported through a grant to the Environmental Monitoring Group (EMG). This supports seventeen activists from seven CSOs spread across the upper, middle and lower catchment. Through a chosen project of interest participants learn to develop skills of inquiry, research and reporting through coursework and mentoring. Since the start in May, two modules of the course have been completed as well as several mentorship sessions. The “change projects” have been developed, refined and presented at the CSO indabas and work is now well underway. Projects focus on a range of issues from pollution of water sources to the environmental and health impacts of mining, to empowering communities through establishment of food gardens. They can be categorised into a) projects that are developing a critical analysis of the cause of a problem, and b) projects that are piloting a process of change.



Figure 8: Changing Practice course mentorship session at Emalaheni in the upper catchment - learning to read critically

The **Municipal Support Initiative** (MSI) focuses on improving preparedness and responsiveness of two local governments (Maruleng and Ba-Phalaborwa) to deal with natural resource protection, degradation and climate change vulnerability. As a professional learning process it supports practitioners through workplace support, tool development and application. The main areas of support this year were:

- a) support for land-use planning (and inclusion of biodiversity and climate change);
- b) the integration of climate change into disaster risk reduction and the municipal Integrated Development Plans (see KRA 4);
- c) support for improved functioning of wastewater treatment works (which affect aquatic health and biodiversity); and
- d) support for municipal water conservation and demand management.

The MSI plays an important role in connecting other RESILIM-O projects and sub-grants to municipal stakeholders through established relationships of trust evidenced by the fact that we are often called to make presentations or give input into their programs.

In terms of **biodiversity-sensitive land-use planning**, a number of highlights are noted:

- One of the highlights this year was the inclusion of RESILIM-O projects into the Integrated Development Plan (IDP) for the Maruleng Local Municipality. This shows a positive outcome in supporting the municipality to re-conceptualise and prioritize climate change adaptation, biodiversity conservation and water management. It is also a step towards integrating these into the municipal sector plans.
- We have joined the Local Economic Development (LED) Forum for the Mopani District with the aim of ensuring that RESILIM-O work that has implications for local economic development is taken into account in the municipal economic planning instruments.
- In October 2016 we developed Biodiversity Sector Plans and Critical Biodiversity Area (CBA) maps for the Maruleng and Ba-Phalaborwa local municipalities. These are important tools for integrating critical biodiversity areas into various plans.³ Following training workshops, both municipalities

³ The IDP, Spatial Development Framework (SDF), Land Use Management Scheme (LUMS) and LED Strategy

resolved to adopt the CBA map as a guiding document for land-use applications, bylaw development and to involve the municipal portfolio committees in CBA prioritisation.

- AWARD staff advocated with the mayor and director for the updating the Spatial Development Framework (SDF) for the Ba-Phalaborwa LM. This informs land-use planning and development decisions. A service provider was finally appointed in August.



Figure 9: Spatial planning and economic development practitioners from Maruleng Local Municipality at the Critical Biodiversity Areas workshop in August

- As relatively new owners of some 77,000 ha, the Moletele Communal Property Association (CPA) is regarded as an important custodian of natural resources and biodiversity in the lower Olifants. This year we have supported them with land-use planning and zoning to guide future developments. A collaborative learning process was designed, including a field book to involve community members (and particularly youth) in learning about their land and documenting the biodiversity assets. Unfortunately this work had to be put on hold in July due to internal disruptions around the election of a new CPA committee. This has also affected work planned for the Conservation-based Entrepreneurship sub-grant (see under KRA 3). Both projects have decided to focus more effort at Legalameetse instead.

Two projects speak to both municipal capacity development (MSI) and better water resources management (see KRA 2). These include support for *Water Conservation and Demand Management* (as required under the NWA of 1998) and improved discharge effluent of *waste water treatment plants* in Phalaborwa. In terms of Integrated Water Resources Management (IWRM), this discharge affects the quality of river flow in the Kruger National Park (KNP) whilst high water consumption reduces flows into KNP. Both sub-grants were initiated in 2017.

- (1) The Water Conservation and Demand Management work (implemented by WRP Consulting Engineers) started in June 2017 with a capacity development workshop for



Figure 10: Water demand management and water conservation training with technical staff from the Ba-Phalaborwa Local Municipality

technical staff from the Maruleng and Ba-Phalaborwa local municipalities, Lepelle Northern Water and the Department of Public Works. An important step has been to understand the water status quo in the two municipalities and to share the results with the municipal managers. The investigations revealed extremely high water demand (higher than most towns in South Africa); water leaks, high proportions of non-revenue water due to faulty meters, illegal connections and poor implementation of regulations and policies.



- (2) The **Wastewater Treatment Works grant** (implemented by Water Group) aims to develop and implement a turnaround plan for three municipal wastewater treatment plants in the Mopani District, which are a major contributor to poor water quality in the Lower Olifants. Work began in September with skills and risk assessments and process audits of the plants. With all three WWTW scoring under 25% in Green Drop compliance, the results confirmed the need for urgent intervention.



Figure 11: Process audit at one of the wastewater treatment plants

In order to increase the capacity of municipal staff to monitor and manage municipal water demand, and effluent from waste-water treatment works (especially under climate change), AWARD staff will continue to work with the municipalities and DWS in 2018.

In addition to the RSI work, Phase 2 has focused on several other **capacity development initiatives** in response to the scarcity of professional skills in the climate change, water and biodiversity sectors in the catchment. These include a program for interns and mentors and support for institutions of higher learning, all designed to strengthen resilience, natural resource management and adaptation to climate change.

Through our **interns and mentors project**, AWARD provides an important workplace-based learning space to build the capacity of young professionals working in natural resource management positions. This year we took on four additional interns adding to the seven from the previous intake who have remained at AWARD. They gain experience in resilience and systems thinking, multidisciplinary approaches, through “learning by doing”, performance appraisals and self-reflections.

The benefits to these young professionals have been encouraging particularly in terms of understanding responsibilities in a professional workspace and what goes into making a project work. Their growth is evident in their monthly reflections which have moved from being somewhat elementary to issues related to project planning and development. They have had two opportunities to plan and facilitate engagements with the youth of Legalameetse including one in November 2016 on self-development and another in September 2017 to build social-ecological identity and agency (see KRA 3).



Capacity building for universities or Institutions of Higher Learning (IHLs): This grant to Rhodes University began with a consultative process in April with six IHLs⁴ working in the Olifants Catchment. The “Limpopo Basin Curriculum Innovation Network” has now been formally established, and offers a platform for the IHLs to share ideas and research on climate-change resilience in the Olifants and Limpopo Basins so as to develop an innovative curriculum for the higher education system. Activities so far have included setting up MoUs, developing a conceptual framework, and developing and testing a curriculum assessment tool. The first get-together of the IHL partners was held in Hoedspruit in September. The interest of the partners and the opportunities for curriculum innovation identified so far are very encouraging.

2.2 KRA 2: Water Security and Water Resources Protection for Improved IWRM

Key Area 2 objective: To enhance long-term water security and protection by supporting collective action, informed adaptation strategies and practices and tenable institutional arrangements for transboundary IWRM.

This component of the program focuses on supporting the emerging governance of the Olifants Basin so as to secure sustainable plans and actions for water resources protection within Integrated Water Resource Management (IWRM). This is being done through:

- 1) governance support to various institutions (e.g. Catchment Management Agencies in South Africa and Mozambique, SANParks, civil society) for Integrated Water Resources or IWRM,
- 2) the development of tools and protocols in support of a decision-support system for IWRM and training in the use of these tools, and
- 3) mobilising custodianship of residents over water resources through monitoring.

A cross-cutting theme involves understanding the potential impacts of climate change through the incorporation of predictions for both flow and water quality. In addition, we are seeking ways to support stakeholders to confront and consider the multiple impacts of climate change through piloting a collaborative ‘modelling’ approach.

Our work in 2016/2017 has taken place during the worst drought on record (2015-2016). This period was the hottest on record with significantly more ‘hot days’ (exceeding 40°C) than in the previous drought. In terms of water governance and the use of our tools, it is therefore significant that flows in the Olifants River were maintained even though they declined to precariously low levels in September 2016 and again in August 2017. This can be directly attributed to the RESILIM-O work undertaken in partnership with other stakeholders (SANParks) and key directorates within DWS. This stands in contrast to 2005 when the Olifants stopped flowing for 33 days - the first time on record.

A significant indicator of our progress in terms of governance has been the reduced time for needed to secure drought releases from De Hoop dam from the lengthy process followed in 2016. This may be taken as a sign that DWS now trusts the recommendations made by AWARD and the process of determining the release scenarios and paves the way for the future where quick implementation is key to managing a system in real-time to ensure compliance. Again the use of AWARD gauges in the absence of functional DWS network were key. Furthermore, AWARD played a key mediating role when we again met with farmers in the Lower Olifants to ensure they do not take up the water meant for augmentation downstream.

⁴ University of Mpumalanga, University of Limpopo, University of Venda, and Eduardo Mondlane University and Pedagogical University in Mozambique and the South African Wildlife College in South Africa. A civil society organisation - Alliance for Climate Change Resilience in Africa (ACRA) - which works with Eduardo Mondlane University on resilience building, also participated.



The releases from De Hoop dam in September last year significantly improved the condition of the Steelpoort and Olifants Rivers. Although monitoring results are not yet available, we are confident that similar improvements will be recorded this year. Our work around securing releases from De Hoop to ensure that the Olifants kept flowing during the drought was recognised with an Appreciation Award at the Kruger Park Awards Ceremony held in Skukuza on 26 May.



Figure 12: Dr Sharon Pollard and Hugo Retief at Skukuza on 26 May 2017 receiving an Appreciation Award for keeping the Olifants flowing during the drought

Engagement with the Olifants Catchment Management Agency (proto-OCMA) is considered important for the long-term institutionalisation of improved water management practices in the Olifants Catchment. However, working with the OCMA has been challenging so far because of a very difficult and uncertain political and institutional context. Establishment of the OCMA (and CMAs in general) has been hampered by delays and conflicting messages at various levels of government. Despite some significant gains in Q2 through the acting chief executive officer, DWS staff received the news in August 2017 that CMAs are to be collapsed, with little detail given and no clear guidance on the implications. Our letters to DWS national and Catchment Oversight requesting explanation have gone unanswered. Years of hard work supporting the establishment of Catchment Management Forums (CMFs) and CMAs is now hanging in the balance.

Ironically, the news about the disbanding of the CMAs came during the week in which AWARD ran the first module of the IWRM-Decision Support System (DSS) course for OCMA staff (21-24 August). The purpose of the course is to train participants in the use of our DSS known as InWaRDS, which has been specifically designed to support water resource protection (especially compliance monitoring and water-use licencing) in the Olifants Catchment. Feedback from participants was very positive.



Figure 13: Training of OCMA staff in the social and environmental attributes of the Olifants catchment during the IWRM-DSS course

Despite the slow pace of progress, we still believe that developing a shared vision of water governance in the catchment is worth pursuing. This may require a focus on strengthening civil society institutions during 2018. For example, AWARD’s long-term partnerships with SANParks and other partners have been successful in improving water resource management by strengthening monitoring, data redundancy, information flows and responsiveness (see Box 1 and below). In resilience terms, these partnerships are a form of polycentric governance, which in some instances may be able to compensate for the weakness of DWS structures.

Catchment Management Forums (CMFs) are an important mechanism for stakeholder participation. Although AWARD has not worked much with CMFs this year, the CMF charters developed in previous years have now been adopted in most parts of the catchment. We have also focused on supporting civil society organisations to be more effective “watchdogs” through support to SANParks and civil society (see above) which included two week-long Water Clinics for CSOs held in June and August. These provided an introduction to water resources concepts to build their capacity to understand and articulate issues as the basis for their own action.

Another highlight this year on the water governance front has been AWARD’s contribution to the Integrated Water Quality Management Plan (IWQMP) for the ORC. AWARD and USAID have been acknowledged for contributing significantly to the management plans. The IWQMP is driving the integration of water quality and quantity in the water licensing process, which has good synergy with our work with the OCMA.

Management tools and protocols: In support of good governance and the protection of freshwater resources, AWARD has continued to develop relevant tools and protocols as part of the INWaRDS decision-support system (Integrated Water Resources Management Decision Support System). These include the building blocks, conceptual frameworks and software (mobile apps and desktop) for an integrated approach to flow and water quality monitoring, to ensure compliance with standards set by government and stakeholders. To our knowledge, this is a first for the region and the country. The public version of the Flow Tracker mobile application was launched in March 2017 (Figure 16; available at <https://play.google.com/store/apps/details?id=flowtracker.award.org.za.flowtracker&hl=en>) and has now been downloaded 100 times.

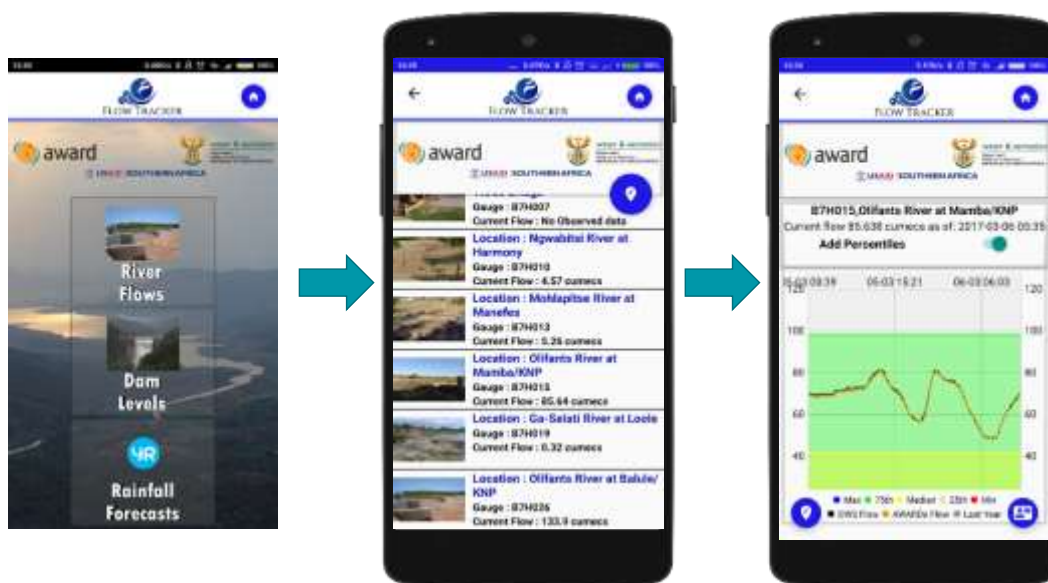


Figure 14: The FlowTracker mobile app which tracks river flow and dam levels in real time and gives rainfall forecasts. This allows the user to track flows against the Reserve (Environmental Water Requirements)

Another major highlight has been to realise the significant benefits from our support for flow and water quality gauging through the installation of three flow loggers (Sep and Oct 2016) and one water quality logger (Oct 2016). The DWS river monitoring network is hampered by frequent outages and **no real-time water quality monitoring**. Without monitoring, uncontrolled abstraction, undetected spills and over- or under-releases from dams become a possibility. Officials from DWS Hydrology Mpumalanga have acknowledged the value of this “backup” monitoring network, especially in the last three months when the DWS network has been down for extended periods. In light of this, AWARD has also spent time and money on regular maintenance and calibration of the AWARD loggers and probes.

Generating near real-time data is only the first step towards pro-active management. The next step is to integrate the information into a system that promotes action. The early warning system further developed under RESILIM-O in 2017 uses the data gathered to identify potential concerns related to flow and water quality, and alerts selected stakeholders and decision-makers. The value of our models and early warning systems has been shown and acknowledged several times this year.

- In January the system allowed fish kills within the Kruger National Park to be linked to low oxygen levels associated with a flow spike and heavy rainfall. The alarm event was communicated to the Lower Olifants Operations WhatsApp group. In response, the Deputy Director General urged a member of the OCMA to investigate the event and support Kruger National Park, demonstrating the value of the tools and networks for more responsive natural resource management.
- River levels dropped significantly during September, creeping towards non-compliance. Thus the emergency operating rules developed in 2016 were re-instituted. Approval for the release was received from the Director: Water Resource Planning Systems, Dr Beason Mwaka (14 September). AWARD is now monitoring the flows and continuously running the model to ensure that the releases are meeting the requirements.

This year, progress has also been made with **mobilising custodianship for water resources**⁵ by landowners from protected areas (PA) around the KNP through biomonitoring. Despite the deterioration in flow and water quality in the Olifants Catchment, most of the private game reserves only monitor

⁵ The National Water Act (1998) devolves responsibilities for water resource management and invites stakeholders to be involved with protecting their water resources, under the premise that compliance is more likely if citizens act as stewards or custodians of their water resources.

terrestrial ecosystems and not the health of their water resources. Through this project, 18 reserves are now involved and two private reserves this year updated their reserve management plans to include river health and aquatic biodiversity. This provides a basis for improved monitoring and more integrated biodiversity management.

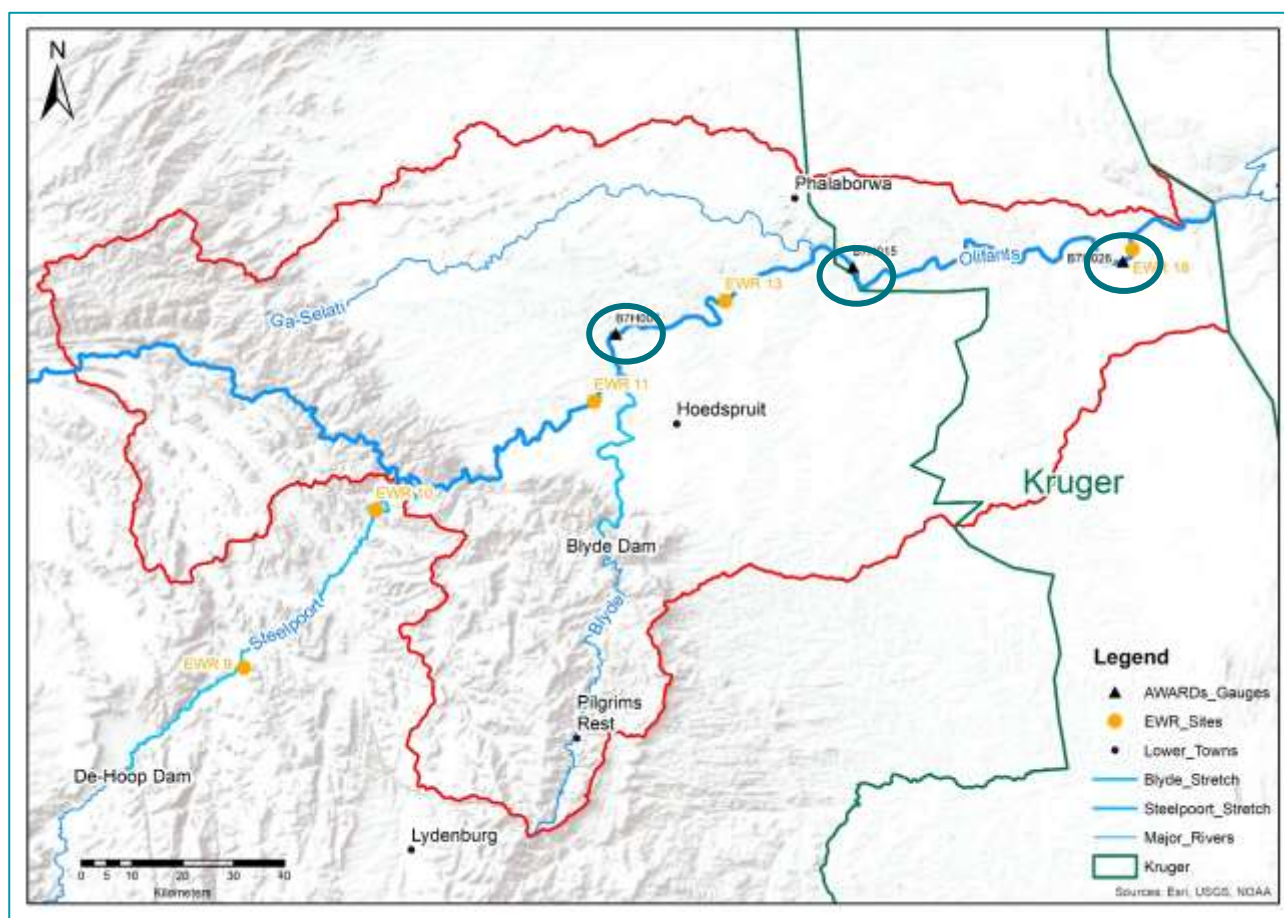


Figure 15: Location of RESILIM-O gauges

A key outcome of the work has been the intention to establish a **Lower Olifants River Health Forum** (LORHeF) which connects the PAs into a network intended to facilitate sharing of knowledge amongst protected areas and with DWS, MTPA and other stakeholders, to build collective action around river health. The biomonitoring team held several meetings and visits with stakeholders in this regard but have met with limited success attributed in part to the focus on rhino poaching.

Other significant events include:

- AWARD was invited to be part of the annual biomonitoring program for the Kruger Rivers, to help collect biomonitoring data, train SANParks technicians, and be involved with publication of a *State of the Rivers* report for KNP. Furthermore, the Mpumalanga Tourism and Parks Authority (MTPA) has agreed to share biomonitoring and fish distribution data with AWARD and to collaboratively produce a *State of the Rivers report for the Blyde Catchment*. These developments indicate the importance of our biomonitoring efforts and the watchdog role that we play together with SANParks in the lower part of the Olifants catchment.
- In August we took part in a school outreach program organised by Southern Cross School in Hoedspruit to introduce learners to freshwater biodiversity.



Figure 16: Training technicians from SANParks on SASS5 and various indices on the Sabie River in KNP



Figure 17: Thabo Mohlala with children from the Southern Cross School sampling invertebrates at a dam at Unifrutti, where the water is pumped from the Olifants River

Starting in late 2015, AWARD has piloted an innovative approach for **water resources planning in the face of complex and dynamic futures**. We employed a stakeholder process using collaborative dynamic modelling approach (CoDyM) within the Selati River sub-catchment. During Q1 AWARD facilitated four sector-based workshops and one multi-sector, multi-stakeholder workshop using the model (ResiMod). This



tool successfully bridged understanding between the different sectors, helped to develop systemic thinking and was used to explore the ways in which climate change impacts on water. ResiMod was developed into a fully-functional online model interface (<http://award.org.za/codym>).

In February 2017, the CoDyM team began working on a new IWRM problem with the Olifants proto-catchment management agency (OCMA). The complexities of sustainability, environmental flows and water use was the focus. Unfortunately due to forces beyond our control that affected staffing, this work was delayed. We have compensated by supporting other projects in systems thinking, training a new CoDyM intern and producing training materials that are customisable as a short course (with links to the IHL sub-grant, see above). Two concept models (rich in explanatory power and story-telling capability) for potential use with stakeholders have also been developed, one focusing on water-use license applications and one on agriculture in a changing climate.

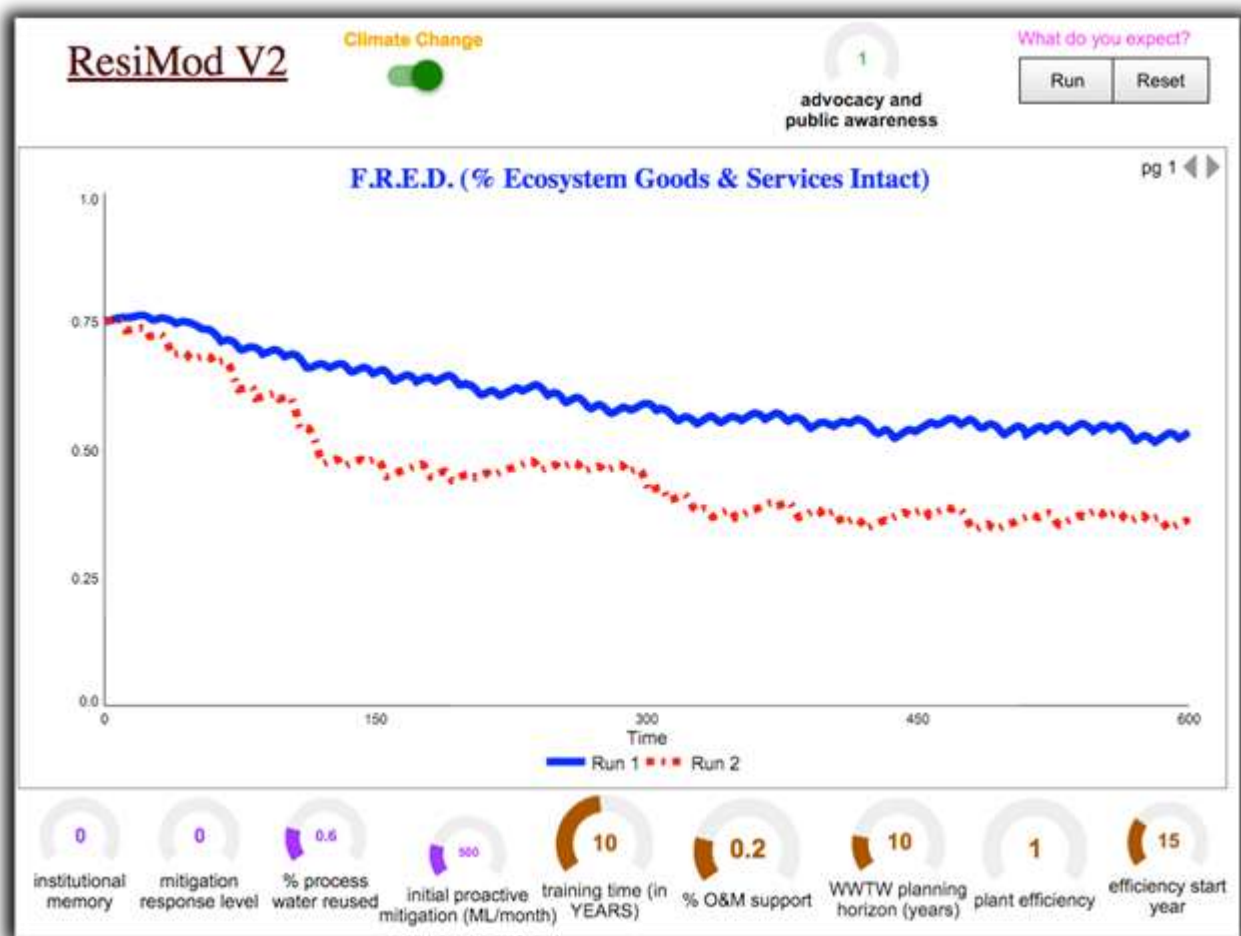


Figure 18: An example of an simulation output from ResiMod - this shows the impacts on FRED (ecosystem health) over time when climate change impacts are taken into account

2.3 KRA 3: Natural resources management of high-priority areas

Key Area III objective: To conserve biodiversity and sustainably manage high-priority ecosystems by supporting collective action, informed adaptation strategies and practices and tenable institutional arrangements.

Work in this KRA is focused in two geographical areas: the Blyde River sub-catchment and the Legalametse Nature Reserve in the upper Selati sub-catchment. Both these areas are priorities for RESILIM-O given that they are high biodiversity areas and strategic water source areas (AWARD, internal report). The Blyde area has been the focus of numerous initiatives and considerable investment to clear alien vegetation and improve water flows but nonetheless is still being threatened by invasive alien plant species and soil erosion, particularly associated with timber plantations. Legalametse on the other hand, has been afforded protection as a provincial reserve but as a park under land claim, the institutional arrangements are in a state of flux. Indeed, this project is the first of its kind in the Limpopo Province and a priority for the MEC.

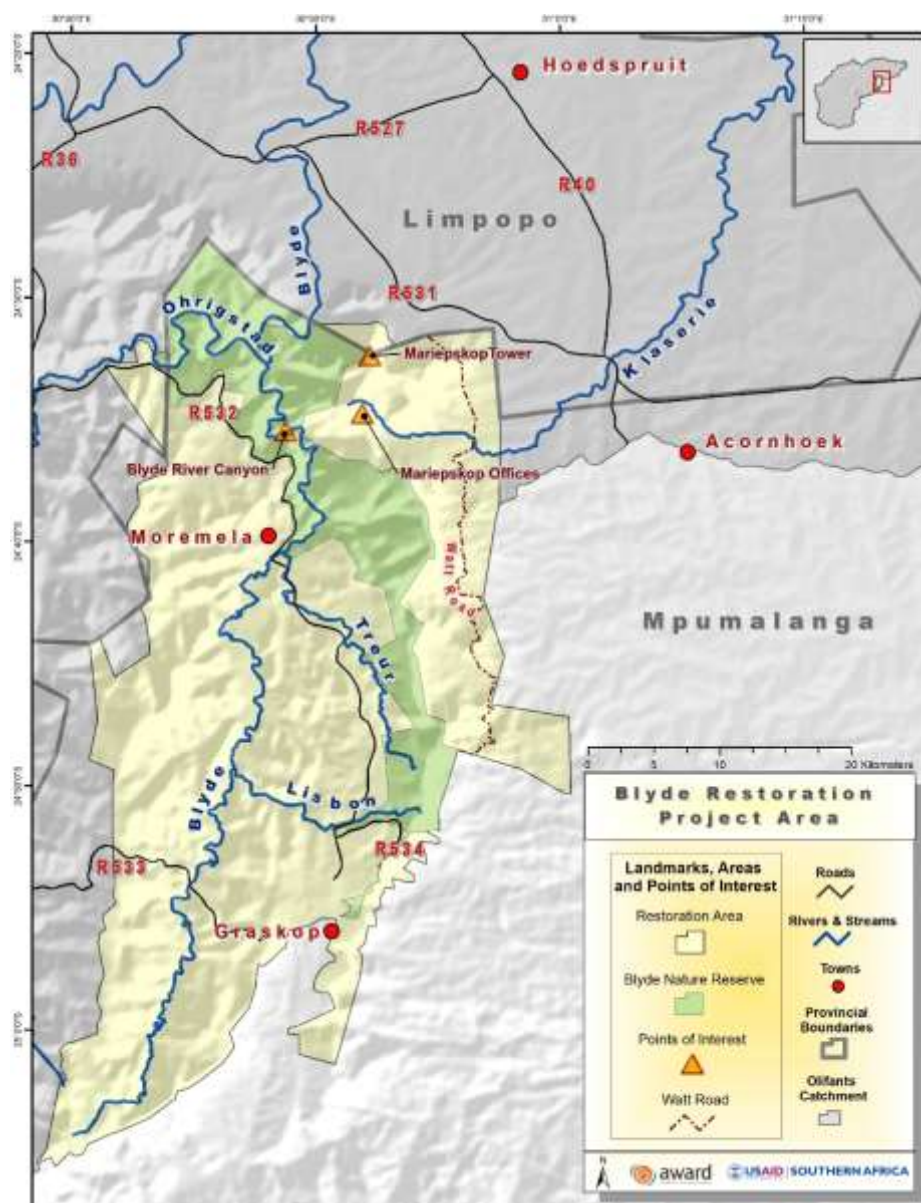


Figure 19: Blyde ecosystem restoration project area



Given the extensive problem of invasive alien plants in the high biodiversity hotspot of the upper Blyde sub-catchment (91,800 ha), **the Blyde ecosystem restoration project** aims to support the development of coordinated and integrated planning and implementation (identified as a major problem by stakeholders in 2015). To this end, and with the support of the deputy Director General of DEA, significant progress has been made this year as follows:

- At a workshop in June, the name “Blyde Restoration Working Group” was formalised together with a Terms of Reference. This is an important formalisation of the relationships which have been developed over the last few years and a step towards institutionalisation.
- A key output is the collaboratively developed *Integrated Restoration Strategy* which is now starting to translate into improved natural resource management and biophysical condition. Although implementation is still in the early stages, planning has been substantially improved through better alignment of the Annual Plans of Operation of the different alien clearing programs across the whole sub-catchment. This has led to consideration of the catchment context and elimination of overlaps and gaps in the clearing plans.
- Improved biophysical condition was recorded for the 2,494 ha of land where clearing⁶ has been done so far this year.⁷ Alien plant densities in cleared patches were reduced from between 15% and 37% to around 0%. Note that follow-up and maintenance of cleared patches is essential and hence the need for long-term clearing efforts.

There was good progress this year towards developing institutional arrangements to support long-term sustainability of the work in the Blyde catchment. In particular, relationships between the state-run Natural Resource Management Programs (NRMPs) and the new land owners (Communal Property Associations) are finally being established. The Kruger to Canyons (K2C) GEF Biodiversity Stewardship team has played an important role as an intermediary between the Blyde interim Co-management Committee and the NRMPs, while consulting us regularly on how best to facilitate this process. In August the process of developing a new Integrated Reserve Management Plan for the Greater Blyde Canyon Nature Reserve was started (this will be aligned with the Integrated Restoration Strategy).

Mapping represents a key strategic tool for the management of invasive aliens and biodiversity assets. In this regard, the following progress is noted:

- AWARD, together with project partners, is developing an *invasive alien plant inventory map* to determine the extent of the problem in the catchment, and to inform planning.⁸ This process has proven more time-consuming than hoped, requiring a substantial amount of manual mapping. A first draft is aimed to be completed in November.
- A *terrain analysis and GIS layer* outlining inaccessible areas and steep slopes has also been developed by the Blyde Restoration Working Group. This will inform the planning and mapping of areas that require clearing and the level of effort needed from specialist High Altitude Teams (HAT). The inaccessibility of certain areas has been a long-standing problem for the NRMPs and the proposed collaboration agreement with the South African Air Force (based in Hoedspruit) to help NRMP clearing teams reach inaccessible areas in the Blyde Canyon, is encouraging.
- In September AWARD facilitated a Geographical Information Systems (GIS) and mapping course for capacity development of NRMP practitioners. The course was well attended by practitioners from our Blyde partners,⁹ who expressed their gratitude for our support. The need to continue this

⁶ Clearing was mainly in grassland areas and the main species cleared were pines, gums, silver and black wattles, sweet prickly pear, American bramble and Blackwood. The first four of these are ranked as high-priority invasive species of grasslands in SA (CSIR national prioritisation, Le Maitre *et al.* 2012). Silver and black wattle are the biggest concern for the riparian zone of the Blyde River itself.

⁷ Note that Working for Water and Working on Fire have not yet started any clearing operations.

⁸ Integrated Restoration Strategy and the individual IAP management plans for management units.

⁹ Working for Water, High Altitude Teams and SANParks-Biodiversity Social Projects and Mpumalanga Tourism & Parks Authority.



process was noted by all parties, specifically in the use of newer GIS technologies which would simplify many of the tasks carried out by project coordinators and GIS managers.



Figure 20: Rosemary and Silindile using GIS to work on the invasive alien plant inventory map

Some exciting opportunities emerged this year for upscaling the impact of this project beyond RESILIM-O. AWARD was invited to the DEA Management Research and Planning (MAREP) workshop on social-ecological systems, strategic adaptive management and complexity thinking approaches in November. The Blyde restoration project was one of four used to consider integrated approaches within the work of the DEA NRMPs and there was strong interest in our approach. This was followed by another workshop in May with “ground-level” practitioners in the Limpopo and Mpumalanga NRMPs, which allowed the Blyde Working Group partners to share our learnings and showcase the work carried out in the Blyde.



Figure 21: Blyde Restoration Group partners presenting a model of the Blyde catchment they had created during the Mpumalanga and Limpopo MAREP workshop organized by DEA NRM

In support of the above, the **Sustainable Forest Management sub-grant** led by the Institute for Natural Resources (INR) is further supporting capacity development for compliance, monitoring and enforcement in the plantation forestry industry. They had several meetings with the forestry stakeholders (DAFF, Komatiland Forestry and York Timbers and the DEA Compliance Inspectors) as part of a capacity-needs assessment process, and completed a situation analysis. The stakeholders emphasised the need to work with landowners and managers to ensure compliance. The Blyde interim co-management committee approved the project within the Lowveld Plantations (afforested areas under land claim).

Support for co-management of the Legalameetse Nature Reserve¹⁰ in the upper Selati sub-catchment was selected as a pilot project for supporting co-management of protected areas. All provincial parks except one are under land claim in Mpumalanga and Limpopo. Without proper processes in place for good governance through co-management, we are at risk of losing prime biodiversity areas and the benefits to claimants and the wider community. However such support is almost non-existent and skills for facilitation of such processes equally dire. The reserve is a major biodiversity hotspot and important water source area, and also has the potential to meaningfully contribute to the livelihoods of local communities with land claims on the Reserve.

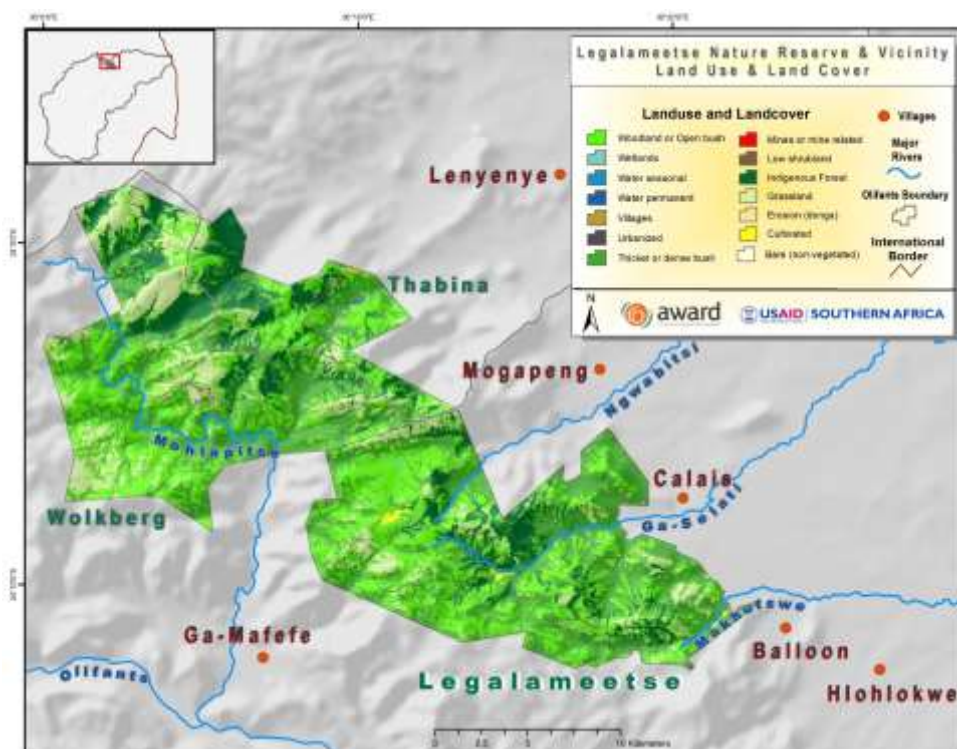


Figure 22: Legalameetse Nature Reserve showing focus of the work on co-management

As noted last year, we recommended that the drafting of a co-management agreement (which guides the provincial conservation agency LEDET and CPAs in jointly managing the reserve), be delayed so as to attend to fundamental institutional issues and capacity development of communities. These have been the focus for 2017 and significant progress has been made.

In terms of improved communication and trust-building, the groundwork we have done to improve communication and collaboration among the six CPAs¹¹ involved will make the agreement much more sustainable. The drafting of a MoU between the six CPAs was a significant development which serves as a legal document to bind the CPAs to ensure equal sharing of benefits (e.g. employment opportunities). Second, our innovative radio focus group discussions also provided a platform for information sharing and

¹⁰ Legalameetse Nature Reserve has been claimed by local communities under South Africa’s land restitution process.

¹¹ Communal Property Associations are an institutional form designed to represent land claimants.



engagement with the wider community about co-management (see KRA 6). Third, in support of LMC's focus on youth empowerment¹² we facilitated engagement between AWARD interns and the Legalameetse youth and between the youth and the community elders (see KRA 1). This has been even more promising than originally envisaged.

Support for improved institutional arrangements has taken a number of forms:

- Co-management agreement: The draft agreement, which is currently with LEDET, has now been collaboratively drafted by committee members from all six CPAs, with input from the broader community and LEDET. The LMC chairperson Mr Mangena took a leadership role, producing a first draft of the agreement and facilitating workshops using activity system analysis (CHAT). It was evident that committees now have a better understanding of the co-management process and what the agreement should entail.
- An important challenge identified last year was the discovery that four of the CPAs (Paris, Cyprus, Madeira and Balloon) still need to finalise their land claims and complete their CPA registration.¹³ This responsibility lies with the Department of Rural Development and Land Reform (DRDLR). Despite pressure from the AWARD, the CPA and the Legal Resources Centre, the lack of response is of great concern. To address this challenge, AWARD and the four unregistered communities went to the Department's offices in Polokwane. The communities largely took charge of planning and implementing this, reflecting organisation and cohesion which was not evident a year ago. We have also been supporting the archiving of documents and the value of this was clear during the DRDLR meeting when the communities were able to present documents to support their statements. Unfortunately, the DRDLR has not kept the commitments and communities are now considering escalating the matter to a higher office.

Finally, five further training modules were run in Q4, in response to the capacity needs identified by the CPAs. These included training on land reform legislation, protected area legislation, reserve management planning, beneficiation models, participation and engaging government officials.



Figure 23: Youth listening to one of the elders during the historicity and mapping session during the LNR Youth Engagement Workshop in September

¹² It is the requirement of the People and Parks Forum for CPAs in protected areas to have youth forums.

¹³ During Q2, participants from these communities drafted and signed community resolutions to withdraw from the umbrella Makhutšwe CPA which is for the agricultural land (and around which there is much dissatisfaction) and register independent CPAs.



For co-management arrangements to work, beneficiation (financial and non-financial) from the protected area needs to be addressed. To this end we have designed the **Conservation-based entrepreneurship (CbE)** sub-grant (INR). Protected areas and priority ecosystems hold great potential to support conservation-based entrepreneurship opportunities that can contribute to biodiversity conservation and climate change adaptation, as well as build resilience of the livelihoods of local communities.

This sub-grant (which falls jointly under KRA 1 and 3) started work in May. A stakeholder engagement plan and communications materials were developed, under the branding “Oli-Enterprises” to link with the broader AWARD “Our Oli” Campaign and a scoping and encumbrance surveys were completed. In August, the INR team held a workshop on CbE opportunities in Legalameetse with the Legalameetse Management Committee and a youth contingent. It considered the “cultural” and “natural” assets of Legalameetse, how they can be utilised as business opportunities, and business planning. A number of CbE opportunities¹⁴ were identified by the LMC and will be further detailed in late 2017 and 2018.

2.4 KRA 4: Support for climate change adaptation strategies and practices

Key Area 4 objective: To reduce vulnerability to climate change and other factors by supporting collective action, informed adaptation strategies and practices and tenable institutional arrangements.

Work under KRA 4 is implemented through two initiatives as well a number of associated projects (AgriSI, CoDym), namely (a) work on embedding climate change planning into disaster risk reduction and (b) capacitating climate change adaptation stakeholders through climate change conversations (DICLAD).

Much of our work is focused on **embedding climate change into disaster risk assessment and management planning** within municipalities because South Africa has pledged that municipalities will consider the impacts of climate change on basic services (via the Durban Charter). As a strategy to scale up the impacts of capacity development, we have focused on a learning network which aims to facilitate exchange of lessons, experiences and expertise with regards to climate change adaptation (CCA) amongst Disaster Managers at local and district levels. We have succeeded in establishing strategic partnerships amongst disaster management practitioners in Limpopo and Mpumalanga for this and, despite challenges, we and our partners have succeeded in hosting the first learning exchange for these emerging networks.

¹⁴ Opportunities include increasing accommodation capacity and picnic sites in the reserve, building restaurant facilities, improving hiking trails and other tourist attractions, exploring the use of solar power, providing support services such as catering, and hosting events such as dance or music festivals. There was also the suggestion of building a museum that will curate the cultural history of the indigenous peoples who used to live in the area. Opportunities outside the reserve were also identified including building a fuel station near the reserve and small grocery stores for tourists.



Figure 24: Map showing the area covered by the Disaster Managers' Learning Network

We have also engaged with key decision-makers to raise awareness of disaster management and climate change in local government. In Maruleng Local Municipality we have supported the Disaster Officer in engaging key decision-makers to reduce the risk of hazards, particularly flooding. He is increasingly involved in designing and hosting workshops that build political will for the integration of climate change. He has assisted councillors to think about linkages between disaster management and the councillor committee portfolios. This is a strong sign that his adaptive capacity has grown from working with us.



Figure 25: A flood risk map drawn by the Gert Sibande group for one of the local municipalities in the district at the first Disaster Managers' network learning exchange (left); participants from Dithabaneng village reporting back on their group's temperature chart at a DICLAD workshop (right)

The Dialogues for Climate Change Literacy and Adaptation (DICLAD) project showcases a new approach for making climate change “everyone’s business” (see workplan). In this regard we aim to embed climate



change (CC) into other RESILIM-O projects through facilitating climate change dialogues and thinking about impacts and adaptation options. In early 2017 all AWARD technical staff were trained to facilitate CC dialogues within their own projects, with support from the KRA 4 team. Many staff indicated that they now feel confident in facilitating these dialogues because of the simple and engaging design of the process. We also analysed downscaled climate change data for each of the project areas.

The first DICLAD workshops started in July at the CSO Indabas in the upper, middle and lower catchment (80 participants), and with small-scale farmers in the Middle and Lower Olifants (170 farmers plus sub-grantee staff). Evidence from the first few workshops clearly showed the potential of this approach to promote meaningful engagement of stakeholders. Also, the design is sufficiently robust to accommodate different contexts and different levels of literacy and technical understanding. Nonetheless, what is clear is that small-scale farmers will need continued support in 2018 given the challenges that they face of increased temperatures and risks of floods and droughts.

Falling under the Resilience Support Initiative (see KRA 1), the **Agri-SI (Agricultural Support Initiative)** is designed to strengthen resilience and adaptation of small-scale farmers to climate change through a number of collaboratively-designed adaptation options. These include improved soil and water conservation techniques¹⁵, learning, collective action and livelihood diversification in a climate changing world. These strategies are underpinned by two sub-grants to support small-scale farming in (a) the lower Olifants (Mametja area) and (b) two areas in the middle Olifants (Sekhukhuneland and Capricorn), as well as the CbE sub-grant (see KRA 3).



Figure 26: Map showing Agriculture Support Initiative project areas

¹⁵ In the case of small-scale farming, agro-ecological approaches are widely considered to support farmers to be responsive to and adapt to change. These approaches not only focus on the technical aspects of soil and water conservation but also on social processes of learning and collective action.



Small-scale farming in the lower Olifants is being supported by a grant to **Mahlathini Development Foundation** which has been working with farmers in six villages since October 2016. Around 140 farmers (80% of whom are women) representing 70-80 households are organised into five learning groups. Nine Local Facilitators have been trained to coordinate these groups, run small training workshops and help with garden assessments, for which they receive a small stipend. Despite serious water supply problems, there has been a pleasing uptake of the soil and water conservation practices introduced (Figure 29). Fifty-eight percent of farmers have taken part in farmer experiments, and 65-80% of participants are implementing at least one of the practices. Innovations such as drip kits, tunnels and underground rainwater harvesting tanks have also been piloted.

Major progress includes:

- Construction of 10 tunnels in three villages - Botshabelo, Swedawa and The Oaks;
- Three underground rainwater harvesting storage tanks (24m³) in Botshabelo and Sedawa (DKA funding); and
- Learning workshops for all six villages to accommodate learning needs expressed by the groups, including an overview of all practices introduced thus far, a further focus on natural pest and disease control and a start on the conservation agriculture trial process for the coming planting season.



Figure 27: Magdalena Malepe in Sedawa with her beautiful small garden showing trench beds, mixed cropping and mulching (left); digging erosion control / water diversion ditches (top right); construction of shadecloth tunnels (bottom right)

Twenty-five percent of participants have increased access to food from their gardens since the start of the project, with 61% of farmers able to harvest and eat from their gardens weekly (this figure was 85% in the rainy season). Fifteen percent of participants have increased their income since the start of the project, with 37% of farmers now getting additional income from selling their produce (55% in the rainy season).



The first Open Day was held at Sedawa in April. This allowed participants from the learning groups to share what they are doing in different villages, whilst all were shown the innovations tried out in Sedawa to date. This was a very successful event, attended by around 70 people - mainly farmers but also Traditional Authority representatives, staff from the (similar) LIMA project based in Tzaneen, and extension officers from the Department of Agriculture based in Venda.

Small-scale farming support in the middle Olifants is implemented through **Ukuvuna Harvests** which is working in 10 villages across the Capricorn and Sekhukhune districts, using a similar model to that described above. Six new clusters (learning groups) were established to complement the four previously established by Ukuvuna. Eight of the 10 clusters are doing well; in two clusters the cluster leaders got employment elsewhere and replacements are currently being trained. Of the 135 farmers participating, 64% are women.

Figure 28: Results of garden monitoring over the implementation period of the Ukuvuna sub-grant. The y-axis shows the number of gardens. "Green" gardens have 7 or more crop types, good soil and water conservation, soil cover, and evidence of enterprise, recycling

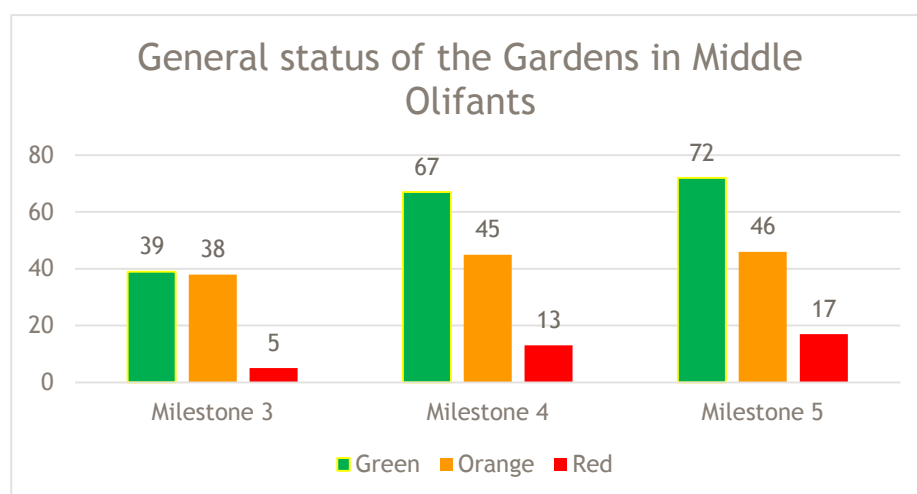


Figure 29: Farmers from the middle Olifants on a learning visit to the National Botanical Garden in Pretoria

Garden assessments have shown a pleasing increase in the diversity of crops and the implementation of soil and water conservation practices by farmers, as is evident from the increasing number of gardens rated "green" over the life of the project (Figure 30) and the many stories from farmers of the benefits in terms of support and peer-learning as well as access to quality produce. A visit to the Pretoria National Botanical Garden in September allowed 11 farmers to learn about propagation and use of indigenous plant species.



2.5 KRA 5: Sharing of experiences and lessons within the ORB and other basins

A highlight this year has been the progress we have made in documenting and sharing our pioneering hybrid and complexity-aware MERL approach. In May the whole MERL team participated in the SAPECS/GRAID 2017 Resilience for Development Colloquium in Johannesburg, where we helped to put together two workshops on Monitoring, Evaluation, Assessment and Learning. We also presented the RESILIM-O MERL framework in an AWARD session which gave an overview of AWARD's experience of resilience-building in practice in the Olifants Basin. There was much interest in both the MERL and AWARD workshops, and the team made valuable connections that may in time be extended into a Community of Practice for evaluation of environmental programs. They also identified opportunities to contribute to the GRAID-initiated conversation on how to make resilience more relevant to development practice.

In August the MERL team together with Sharon Pollard completed a draft paper which gives a broad overview of the RESILIM-O MERL framework and how we have refined it over time, in relation to the need to support learning as well as accountability. A paper on the use of case studies for formative evaluation will be presented at the South African Monitoring & Evaluation conference in October, and some aspects of the RESILIM-O framework will also be presented at the Realist Evaluation conference in Australia in October.

The time and resources allocated to MERL within RESILIM-O have allowed the development of an approach which is starting to find traction in other programs and catchments. Members of the MERL team have contributed to a draft PMERL (participatory MERL) framework for the Tsitsa Catchment in the Eastern Cape (NLEIP) and there are further opportunities to expand this approach into the uMngeni catchment in KwaZulu-Natal, and to work with SANBI and DEA NRM at a national scale to embed learning into their M&E systems.

2.6 KRA 6: Monitoring, Evaluation, Reporting & Learning and Media and Communications

Key Area 6 objective: Strengthen organisational learning, integration and coherency through continuous reflective and collaborative processes.

The **Monitoring, Evaluation, Reporting and Learning (MERL)** culture is increasingly being established within AWARD, as evidenced by the involvement of project staff with MERL activities and the integration of MERL with work planning. The MERL manager receives frequent (unsolicited) emails from senior staff alerting her to developments that may be significant for MERL, such as evidence of conversations between stakeholders, expressions of appreciation from stakeholders, evidence for AWARD's influence over policies and processes, and moments of insight and learning.

Reference Group meetings took place in October 2016 and April 2017. In October, Research Associate Prof. Ray Ison presented a formative systemic meta-evaluation of the RESILIM-O program. This provided some useful insights into the program for strategic planning purposes, and also into the use of case studies for evaluation purposes.



Figure 30: Reference group meeting in April 2017

This year we have focused our evaluation case studies on the Resilience Support Initiative (see KRA 1), through which we hope to understand better the different ways in which support is being provided and how this support is valued by stakeholders. This case study is considered particularly important because it will allow for a detailed examination of what resilience-building means in a developmental context. In addition to this, our MERL Officer, Vhutshilo Mudau, is preparing a case study on reporting practices and how they can be strengthened to enable learning in the DEA natural resource management programs in the Blyde catchment, as part of her Masters in Environmental Education at Rhodes University.

The implementation of eight sub-grants this year has increased the time spent by the MERL team on supporting these sub-grants and also the time spent on reporting. Nevertheless, AWARD remains committed to reporting processes that facilitate real-time learning, reflection and adaptive management.

The **Media and Communications** unit worked with several media outlets and channels to produce stories about the Olifants that significantly increased the media exposure of the program this year. In February the SABC 2 50/50 production team interviewed Derick du Toit, AWARD Assistant Director in Burgersfort, talking about the challenges faced by the Olifants River Catchment. People's Weather (DSTV Channel 180) produced four 3-6 minute clips during Q1 which were aired in May and reached an audience of 5 million people. Filming took place in several locations across the catchment, including Mozambique. The team was extremely proud of the two articles that appeared in the Mail & Guardian newspaper in April, since this publication reaches many influential decision-makers. In June our director Dr. Sharon Pollard was given a 10 minute interview slot during the popular Afternoon Drive show on SAFM, a national radio station. Other noteworthy outputs included an article in The Star newspaper in May, two innovative community radio focus group discussions on Maruleng FM, and a radio interview with Hoedspruit FM. The team also made progress in briefing journalists to enable them to tell a systemic story of the problems in the Olifants.

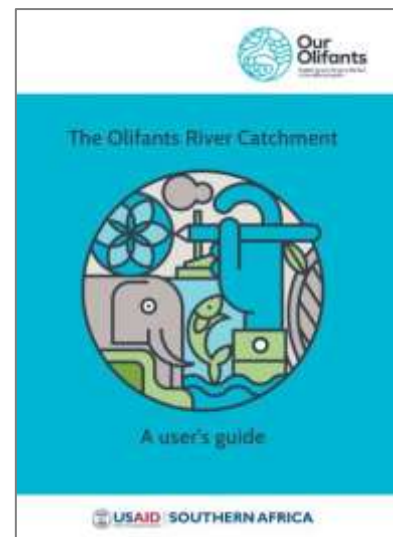
A new Media and Communications Strategy was developed in June to guide future activity. Attention was given to identifying potential communications outputs from the various projects. Two brochures were completed in Q4. The first of these, entitled "Reducing the vulnerability of people and ecosystems",



provides an overview of our resilience-building initiatives in Phase 2. The second “Our Olifants” brochure aims to create a sense of ownership and place amongst a broad spectrum of stakeholders by adopting the approach of a “User’s Manual”.

As at September 2017, the Our Olifants Facebook page had 1,368 followers and the AWARD Facebook page had 457. The Our Olifants and AWARD Twitter accounts had 267 and 321 lifetime followers respectively. The RESILIM-O website is now live, and most of the editing, programming and uploads have been completed. The Our Olifants website has been redeveloped to make it mobile-friendly. The CSO website and Facebook pages were relatively inactive, with most users preferring the WhatsApp group.

The Media and Communications unit has been troubled by staffing issues and was completely restructured in September after the departure of both staff.



2.7 KRA 7: Internal governance

Key Area 7 objective: To ensure good programmatic governance through developing and maintaining organisational capacity and effectiveness through tenable management systems and sub-contract management.

Staffing and offices

AWARD currently has a staff complement of 32 people (including 10 interns) plus seven research associates, 5 consultants and 1 volunteer. It has been challenging to fill vacancies, especially technical posts and senior administrative posts. At the same time, AWARD has been trying to grow young professionals into the sector through the employment of junior staff and the internship program.

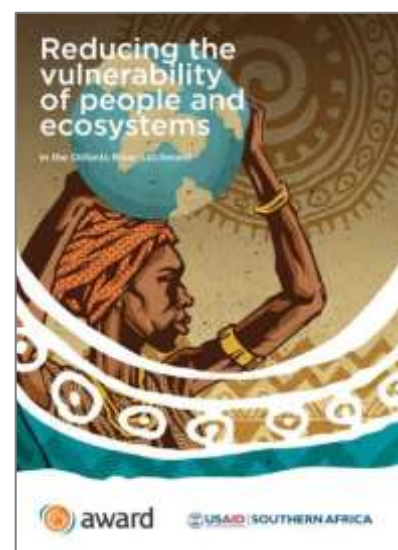


Figure 31: RESILIM-O brochures

In April our dear colleague and friend Dineo Shubane tragically passed away in a car accident on 10 April 2017. All the AWARD staff have felt her loss. The last two quarters were marked by difficult staffing issues and a number of disciplinary processes. Securing work visas for international staff continued to be a major problem. The following staff members left AWARD for a range of different reasons: Margaret Venge, Lilian Goredema, Fidelis Zvomuya, Richard Hatfield, Lenkie Dikotope (intern) and Thato Phakela (intern). The Media and Communications unit and the AgriSI project were particularly badly affected by these departures.

On a positive note, Prince Nkululeko Mahlambi was appointed as Office Manager in November 2016. A new Grants and Contracts Manager, Mayford Manika, was appointed in June, bringing valuable experience from RESILIM-B. Rosemary Alles joined AWARD as a volunteer software engineer in Q3. In Q4 Harry van der Linde was appointed part-time in a senior project management role and Molly Hove joined the finance team. Harry Biggs' RA contract was revised to include support to the directors in “seeing and making connections” between projects and people, both within RESILIM-O and externally. An IT consultant was hired to assist with IT support.

Naphtali Ratshitanga, an intern for the past two years at AWARD, was given a permanent post as Logistics Officer, and Lerato Mogone was promoted to Junior Researcher and Field Worker. Charles Chikunda took over from Lilian Goredema as project leader for the co-management support project.



As part of the staff development program, all AWARD technical staff attended an internal week-long facilitation training course run by the Community Development Resource Association (CDRA). Facilitation skills are vital for the social learning process used by all projects to institutionalise sustainable NRM practices. All staff attended First Aid training in July. The Finance Assistant, Mpho Matsie, attended a five-day training course on Pastel, while Itumeleng Seleballo was trained in System Dynamics Modelling.

New equipment procured during the year included a state-of-the-art data projector and camera, filing cabinets and a new server. Two new vehicles were also purchased, registered and fitted with tracking devices.

Partners and Steering Committee meetings

Five members of the AWARD team attended a USAID learning event in Pretoria in August. The event was intended to promote learning across programs in the Limpopo Basin (e.g. between RESILIM-O and RESILIM-B). While the facilitators used innovative methods, the event was disappointing in terms of opportunities for learning, and it was unclear who should be learning and why. The partners' meeting originally planned for September 2017 was cancelled.

Reference Group meetings

Reference Group meetings were held in October 2016 and April 2017 (see KRA 6). These engagements provide an important space for reflection and formative evaluation by the senior management team, and help us to keep up-to-date with global thinking and developments around building systemic approaches into our resilience-building endeavours.

Knowledge management

Knowledge management has been an ongoing difficulty in RESILIM-O due to the complexity and range of both material and partners. Progress on this front was made with the arrival of Rosemary Alles, who is developing an object relational database management system (ORDBMS). The process of collecting data from the RESILIM-O projects is ongoing, with an initial focus on spatial data and biophysical monitoring data. The ORDBMS, implemented on a virtual Linux server located in London, will provide the means to perform high-end analysis using AWARD's data in the context of the KRAs and ensure a reliable and robust archival system. Rosemary has also offered informal GIS training and capacity-building to staff within AWARD, and increased AWARD's capacity to produce high-quality GIS maps for brochures, websites and other communications materials.

No-cost extension

Financial projections at the start of 2017 indicated that there would be sufficient funds for an additional 2.5 to 3 years of work. AWARD therefore requested a no-cost extension (NCE) in January which was undertaken by our agreement officers on our behalf. However, this process took months to finalise, and the NCE was only finally signed in August 2017 when we were officially in close-out. The extension is for two years and four months, until 31 March 2020, with the last six months being the close-out period. The delay in finalising the NCE had several negative impacts on the program, including an extended period of uncertainty around staff appointments which affected program activities, delays in starting several of the sub-grants which led to the need for changes in scope and agreements. Our inability to plan any activities beyond December 2017 meant that certain sub-grant proposals and budgets had to be redone. Although not the only factor involved, the NCE delay did contribute to some of the program targets not being reached.

Contractual requirements

The contractual requirements governing our Cooperative Agreement with regard to the Environmental Monitoring and Management Plan (EMMP), as submitted with our 2016 Work Plan, continue to be upheld and monitored across all program activities. All consultancies and sub-contracts have equally been informed of this requirement. We have plans to ensure that our sub-grantees develop their own EMMPs, which we will monitor during the course of program implementation.

