

Progress Report Quarter 2 2015/ 16

Resilience in the Limpopo - Olifants

Association for Water and Rural Development



Association for Water and Rural Development (AWARD)

Company Reg. No. 98/003011/08
P O Box 1919
Hoedspruit 1380
Limpopo
South Africa

Non-profit org. Reg. No. 006 - 821
Tel: 015 - 793 0503
E-mail: sharon@award.org.za
Website: www.award.org.za

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RESILIM O - Cooperative Agreement nr AID-674-A-13-00008

RESILIM-O

RESILIENCE IN THE OLIFANTS PROGRAM

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ACRONYMS AND ABBREVIATIONS

AWARD	: Association for Water and Rural Development
CMA	: Catchment Management Agency
CMF	: Catchment Management Forum
CoGTA	: Cooperative Governance and Traditional Affairs
CSIR	: Council for Scientific and Industrial Research
DAFF	: Department of Agriculture, Forestry and Fisheries
DEA	: Department of Environmental Affairs
DRR	: Disaster Risk Reduction
ESP	: Ecosystem Services Partnership
GDC	: Green Drop Certificate
GLTFCA	: Greater Limpopo Transfrontier Conservation Area
IUCMA	: Inkomati-Usuthu Catchment Management Agency
ITN	: International Training Network
IWRM	: Integrated Water Resource Management
K2C	: Kruger to Canyons
LEDET	: Local Economic Development, Environment and Tourism
M&E	: Monitoring and Evaluation
MERL	: Monitoring, Evaluation, Reporting and Learning
MOSA	: Middle Olifants South Africa
NCWSTI	: National Community Water and Sanitation Training Institute
NGO	: Non-government Organisation
NRMP	: Natural Resource Management Program
OLCMA	: Olifants-Letaba Catchment Management Agency
PMC	: Phalaborwa Mining Complex
RESILIM	: Resiliency of the Limpopo River Basin
SES	: Socio-ecological system
UNDP	: United Nations Development Program
VSTEEP	: Values, Social, Technical, Ecological, Economic, Political
WatRes	: Water Related Ecosystem Services

EXECUTIVE SUMMARY

Programme performance in Quarter 2 (Q2) shows significant improvement both in Climate Change and Natural Resources Management (NRM) and/or Biodiversity programmes in terms of numbers, both at institutional and individual levels. There is also a notable increase in the number of women reached during this reporting quarter. This was not only because of the expansion of RESILIM-O into the Mozambique part of the Olifants, but also due to the number of people and institutions reached by AWARD through workshops based on Systems Dynamic Modelling (SDM); Cultural-Historical Activity Theory (CHAT) and Values, Social, Technical, Ecological, Economic, Political drivers (VSTEED).

Below is a snapshot of Quarter 2 in numbers:

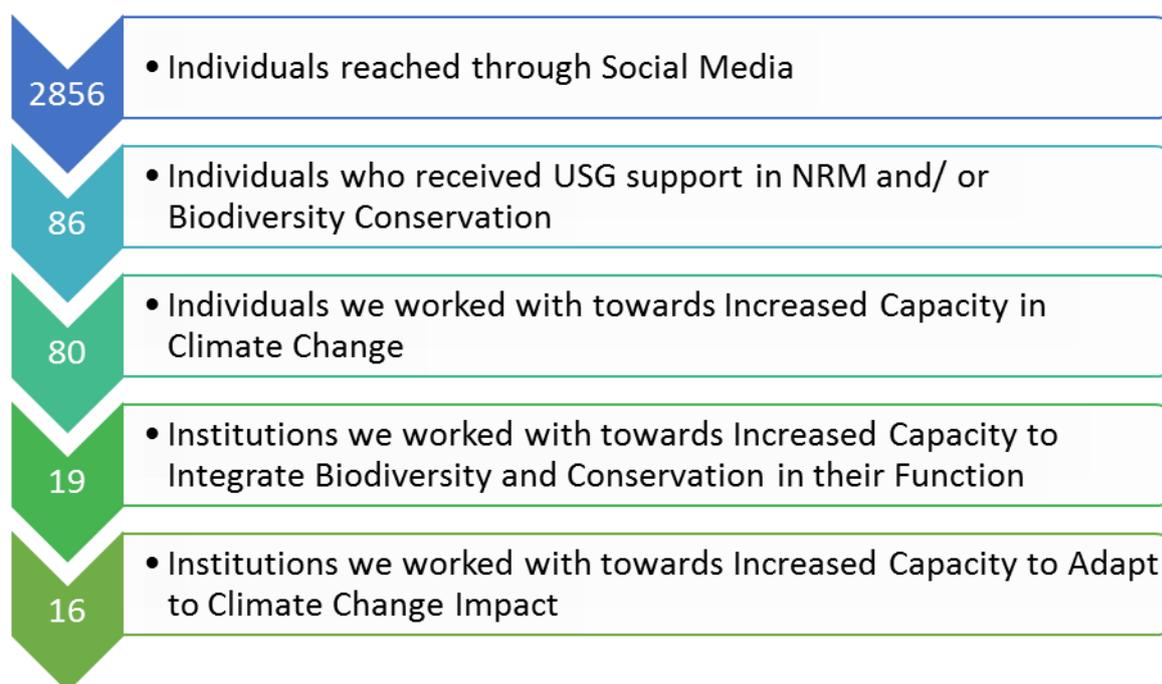


Figure 1: Quarter 2 Quantitative Results Summary

Q2 activities included ongoing strategic planning, internal and external capacity development and field-based implementation of various activities guided by the 2016 Workplan. AWARD staff members also participated in and attended various meetings, workshops and activities as invited by strategic partner institutions.

While we have made good strides towards our set targets, there is a need to review some of these targets. Phase II as a response to the learning in Phase I has challenges which are beyond AWARD's control, because the roll-out of capacity development and training at both individual and institutional levels is dependent on the availability of the stakeholders. This has proven to be a challenge, especially in the case of our government partners. Q2 has been important in giving us a more realistic foundation to help review the targets which were set based on Phase I achievements and experiences. *Any changes to targets made for the remainder of the year, will be discussed with USAID in advance.* Also contained in this report are RESILIM O financial management and governance summaries and reports.

1. BACKGROUND

The Olifants River ceased flowing for a number of days in 2005 prompting widespread concern and calls for an integrated focus on all of the easterly-flowing rivers of the Lowveld of South Africa. The Olifants catchment is a particular concern given that its heavy rainfalls make it the largest contributor to the transboundary Limpopo Basin. Despite the enabling legislative framework for water reform in South Africa since 1998, the integrity of most rivers in this catchment continues to degrade both in terms of quality and quantity. Given that all these rivers form part of international systems the implications are of wider significance than for South Africa alone. This ongoing degradation is caused by a complex interaction of factors that vary for different parts of the catchment and along the length of the river. Key drivers include rapid growth in mining, irrigated agriculture and various industries, coupled with weak governance, regulation and enforcement which, when combined with the threat of climate change, rural poverty and food insecurity particularly in Mozambique, threatens to cause widespread livelihood vulnerability, environmental degradation and intensifying conflict over resources.

Our Olifants River Basin

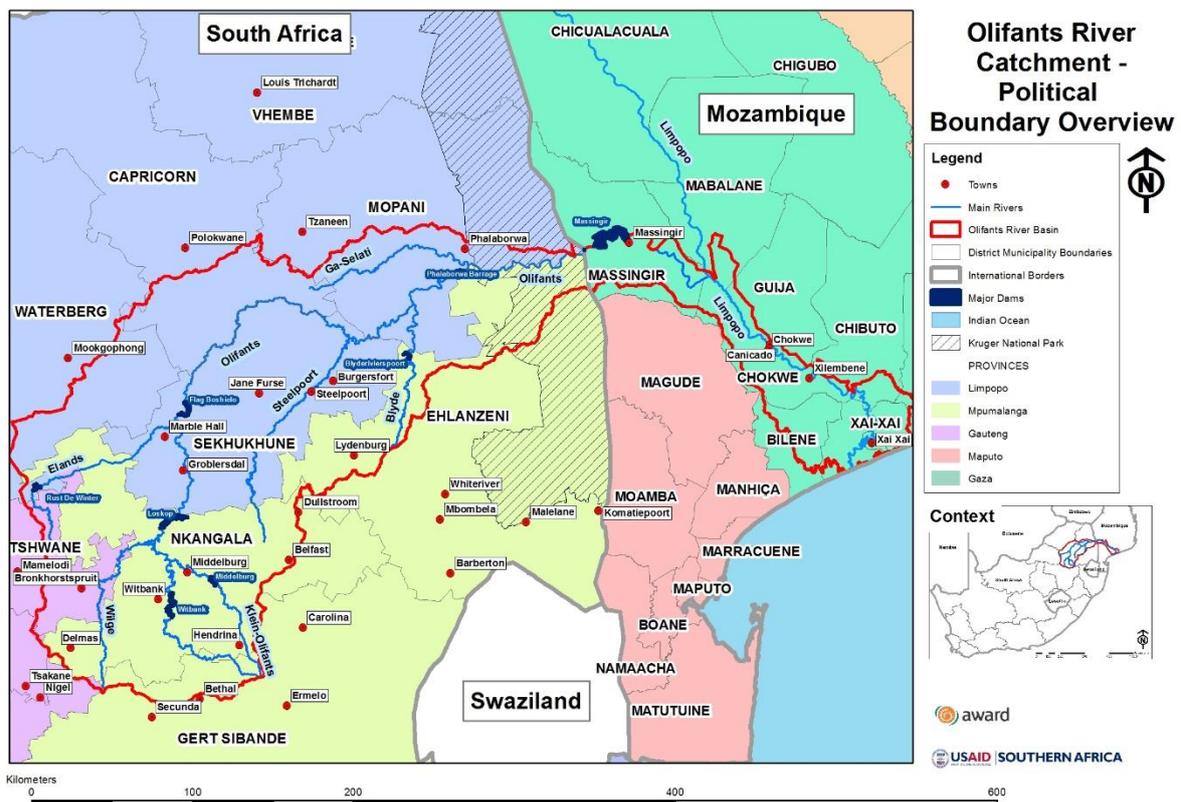


Figure 2: Map of the Olifants River Basin showing major sub-catchments

2. INTRODUCTION

While Quarter 1 (Q1) 2016, marked the beginning of Phase II of the Resilience in the Limpopo - Olifants Programme (RESILIM-O), Q2 provided further insights in determinants of 2015/16 activities. Phase II is therefore about institutionalisation, capacity development, finalising some studies and assessments conducted in Phase 1, the implementation of resilience-building endeavours in response to Phase I and supporting Phase I within the Mozambique part of the Olifants Catchment.

This report provides narratives on Q2 activities and related progress, highlighting identified and shared challenges. Informed by some Phase I findings, the report provides results in the ongoing collaborative and systemic exploration of key challenges in the Olifants Catchment.

3. PROGRESS IN KEY RESULTS AREAS

3.1 Key Area I: 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.

3.1.1 Collaborative Resilience Assessment

AWARD developed and tested the Collaborative Resilience Assessment Process (ColRAP) as an alternative to the conventional vulnerability and risk assessment approaches. In documenting the design, implementation and the assessment, AWARD staff has started to compile a ColRAP report. During this quarter, five of the eight chapters have been drafted. The completed draft chapters include introduction, overview of existing information related to vulnerability and risk, the design and implementation of ColRAP, and the findings from the assessment thus far.

Starting the Resilience assessment in Mozambique

Over the last few months, AWARD has been negotiating contracting Verde Azul, as a sub-grant, to assist with the Mozambican part of the Olifants. This quarter, with the assistance of 5 AWARD staff members, Verde Azul ran the first scoping workshop (VSTEER)¹. The VSTEER workshop is designed to encourage participants to talk about their aspects of social life as they understand it, thus developing a local picture of the context.



Figure 3: Participants during a VSTEER Workshop in Mozambique

¹ Values, Social, Technology, Environment, Economics and Politics (VSTEER) workshop which is one of the first steps in the Resilience Assessment Process (RAP)

Some early findings

- Cultural and spiritual values and practices strongly guide social life in the Zonguena area². Verde Azul reported that the traditional authorities are strong which in turn enhances social cohesion but also leads to conflict.
- The people of Zonguena also showed some awareness of Climate Change and its effects which directly impact their lives. This needs to be more fully explored.



Figure 4: Mangrove Trees

- Sanctions for transgressions appear to be quite strong although weakening. This self-compliance is evident for protecting aspects of the natural environment, especially the mangrove trees (mangroves). Other prohibitions exist especially in sacred forests. There are also projects in the area that plant forest trees and that also raise bees for honey.
- There is a high reliance on household food production for food security but this has been affected by a reduced access to water and rising salinity in the soils. Famine is increasing in the area.
- The dominance of the political party, FRELIMO is pervasive. Verde Azul is concerned that this dominance may jeopardize the implementation of projects further down the line.
- Tensions between traditional leaders are evident.

3.1.2 Collaborative modelling to support scenario thinking, planning, and acting for resilience

AWARD is employing a System Dynamics Modelling (SDM) approach as part of a collaborative initiative for building resilience in the Olifants River catchment. The approach is being piloted in the Selati sub-catchment of the Lower Olifants, with the aim of building the capacity of stakeholders to think, plan, and act under diverse scenarios of change (with a specific focus on adapting to climate change). Between January and March 2016, AWARD facilitated six workshops, which followed on from the first two workshops hosted in November 2015 (see

Table 1).

² Zonguena is a word in Changana, which is the local dialect of the Gaza Province, which means 'fertile land'. The elders named the area this because of the rich and moist soils which made the area conducive for agriculture. Unfortunately the emerging problems, mostly due to climate change, that the people face, have meant that Zonguena no longer lives up to its name.

Table 1: SDM Workshops

Workshop number	Stakeholder group(s)	Workshop date
3	Kruger National Park (KNP) and the South African Earth Observation Network (SAEON)	26/01/2016
4	Municipal managers (overseeing the operations of waste-water treatment works (WWTW) in the lower Selati)	27/01/2016
5	WWTW operators and supervisors	27/01/2016
6	Foskor Mining	04/03/2016
7	Commercial farmers and managers of the Selati River Irrigation Board	10/03/2016
8	KNP and SAEON follow-up	15/03/2016

In the workshops with Kruger National Park (KNP), the far-reaching implications of the environmental water requirements (EWRs) not being met were explored (workshops 3 and 8). The representatives from KNP and other conservation organisations perceive that there is deep resistance towards improving the state of the Selati River from stakeholders within the Selati catchment, whilst the effects of elevated phosphate and sulphate concentration levels are experienced most harmfully by stakeholders outside of the Selati. The freshwater team within KNP expressed concern that too many other stakeholders (including national government departments) were either treating the Selati system as a system to ‘sacrifice’, or lacked the strategic capacity to intervene. Through the workshops, AWARD and the participants began considering the policy and practice ‘levers’ that could result in the state of the Selati improving.

Two separate workshops were run with the Ba-Phalaborwa Municipality: first with the representatives from municipal management and then with representatives from the operational side of wastewater treatment works (WWTW). This was attended by USAID (see [Figure 5](#)).

Participants in the wastewater-focused workshops included operators, supervisors, and managers (workshops 4 & 5). A disjuncture between these stakeholders was evident in the diverse problem perspectives raised through the workshops. The challenge of limited cooperative governance and co-management between the district and local municipality is an ongoing issue recognised by the stakeholders themselves, but it also presents an opportunity for strategic intervention in the next



Figure 5: SDM Workshop at Ba-Phalaborwa Municipality

workshops with these stakeholders. Greater cooperation is needed, especially given that partially-treated waste-water is being discharged into a freshwater system with low dilution capacity.

Dilution capacity of the Selati River, seepage from unlined dams, and the variety of mitigation measures deployed within Foskor mining company were also explored in workshop 6, where AWARD presented and discussed initial versions of the simulation modelling with workshop participants.

The dilution capacity of the Selati River is affected by the activities of water users upstream, chiefly the agricultural sector which influences flow. In order to further the problem scoping, commercial farmers from the established parts of the agriculture sector in the upper Selati participated in a workshop centred on the question of ‘what does the future of the irrigation board depend upon?’ (Workshop 7). The water security issues include changing climatic conditions that stakeholders perceive as resulting in declining water availability for commercial farming, which is compounded by poorly-functioning irrigation infrastructure and mounting costs borne between national government and the farmers themselves. The next workshops will elicit the problem perspectives of the emerging and small-scale farmers in the region and aim to connect these to the established commercial farmers, irrigation management, and national government regulators.

3.1.3 Feasibility study for the Lower Olifants Custodianship Initiative (Eco-Park)

AWARD has proposed the concept of a flagship “conservancy” or custodianship project (termed the Eco-Park in previous documents) in the lower Olifants River region which would strive to bring different land users on board in terms of agreed sustainable land and water use practices, in support of CC adaptation and biodiversity conservation. It also provides an area where multiple RESILIM-O projects can be implemented in an integrated manner, allowing for the development of complementarity and synergy amongst these projects.

To this end, AWARD initiated the following activities in this quarter:

- Appointment of a consultant to carry out a feasibility study for this initiative
- Meeting with a range of stakeholders including several commercial farmers and farmer representatives, the Mametja Traditional Authority, private nature reserve representatives, Moletele Communal Property Association and the Blyde Water Users Association
- Meeting with strategic partners including Local Economic Development, Environment and Tourism (LEDET; see Box 1), DEA Natural Resource Management Programme (Limpopo region), Maruleng Local Municipality, SANParks and Kruger to Canyons Biosphere region (see below).
- Preparations for a visioning workshop involving all stakeholders and partners to be carried out in the next quarter.

The proposed initiative was positively received by most stakeholders and strategic partners. A number of challenges facing various land-use practices, impacting on water security, climate change adaptation and biodiversity conservation, were identified by the stakeholders and partners. Various opportunities and potential mechanisms to address these were also identified, including the need to coordinate efforts amongst various NGO programmes and government departments with similar objectives. This has set a good basis for bringing together all the different stakeholders and partners to develop a joint vision and to identify potential key projects under this initiative, during the next quarter, which collectively could contribute to improved land and water management, linked to peoples’ livelihoods, within this area.

In February, the AWARD team met with (LEDET) officials. The aim of the meeting was to discuss areas of mutual interest and work between LEDET and AWARD and to start the development of a Memorandum of Understanding (MoU) between the two organizations. Secondly the idea of a

“conservancy” was discussed. It is noteworthy that LEDET, as a strategic partner faces challenges (Box 1) and requests close collaboration. Specifically the Eco-park could facilitate the development of a more effective, appropriate or tenable stewardship programme for the whole province, through piloting this work in the Eco-Park footprint and utilizing complementary opportunities (the appointment of additional stewardship staff through the GEF PA programme). In other words, this has implications beyond the Eco-Park.

Box 1: Outcomes of meeting with LEDET

- LEDET is seeking support in addressing capacity constraints (both capacity of staff and number of staff)
- LEDET is reliant on external capacity and funding
- In relation to biodiversity stewardship, a lack of defined processes, tools, protocols or methodology for implementing stewardship further undermines institutional capacity.
- Internal processes at times hinder staff in getting basic things done (such as attending meetings).
- LEDET is very willing to develop a collaborative relationship with AWARD.

3.1.4 Municipal Support Initiative (MSI): capacity building campaign for municipalities to support catchment resilience

RESILIM-O is in the process of consolidating the Municipal Support Initiative (MSI) for 2 districts (Mopani and Sekhukhune) with a total of 5 Local Municipalities between them. In February 2016, AWARD worked with the Maruleng Local Municipality to collaboratively develop a MoU which provides the basis and scope for capacity development needs in the municipality. The directorates welcomed the initiative and undertook to coordinate their staff. They agreed that working together in a coordinated way would be more beneficial than working in an *ad hoc* manner as has been the case up till now. It was felt that consistency and continuity are important and that the same people should be engaged in all activities. The municipality’s willingness to learn was noted. Top management demonstrated a sense of agency in that they indicated that they would like to play an active role in the development of municipal capacity.

It was agreed that the municipality would consider a MoU proposal based on a draft provided by AWARD. AWARD agreed to finalise the MoU, with clear timelines for the process.

Setting baselines at the Ba-Phalaborwa municipality

In an ongoing process of the institutionalisation of the key RESILIM-O activities, we worked with the Ba-Phalaborwa municipality to interview relevant staff, to gather baseline information and to scope out practices within the municipality related to land use, biodiversity, waste water management and climate change. During this reporting period, staff at the Ba-Phalaborwa WWTW’s requested the AWARD team to return to verify the challenges that have been identified. AWARD staff used this opportunity to gather information to set a baseline for the workplan.

AWARD is also in the process of providing climate change and land use focussed inputs into the new Integrated Development Plan (IDP). The intention is to provide ongoing support to the municipality in this cycle for IDP development to ensure climate change integration.

The following areas were identified as areas in which the municipality would like help on from RESILIM-O through the Municipal Support Initiative (MSI):

- Improving their relationships with farmers and business land users. AWARD staff suggested that there may be opportunities to bring them on board through the disaster management plan, because the recent severe hailstorm has had a considerable impact on production.

- Engaging with the Traditional Authorities around land allocation and planning was identified as crucial for land-use planning.
- Climate change was identified as an area which they are “not doing anything about” at the moment but which they do wish to address. They particularly identified their disaster risk reduction plan in this regard.
- Communication with other role-players, including the military (the air force base is in town but the municipality finds it very difficult to work collaboratively with them due to communication protocols).
- It was evident from the collaborative process that stakeholders do not have the background for understanding and integrating climate change and biodiversity into municipal practices. Furthermore, where there is some familiarity with climate change action it often relates to mitigation and not adaptation. Some senior staff are explicit about their limited knowledge of climate change and biodiversity and consequently that they are unable to integrate these aspects in the IDP.

Findings and challenges

- Ultimately the municipalities are services-delivery focused. At the Ba-Phalaborwa Representative Forum, AWARD noted that environmental issues were not raised as an issue. No one advocated for such and issues relating to the environment were not discussed nor were environmental issues and needs reflected in the budget. We noted this as a cause for concern as it is likely that environmental issues and their link to development and livelihoods are poorly understood at local government level. When questions were raised about environmental management and sustainability, the municipality answered that they did not have power to control these issues reflecting a sense of powerlessness and lack of agency.
- Municipalities are currently characterised by inflexible structures and procedures that present an challenge to the institutionalisation of strategic adaptive management and to the process of resilience building. One practical implication, for example, is that all engagements with municipal staff need to be sanctioned by the Municipal Manager. Before Directors and other staff can even be contacted, a Memorandum of Agreement has to be in place.
- Land claims are an issue particularly when multiple Traditional Authorities claim the same land but do not necessarily share the same vision. This makes it difficult for the municipality to work with them and develop the land or develop plans that protect the biodiversity on that land.

AWARD noted issues with agency, ownership, commitment and motivation among some staff associated with reactive actions and ongoing crisis management at the level of local government. There is also little involvement by communities and traditional authorities in local-level management. Some of the consequences include the discharge of raw or undertreated effluent or waste water into the Olifants catchment. The cumulative effect of multiple dysfunctional waste water treatment works in the catchment is having a serious impact on the water quality integrity of the system and a major source of vulnerability to human well-being and biodiversity of the catchment.

3.1.5 Agricultural Support Initiative (AgSI)

As with the municipalities, AWARD will also offer support to various agricultural projects designed to strengthen resilience and adaptation through improved soil and water conservation techniques as well as associated diversification in livelihood activities. In this regard we have designed a draft support process, met with various specialist and called for sub-grants. In scoping potential projects and sub-grantees for the climate change adaptation within the agricultural sector, AWARD met with staff from Agricultural Research Council (ARC), Ukuvuna and Seeds of Light (potential grantees) as well as holding discussions with various other specialists in this field. In the following quarter, we will follow-up with the referrals and the potential partnerships for with the agricultural sub-grants.

3.2 Key Area II: IWRM- 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 KRA focuses on supporting the emerging governance of the Olifants Basin so as to secure a sustainable plan for water resources protection within IWRM. This is being done through support to the Catchment Management Agencies (South Africa and Mozambique) and forums; the development of tools and protocols in support of IWRM and training, and mobilising custodianship of residents over our water resources through monitoring. A cross-cutting theme involves understanding the potential impacts of climate change and this is being done through the incorporation of predictions and in the CoDym process (see above).

3.2.1 Olifants-Letaba CMA support for the Governance and Management of water resources of the Olifants River Catchment

Engagement with the Olifants Letaba Catchment Management Agency (OLCMA) has been challenging as evolution of the institution has been hampered by delays and changes to major national legislation. Previous monthly reports cover delays in gazetting the CMA, which is now complete.

During this reporting period, two AWARD team members attended a meeting by the Department of Water and Sanitation (DWS) on the validation and verification of water use in the Olifants-Letaba CMA. The stakeholders highlighted how some aspects of water-use registration is confusing under the 1998 Water Act and that this has introduced a suite of vulnerabilities in the management of water in the basin. In some cases water users even abstract water illegally (above their allowable quantities), resulting in less or no flow downstream thus negatively affects the biodiversity and livelihoods downstream.

AWARD continued to try to secure a meeting with the acting CEO to develop a co-operative working relationship and an MOU, but this was cancelled on two occasions. The meeting has been re-scheduled for May. AWARD did meet with the director Johan van Aswegan and secured the names of staff with whom AWARD can start to prepare an extensive capacity development programme.

The team also noted with concern the revoking of Chapters 3 and 4 functions from two CMAs (the IUCMA and the BOCMA). A network of stakeholders were engaged and in particular the Centre for Environmental Rights. Various DWS officials were made to seek clarity but this proved fruitless as they had minimal idea as to why this had been done. AWARDs concerns relate to the implications this may have for governance and the devolution of authority to CMAs. Stakeholders have already expressed disillusionment at DWS recently with confused messages and institutional arrangements

which this will serve to exacerbate. A formal letter has been written to the Minister on behalf of ourselves and others by the CER. We are awaiting a response.

Networking and supporting partners

We were involved in a number of ways, from organisation, to funding, to convening, to participating in a number of multi-stakeholder and managerial forums, listed below. Importantly at all these meetings, we presented an overview of our work on water resources protection integrated water quantity and quality monitoring tools which we have developed.

- AWARD is now also a member of the Lower Olifants River Operations Committee that includes water service providers (e.g., Lepelle Northern Water), DWS, irrigation water users, municipalities, SANParks and Ara-Sul in Mozambique. This committee meets bi-monthly to discuss the management of river flow and dam conditions in the Olifants catchment in response to the drought conditions. AWARD has a major role to play in this forum by providing insights into water availability obtained during Phase 1 of the project
- OLLI³- This forum met in February 2016 and AWARD continued to provide important inputs as noted above
- Inland Waters convened by DWS and DEA. AWARD again provided feedback and inputs at the quarterly meeting in March 2016

In addition:

- AWARD has started working in collaboration with DWS in terms of monitoring river flows. For example we visit to Oxford Bridge (B7H007) along the Phalaborwa-Hoedspruit road for the past three months to take water levels at weekly intervals in support of DWS hydrology staff in Pretoria.
- In February 2016, AWARD attended the Great Limpopo Trans Frontier Conservation Area (GLTFCA) Integrated Livelihood Diversification Strategy Workshop⁴. The workshop was attended by numerous stakeholders to discuss a collective vision and present the draft strategy

3.2.2 Developing tools and protocols in support of water resources protection and IWRM

INTEGRATED WATER RESOURCE DECISION-SUPPORT (INWARDS) DASHBOARD

Assessing water quality for an entire catchment can be time consuming and requires intermediate data processing skills. The Microsoft Excel based water quality analyses tool developed in 2015, was based on the need for a user friendly interface and experience (

Figure 6). This would allow any user regardless of their data processing skills to rapidly assess the water quality for a specific monitoring site in the Olifants River Basin (ORB). When one takes into account that there are currently 452 Department of Water Affairs and Sanitation (DWS) monitoring stations within the ORB, one can see the value and the need for a **rapid assessment tool**. The water quality assessment tool allows the user to view water quality data as load duration curves, concentration duration curves, seasonal concentration box and whisker plots as well as exceedance tables.

³ Olifants Letaba Luvuvhu and Inkomati Forum convened by DWS to support sharing and networking

⁴

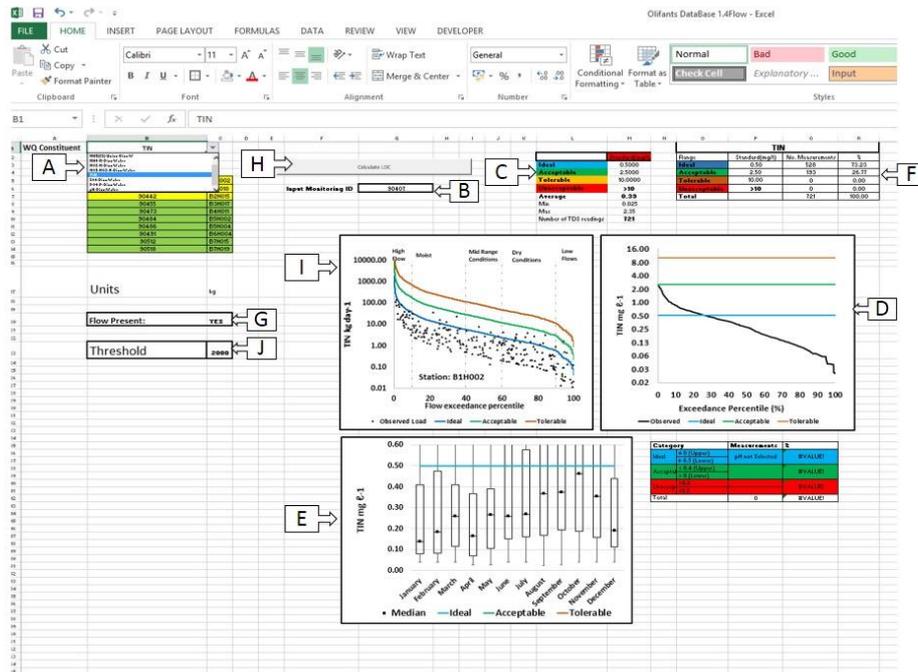


Figure 6: Elements of a visual, user-friendly interface of the water quality analyses tool for the Olifants River Basin.

Whilst the initial user-friendly dashboard created was useful, there are a number of limitations. Most importantly we wanted to track compliance with dynamic benchmarks (e.g. environmental water requirements or EWRs) that are set for water resources protection and designed to **maintain biodiversity and ecosystem services**.⁵ Also we wanted to incorporate an **early warning system** that has the capability of sending messages to key stakeholders, regarding flood warnings or EWR flow non-compliance. This is being designed for use by key stakeholders (OLCMA- see above training) and those that play a ‘watchdog’ role such as SanParks.

Therefore an alternative approach was designed during the last quarter and moreover, was further developed into an **all-inclusive dashboard**⁶ in support of water resources protection within Integrated Water Resources Management. This included: Flow, Water Quality, Rainfall, Dam Level and Climate Information and is the first of such a kind in the country.

- The first dashboard developed was a desktop application known as the Integrated Water Resource Decision-Support dashboard (InWaRDS) (see Figure 7). The InWaRDS dashboard boasts the capabilities of a rapid overview of EWR flow compliance (A), rapid dam level assessment (B), flow gauge time series compliance analysis for historical and near-real-time data (C) and a water quality assessment tool (D).

⁵ Resource Quality Objectives (RQOs) for flow (Environmental Flow Component of the RQOs) or Resource Water Quality Objectives (RWQOs) for water quality.

⁶ This has required extensive programming and data integration.

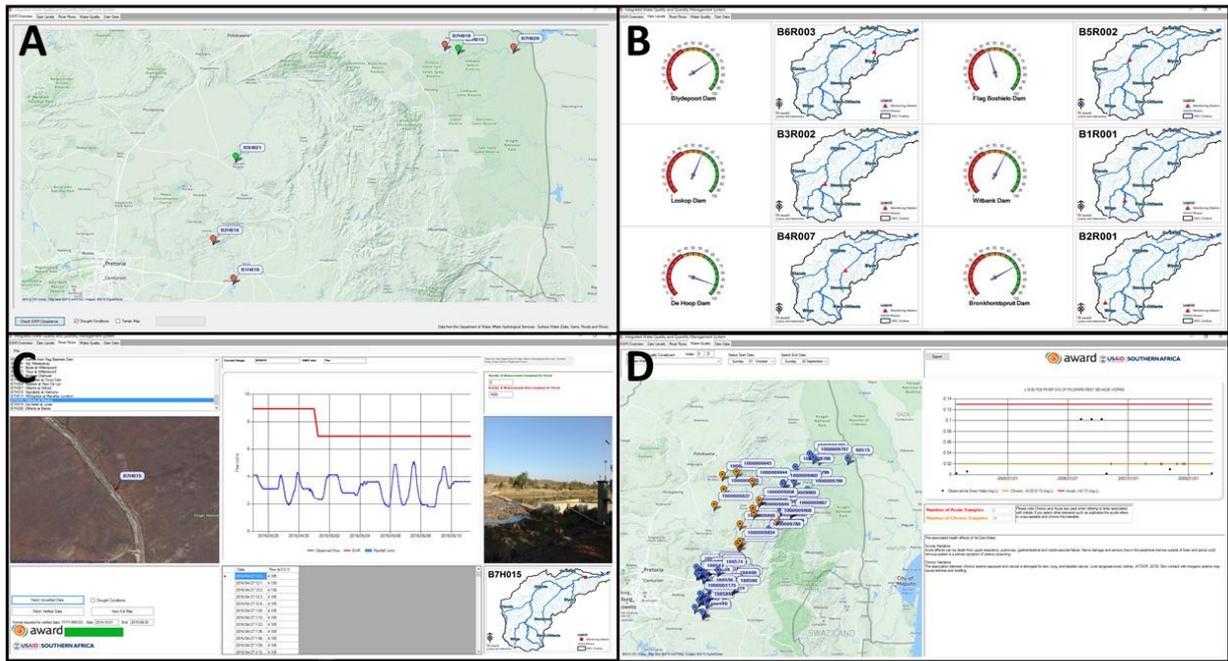


Figure 7: The InWaRDs dashboard: A: EWR compliance overview where RED= non-compliance, B: Rapid dam level assessment, C: Flow and EWR analysis (in the case non-compliant), D: Water quality compliance platform.

- Mobile app: The desktop InWaRDs dashboard is a key innovation of the project- developed as a tool to guide water resource managers in making short and long term strategic adaptive operational decisions. However, a limitation is that decision makers and stakeholders may not always be at their desktops. Therefore, as reported in the last quarter, a reduced functionality mobile application was mooted and has been developed during this quarter. This is known as Flow Tracker (see [Figure 8](#) [Figure 8: Mobile Flow Tracker app](#); features include: B) Near-real time compliance monitoring and flood alerts, C) Current Dam Level Status, D) Precipitation Forecasts. A). This android application allows the user to
 - o view the current flows at all gauges in the catchment;
 - o view compliance of the observed flows against EWR standards ([Figure 8 B](#));
 - o view the current status of dam levels ([Figure 8 C](#)) in the catchment;
 - o View projected precipitation for up to two weeks in advance ([Figure 8 D](#)).
 - o In addition, it allows the user to share the information through social media platforms such as WhatsApp (a WhatsApp group currently exists for the river operations of the lower Olifants River Catchment) or/and email.

Future developments will include programming warning triggers into the code for early flood detection as well EWR compliance, that once surpassed will push through a warning notification on the user's cell phone that has the app installed.

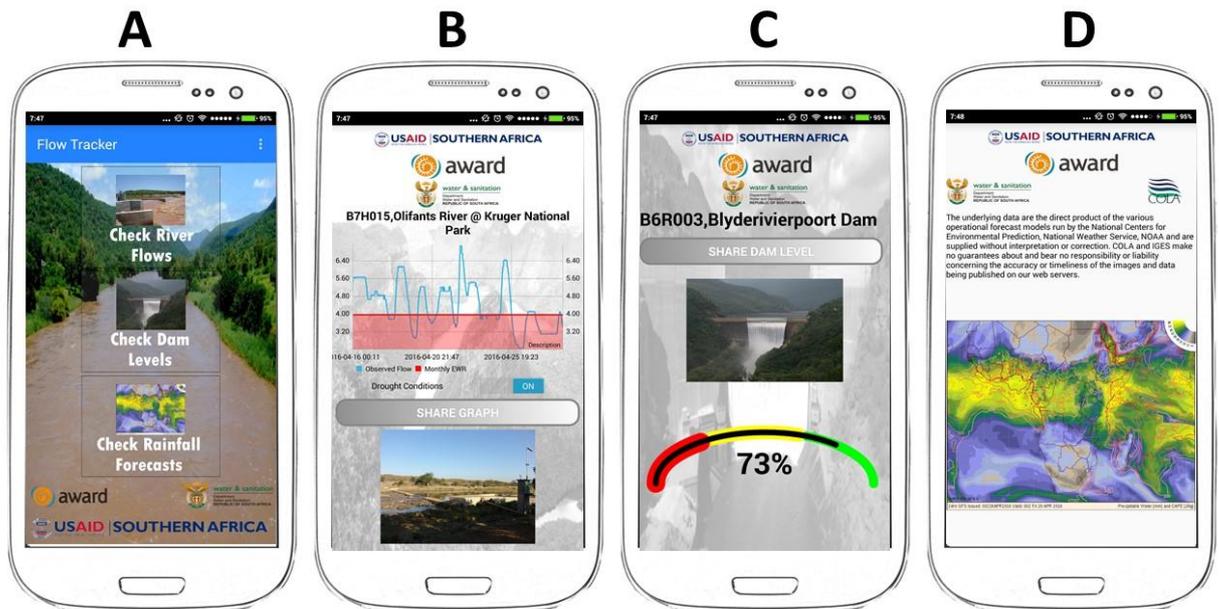


Figure 8: Mobile Flow Tracker app; features include: B) Near-real time compliance monitoring and flood alerts, C) Current Dam Level Status, D) Precipitation Forecasts.

In summary the dashboard and application have made significant progress and currently an information dissemination agreement is being developed, along with a number of user guides and protocols for rapid response in regards to meeting EWRs as well as flood warnings. Both of the aforementioned support tools will be included in the training the OLCMA (see above) The suit of tools have been presented this quarter at the Inlands Interdepartmental Meeting as well as to the Lower Olifants River Operation Committee (LOROC) meeting.

3.2.3 Integrated Water Quality and Quantity Modelling for Water Resources Protection

To manage water resources for their protection and sustainable use, an integrated monitoring and management system is needed. This is currently not available in South Africa and to this end AWARD and this has therefore been a major focus for KRA2 in the RESILIM-O workplan. This is particularly true for integrating water quantity and quality given that they should not be considered separately (one can have compliant flows but with poor water quality for example).

A start-up site, namely the Ga-Selati sub-catchment, was selected and significant progress with the calibration of the water quality model has been made in this quarter. Furthermore, the hydrological modelling for the three selected *climate change scenarios*⁷ has been completed.

As part of calibrating this system⁸, to ensure high quality and reliable outcomes for wider use by the OLCMA and others, there is a need to install data loggers for flow and water quality at key sites in the Selati. This is because data needs to be verified in real time, but as has been noted nationwide, the gauges⁹ often malfunction due to poor O&M (it is hoped this will change once the OLCMA is established). Progress to date includes the drafting of the MoU between AWARD and DWS to support the installation of additional data loggers at gauging stations owned by DWS and to specify

⁷ MPI-ESM-LR-rcp85, MIROC-ESM-rcp85 and CanESM2-rcp85

⁸ AWARD research (RESILIM-O) has shown regular non-compliance with EWRs compromising environmental sustainability and catchment resilience

⁹ For example, Oxford Weir, a key site, has not functioned for three months

the hand-over plan of the data loggers at program closure. Also the team has reviewed the specifications for the data loggers from experts in DWS; drafted the motivation to USAID and has been involved in the selection of sites together with DWS and SANParks. Preliminary sites identified are based on the international and national importance.

Finally, the entire Olifants water quality model setup has begun with the hydrological and yield model setup is now complete. The Olifants water quality model will be used to calculate load contribution from each sub-catchment, allowing us to prioritise intervention strategies through categorising the *highest risk areas* in the catchment according to the quantity of pollutant contributed.

3.2.4 Building custodianship through river health monitoring

The AWARD bio-monitoring team continued to engage with private nature reserve managers to introduce the bio-monitoring initiative and continued with sampling, together with the monitor trainees. Thirdly, the accredited SASS and fish training was started with 9 monitors appointed by the reserves.

A number of challenges that have been identified by stakeholders for the Blyde and are noteworthy:

- Dam releases from Blyderivierpoort Dam upstream lead to fish kills from thermal shock
- Inefficiency of the Working for Water program.

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

3.3.1 Blyde Ecosystem Restoration & NMRP support project

In this quarter work continued on the Blyde Ecosystem Restoration Project and on support for co-management as follows.

In 2015, AWARD facilitated discussions on possible responses and strategies to address major challenges facing the effective work of state restoration programmes (of which there many¹⁰) in the biologically significant Blyde area. In short, the impact of these challenges are that the extent of invasive alien plants is not improving and possibly worsening significantly, thus threatening biodiversity and water security.

In response, AWARD undertook two key steps in this quarter: an internal discussion with role-players and stakeholders, and a meeting with the same role-players along with senior DEA staff (Deputy Director General (DDG) and Chief Director (CD) from National Department of Environmental Affairs (DEA) Environmental Programmes branch), under which all the NRMPs fall. For the former, AWARD called all stakeholder groups together (

[Figure 9](#)) to discuss the identified challenges and responses collectively, and to develop a preliminary collaborative strategy for restoration in the Blyde to be presented to the DDG and CD.

¹⁰ Working for Water, the High Altitude Teams, Working on Fire, MTPA-SANParks BSP, K2C SANParks BSP and DAFF



Figure 9: Noah Konaite, MTPA-SANParks BSP, and Ronald Mugwedi, WfW Mpumalanga, comparing the invasive alien plant clearing areas of their respective projects in the Blyde, and discussing how to resolve areas where they overlap. This was at a Blyde NRMP meeting which AWARD held on the 12th January 2016.

In order to secure the support of all role-players (see footnote) AWARD invited Dr Guy Preston and Dr Christo Marais (Figure 10) to visit the area and to discuss challenges with the role-players (DDG and CD respectively). Additionally we aimed to draft an outline for a preliminary collaborative strategy for restoration in the Blyde. The meeting was very successful and stakeholders indicated a willingness to engage and to work collaboratively. A key set of steps within a broad strategy for this project were agreed upon with an endorsement from the DDG and CD. During further communication between AWARD and DEA following the meeting, it has been formally agreed that AWARD would fulfil the role of coordinator amongst the different NRMPs in the Blyde, and lead the implementation of this strategy.



A.



B.

Figure 10: Dr. Sharon Pollard and respectively, Dr. Guy Preston (A), Deputy Director General, Environmental Programmes, DEA, and Dr. Christo Marais (B), Chief Director of Natural Resource Management Programmes, DEA, during a field visit to the Blyde Catchment discussing some of the challenges and potential strategies to address Invasive Alien Plant control and restoration in the area.

This is a significant step forward in the implementation of this project, highlighting the support and commitment from DEA at all levels of government to ecological restoration in the Blyde Catchment, which in turn will have positive implications for resilience in the Olifants Catchment.

3.3.2 Lekgalameetse co-management support project

In the past year, AWARD has been engaging with the Lekgalameetse co-management process. AWARD had noted in 2015 that most CPA members have a limited understanding of co-management. In this regard, a number of steps have been taken:

Workshop aimed at further developing a shared understanding amongst the Lekgalameetse co-management stakeholders of the process of developing and implementing co-management, using the participatory Activity Systems analysis (based on Cultural-Historical Activity Theory (CHAT)).

The workshop was attended by USAID (

- [Figure 11](#)).
- The Lekgalameetse CPA had also met and outlined their main capacity needs in terms of co-management. There was clearly an eagerness to learn and develop further both by the CPA and LEDET who also requested that AWARD run a similar workshop at a provincial level to help facilitate development of co-management across the province.
- At a meeting hosted by AWARD, the chairperson of the CPA requested that a MOU be drawn up with AWARD to take things forward. This has been done
- Meeting between AWARD and LEDET in February 2016 which laid the foundation for working together and to start the development of a MoU. Issues around co-management (particularly beneficiation and the green economy) were discussed.



Figure 11: Doreen Robinson of USAID addressing stakeholders at Lekgalameetse

3.3.3 Blyde co-management & stewardship support management

During the course of this reporting period, AWARD held a meeting and a number of further interviews with CPA committee members involved in co-management of the Blyde River Canyon Nature Reserve (Blyde NR) currently managed by the Mpumalanga Tourism and Parks Agency (MTPA).

One of the four CPAs involved, the Maorabjang CPA has claimed agricultural land, forestry land and portions of the Blyde NR through the land reform process.

Through these meetings and interviews AWARD has started to develop a better understanding of the context of land claims lodged in the Blyde area, the structure of the CPA, their aims under co-management, and future land-use plans on areas claimed outside the Blyde NR.



Figure 12: AWARD Stakeholder assistant with stakeholders during the CPA interviews

Findings

- Some of the 4 CPAs involved have very large memberships, spread discontinuously over a large area.
- Most of the CPAs have larger areas of claimed land outside the Blyde NR, and hence most of their interest in terms of land development and therefore land management is outside the protected area.
- The Project Advisory Committee (PAC) composed of representatives from the 4 CPAs is an umbrella body for co-management related aspects.

The above engagements have highlighted the complexity of the situation in the Blyde NR in terms of developing co-management, and AWARD is strategically considering how best to support improved natural resource management in the Blyde.

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

Work on support for climate change adaptation has continued in earnest in Phase II. This has included integrating climate change into Disaster and Risk Management, and designing and embedding climate change into RESILIM-O projects. Progress is summarised below.

3.4.1 Integrating climate change (CC) into Disaster Risk Reduction (DRR)

This work has involved Mopani District Municipality and the Maruleng Local Municipality.

BUILDING RESPONSIVITY TO CLIMATE CHANGE: SUPPORTING MOPANI DISTRICT DISASTER MANAGEMENT ADVISORY FORUM (DMAF) WITH A QUARTERLY CAPACITY BUILDING SERIES

The Mopani DMAF is a mechanism for vertical and horizontal integration and is attended by national, provincial and local government. External parties from civil society or the private sector are invited to attend and contribute. We attended the meeting to introduce the concept of climate variability and change, presented on El Niño and discuss the utility of early warning for risk reduction planning for droughts. We also used the opportunity to gather baseline data (see below).

SUPPORT FOR THE RELAUNCH OF THE MARULENG LOCAL MUNICIPALITY DISASTER MANAGEMENT ADVISORY FORUM (MLMDMAF)

During this quarter, we met with the Disaster Manager for the Maruleng Local Municipality to make concrete plans for the relaunch of the MLMDMAF. This forum has launched in 2015, but suffered a pause due to limited capacity support. We are keen to provide capacity support because we regard the MLMDMAF as a platform for building preparedness and responsiveness to climate change through collective planning and actions.

3.4.2 Update information and embed climate change into RESILIM -O projects.

PARTICIPATION AT STRATEGIC MEETINGS AND NETWORKING

- **A national framework for climate change vulnerability and risk assessment**
 WE attended a workshop organized by the CSIR, ACIDI and CSAG to exchange knowledge, research and experiences on climate vulnerability assessments to strengthen the approaches taken at a national, provincial and local scale in South Africa. We presented the Collaborative Resilience Assessment Process that it has developed and implement and contributed to discussions for the development of a national framework for vulnerability assessments and recommendations (for the Third National Communication).
- **A national framework for Ecosystem-based Adaptation (EbA)**
 We also attended a workshop organised by the Department of Environmental Affairs (DEA) and the South African National Biodiversity Institute (SANBI) to engage the biodiversity and climate change sectors on developing a draft national strategy framework and implementation plan for **ecosystem-based adaptation** (EbA) in South Africa. This policy instrument will have an impact on the institutional setting for climate change and biodiversity.
- **Mpumalanga Let's Respond Toolkit Training Workshop: Integrating climate change adaptation into the Integrated Development Plans**
 We attended a training workshop conducted by the South African Local Government Association (SALGA), DEA and the Mpumalanga Department of Agriculture, Rural Development, Land and Environmental Affairs (DARDLEA) on the Let's Respond Toolkit¹¹ for the staff from district and local municipalities in Mpumalanga. This Toolkit is foundational to our activities with local government (see MSI) as it introduces climate change adaptation into an established municipal process. AWARD's capacity development through the MSI will fill the gap between higher level focus of "SALGA process" and local municipalities for implementing adaptation.

DURING THIS REPORTING QUARTER AWARD ALSO UNDERTOOK THE FOLLOWING ACTIVITIES:

- **Initial scoping and baseline assessment for embedding climate change into Integrated Development Plan and capacity development for biodiversity in Ba-Phalaborwa**
 The team visited the Ba-Phalaborwa Local Municipality¹² to scope out capacity development needs for climate change and biodiversity. AWARD tries to align the capacity development with the Local Government Climate Change Support Programme (LGCCSP) that is being implemented by DEA and SALGA (see above)).

¹¹ The Let's Respond IDP Toolkit was developed by SALGA, DEA and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) to assist municipalities with integrating climate change into municipal IDPs.

¹² Ba-Phalaborwa is one of the three pilot municipalities where AWARD is planning to provide capacity development for climate change adaptation.

- **Climate change adaptation options, policies and projects: A review at global, national and Olifants Catchment levels**

During this quarter, we completed the first draft of a review on the climate change adaptation options, policies and projects. The purpose was to provide a basis for understanding the international, national and provincial discourse and development on South Africa's climate change adaptation, and how this context can inform our work. This report revealed significant institutional barriers for implementing adaptation and opportunities for collaboration with other adaptation projects in the Olifants Catchment.

- **Development of baseline questions relating to climate change**

During this quarter, project managers and technical staff, including those working in KRA4, met with members of the Monitoring, Evaluation, Reporting and Learning (MERL) team, specifically Dr Eureka Rosenberg and Dr Fredrick Govere, to formulate the baseline questions on climate change.

3.4.2 Integrating climate change (CC) into Disaster Risk Reduction (DRR)

Building responsiveness to Climate Change: supporting Mopani District Disaster Management Advisory Forum (DMAF) with a quarterly capacity building series

The Mopani DMAF is a mechanism for vertical and horizontal integration and is attended by national, provincial and local government. External parties from civil society or the private sector are invited to attend and contribute. AWARD attended the meeting to introduce the concept of climate variability, presented on El Niño and discuss the utility of early warning for risk reduction planning for droughts. AWARD also used the opportunity to gather baseline data.

Planning for the relaunch of the Maruleng Local Municipality Disaster Management Advisory Forum (MLMDMAF)

During this quarter, we met with the Disaster Manager for the Maruleng Local Municipality to make concrete planning for the relaunching of the MLMDMAF. This forum has launched in 2015, but has entered into a hiatus due to limited capacity support. We are keen to provide capacity support because we saw the MLMDMAF as a platform for building preparedness and responsiveness to climate change through collectively planning and actions.

3.4.4 Update information and embed climate change into RESILIM -O projects.

A national framework for climate change vulnerability and risk assessment

We attended a workshop organized by The CSIR, ACIDI and CSAG to exchange knowledge, research and experiences on climate vulnerability assessments in order to strengthen the approaches taken at a national, provincial and local scale in South Africa. We presented on the Collaborative Resilience Assessment Process that it has developed and implement. At the workshop, AWARD contributed to the discussion of the principles and guidelines that should steer the development of a national framework for vulnerability assessments and recommendations for how to best frame the vulnerability component of the Third National Communication.

A national framework for Ecosystem-based Adaptation (EbA)

Through invitation, we participated at a workshop organised by the Department of Environmental Affairs (DEA) and the South African National Biodiversity Institute (SANBI) to engage the biodiversity and climate change sectors on developing a draft national strategy framework and implementation plan for ecosystem-based adaptation (EbA) in South Africa. The workshop provided us with an opportunity to contribute to the development of a national policy instrument that will have an

impact on the institutional setting for climate change and biodiversity. AWARD was asked to submit comments on the draft strategy framework in the following quarter. Such contribution is an institutionalization of climate change and biodiversity conservation.

[Mpumalanga Let's Respond Toolkit Training Workshop: Integrating climate change adaptation into the Integrated Development Plans](#)

Two AWARD staff members attended a training workshop conducted by the South African Local Government Association (SALGA), DEA and the Mpumalanga Department of Agriculture, Rural Development, Land and Environmental Affairs (DARDLEA) on the Let's Respond Toolkit for the staff from district and local municipalities in Mpumalanga. The Let's Respond IDP Toolkit was developed by SALGA, DEA and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) to assist municipalities with integrating climate change into municipal IDPs. This Toolkit is foundational to AWARD's activities on developing adaptive capacity of our stakeholders in local government because the Toolkit introduces climate change adaptation into an established municipal process. This will be done in collaboration with the various support initiatives being implemented by national and provincial departments to mainstream climate change adaptation into local government. AWARD's capacity development through the MSI will fill the gap between these initiatives which operate at levels higher than the local municipalities, which can play an important role in implementing adaptation.

[Initial scoping and baseline assessment for embedding climate change into Integrated Development Plan and capacity development for biodiversity in Ba-Phalaborwa](#)

During this reporting quarter, we visited the Ba-Phalaborwa Local Municipality to scope out capacity development needs for climate change and biodiversity. Ba-Phalaborwa is one of the three pilot municipalities where AWARD is planning to provide capacity development for climate change adaptation. AWARD tries to align the capacity development with the Local Government Climate Change Support Programme (LGCCSP) that is being implemented by DEA and South Africa Local Government Association (SALGA). As such, it was important for AWARD to inform the stakeholders of the LGCCSP and how the intervention by AWARD is related to it, as well as to plan for the capacity development in a collaborative manner that takes the local context into consideration.

[Climate change adaptation options, policies and projects: A review at global, national and the Olifants Catchment levels](#)

During this quarter, AWARD completed the first draft of a review on the climate change adaptation options, policies and projects. The purpose of this report was to provide a basis for understanding the international, national and provincial discourse and development on South Africa's climate change adaptation, and how this context can inform AWARD on addressing one of RESILIM-O's main objectives to reduce vulnerability of the Olifants Catchment to climate change. This report revealed significant institutional barriers for implementing adaptation and opportunities for collaboration with other adaptation projects in the Olifants Catchment. It is within this context that AWARD developed the adaptation project activities for RESILIM-O and is implementing these activities to build the climate resilience of the SES in the Olifants Catchment.

[Development of baseline questions relating to climate change](#)

During this quarter, project managers and technical staff, including those working in KRA4, met with the MERL team on numerous occasions to develop the baseline questions. As a result, a set of 10 generic baseline questions were adapted for climate change and various versions of the questions were developed to fit the different context and stakeholders.

Initial scoping visits with potential sub-grantees for the Agriculture Support Initiative (AgSI)

In scoping potential projects and sub-grantees for the AgSI, an AWARD staff met with an expert in conservation agriculture and an agro meteorology researcher at Agricultural Research Council (ARC). During the meeting with the former, AWARD obtained referrals for an individual who specialises in working with small-scale farmers on conservation agricultural practices, which can enhance the adaptive capacity of these farmers to a changing climate. At the meeting with the later, the researcher shared his lessons learned from working with rural small-scale farmers on seasonal meteorological forecasts and informed AWARD that ARC is running a climate smart agriculture project in one of the potential project sites that AWARD has identified. In the following quarter, AWARD is following up with the referrals and the potential synergy with the CSA project that is implemented by the ARC.

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

In order to ensure good programmatic governance through developing and maintaining organisational capacity and effectiveness through tenable management systems and sub-contract management, AWARD's Board of Directors reviewed AWARD's and the RESILIM-O programme organograms during a Board Meeting in January 2016. Draft organograms have been developed for further internal input and consequent adoption. The major thrust in the exercise was also to create a balance between AWARD's core mission as an organisation and RESILIM-O's objectives in relation to other projects. The review process and input also considered Phase II of the programme activities so as to improve integration of activities as well as embrace further our adaptive management approach to programme management.

We have grown to appreciate the fact that a conducive working environment is in itself an enabler for creative thinking. We are happy to report that we relocated to spacious offices in Hoedspruit and we are now able to accommodate all project teams in one building. This has significantly improved operational efficiency. We also considered the fact that there will be an increase in staffing i.e. interns, grants and contracts unit etc. The rapid growth will call for continued reflection on programme governance.

A total of 19 staff members were trained through an in-house 2 day Intermediate and Advanced MS Excel Training. This was a strategic management response to identified gaps in terms of MS Excel competencies among both junior and senior staff. We see such interventions as key and an on-going exercise of strengthening human resources capacities to effectively manage the programme.

Significant progress has been made in the establishment of a Grants and Contracts Management Unit. This will be a dedicated unit within Award that will manage all external contracts and the sub granting component of the RESILIM-O programme. Interviews for the Grants and Contract Manager, Accountant, a Finance Officer and an Administrative Officer have been successfully completed and all will be on board at the beginning of Q3.

In the meantime, we have completed a Grants Management Manual which will guide the Unit's operations. Through our on-going strategic planning sessions, we were able to identify key programme areas for sub granting with an understanding that AWARD's internal capacity is limited to efficiently and effectively achieve all our targets and objectives. We therefore managed to draw up a Call for Expressions of Interest covering about 11 programme activities. We hope continue the sub granting process in Q3 and hopefully have a Kick-Off Meeting at the beginning of Q4.

We continue to nurture our partnership with Verde-Azul in Mozambique whose contractual agreement at present is that of short-term consultancies. We believe this partnership has now matured to the extent that the time is ripe to engage on a long-term contractual relationship. We have therefore begun the administrative paperwork for a Fixed Award Amount (FAA) to run from June 2016 to December 2017. It is our hope that this will give them the expected flexibility to proactively raise the profile of RESILIM-O programme objectives on the Mozambican portion of the Olifants. As part of strengthening programmatic governance, we continue to share resources and information pertaining to our work i.e. AWARD and Verde-Azul. This has been achieved through weekly telephonic technical assistance and or progress update meetings, site visits in which our technical team spends time in the field in Mozambique learning from each other. More so, we begun the process of jointly developing a transboundary communications strategy for the Olifants.

An on-going setback for the programme has been the lack of success in finding suitable candidates for the unfortunately, NRM Biodiversity Senior Manager and Co-management Facilitator. However, in the case of the latter, we continue to find means and ways of accelerating the issuance of a work permit by the South African consulate in Zimbabwe. We envision both positions being filled in at the end of Q3 if not early Q4.

While we had 5 interns in Q1 transitioning to full time employment within AWARD and others to other sectors, we are equally pleased to report that we have created **8 internship vacancies** for new graduates. We view this as our contribution to the broader environmental sector in South Africa. This will enhance the work of senior managers and equally benefit interns at a personal and professional level thereby contributing to a broader NRM human resources base in South Africa and the region.

Internship and Mentoring Programme

A constant challenge identified in Phase I was the scarcity of skilled personnel in the climate change, water and biodiversity sectors. For that reason RESILIM-O-O as part of the CD phase has embarked on an Internship Programme that aims to provide an educationally sound professional development programme for new entrants, unemployed or underemployed graduates in NRM related positions. Specific areas to engage interns within the RESILIM-O Programme were identified and included community facilitation, bio-monitoring, integrated water resource management, co-management, natural resource management, local government support. The selection and recruitment process will commence in the Q3 with hope that successful candidates will start on the 1st of June 2016.

Through the internship initiative, RESILIM-O's intention is to strengthen organisational capacity to work with young people entering the field; encourage them to stay and to be not only effective functionaries, but also dynamic, transformative leaders in the workplace - thus improving resilience in the face of challenges like climate change. With this in mind, a comprehensive, year-long, semi-structured interns' learning programme has been designed. The programme will include face to face group sessions with experts and facilitators, individual mentoring; and field work as well as collaborative activities with partner organisations. To help set up and run this project, RESILIM-O has sought the expertise of Drs Eureta Rosenberg and Glenda Raven. The two have extensive experience in running internship programmes. Dr Charles Chikunda is the internal coordinator.

Environment Monitoring and Mitigation Process

During this reporting period, we continued to monitor and evaluate all our activities including all activities delivered sub contracts to ensure that they are consistent with our Environmental Monitoring and Mitigation Plan. We are happy to report that there has not been any negative impacts caused as a result of implementing RESILIM-O Programme activities.

The EcoPark feasibility study, once completed, will seek to also inform in the identification of any potential risks that will need mitigation. Therein we will revise the Plan if needful, and involve USAID in the process.

3.5.1 Monitoring, Evaluation, Reporting and Learning (MERL)

In the quarter January - March 2016 the MERL team consisted of:

- Mr Derick du Toit (Assistant director and senior manager),
- Dr Eureka Rosenberg (Research Associate and MERL advisor) (based in Cape Town)
- Dr Fredrick Govere (MERL manager)
- Ms Jane Burt (Consultant and process narrator) (based in Dullstroom from 2016)
- Ms Vhutshilo Mudau (MERL officer)

The challenges of the quarter include:

- The new MERL manager finding optimal ways of working with staff who are very busy with program implementation; this has resulted for example in him setting targets without staff involvement and hence overestimates based on a lack of understanding of what realistic capacity development targets would be.
- The full MERL team finding optimal ways to work with each other as a dispersed team, with some new members, and having a clear ‘chain of command’.
- Completing the quarterly report on time and to suitable standards of coverage and quality, when staff struggled to submit their content on time, and the MERL manager lacked adequate program knowledge.
- A particular challenge remains working with quantitative indicators and providing a quantitative sense of programme progress and achievements; the tables below are an example. Staff are concerned about reporting people who have been involved in capacity development initiatives as ‘having been capacitated’ as some of the chosen indicators would have it, given that the nature of capacity development is not an once off event or even easily defined, i.e. “after 3 workshops x will have increased capacity to respond to the impacts of climate change”.

Achievements of the quarter include the development of a new ‘theory of change’ (ToC) diagram that reflects the relationships between the program outcomes and indicators. This is a simple version of the ToC that easily communicates with newcomers or outsiders, but also adequately reflects for staff the high level trajectory of the program. The ToC will be included in an update of the MERL framework in Q3. The MERL team discussed with project leads whether they needed baselines for monitoring progress (not appropriate for all projects). The following projects were identified as needing baseline data: Climate change integration; Custodianship/ biomonitoring; Co-management; Governance (MSI); and CoDyM. Ten generic baseline questions related to individual capacity and institutional strengthening were developed and shared with project leads for adaptation in their projects. In 4 of the 5 projects, an evaluation team member will help the project lead to gather appropriate quantitative and qualitative data.

The following quantitative results reflect AWARD's efforts of the quarter. What is significant on the graphs below is an increase in the two *natural resources management and or biodiversity conservation indicators*. Both the number of individuals trained and the number of institutions involved have significantly increased. Also important to note is the increase in the number of females reached on the same indicator. With regards to the climate change indicator, it is difficult to tell why there has been a drop in terms of number of individuals with developed capacity. On a more positive note however, *the number of institutions with increased capacity to adapt to impact of climate change* increased significantly.

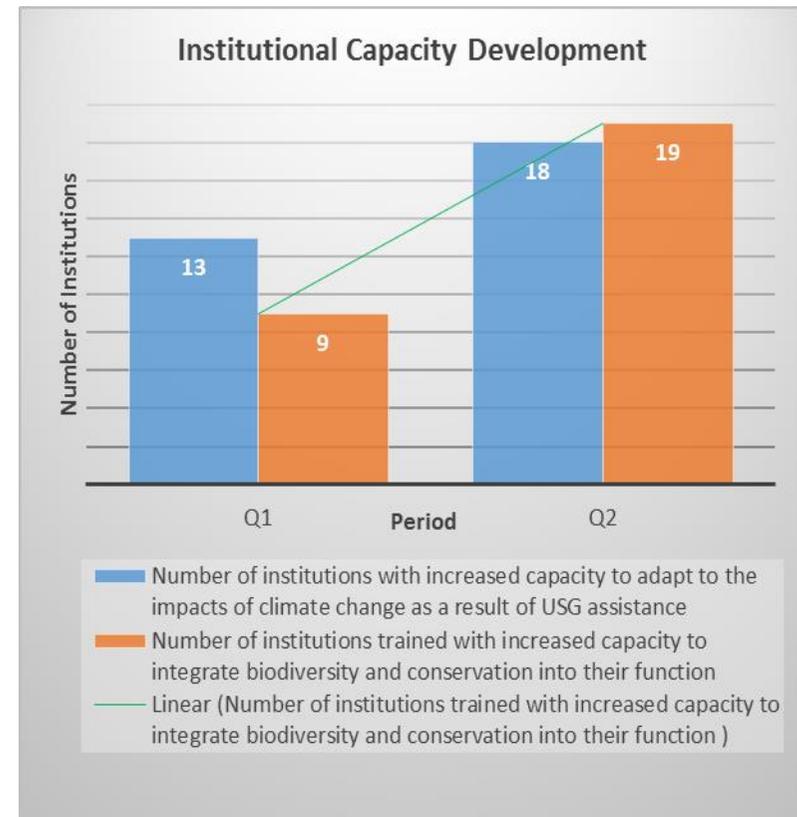
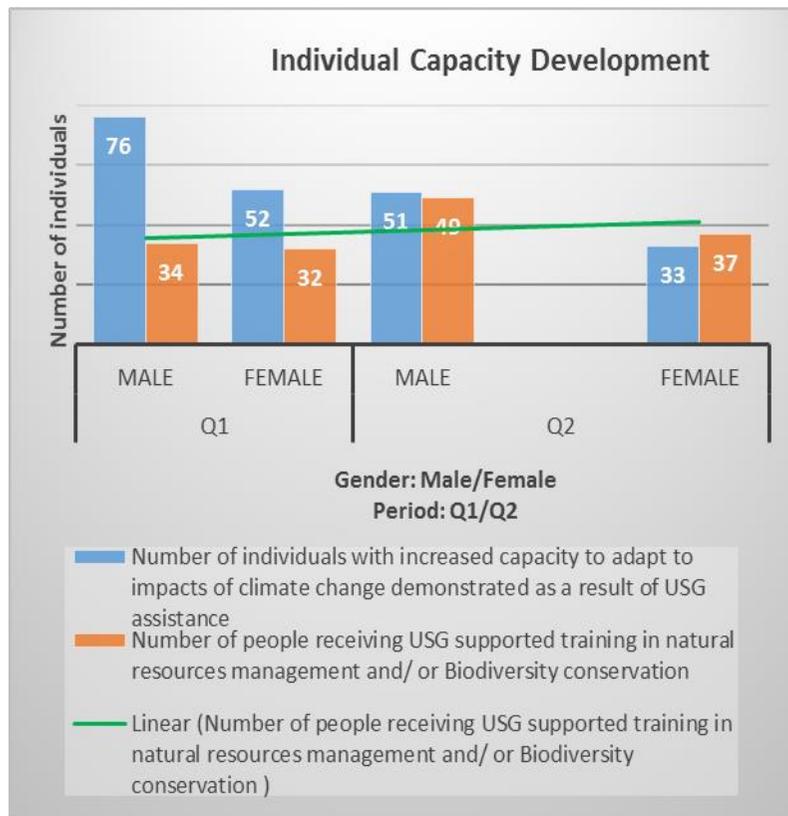
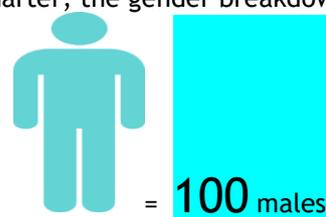
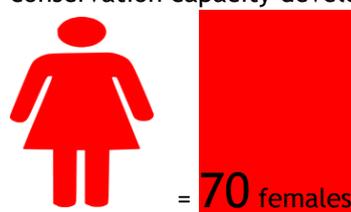


Table 2: Individuals and Institutions provided with capacity building and training in climate change and biodiversity conservation.¹³

Program Area	Indicator	2015/16FY Progress					
		Q1	Q2	Q3		Q4	Target
Climate Change	Number of individuals with increased capacity to adapt to impacts of climate change demonstrated as a result of USG assistance	128	84	*		*	700
	Number of institutions with increased capacity to adapt to the impacts of climate change as a result of USG assistance	13	18	*		*	25
Biodiversity	Number of institutions trained with increased capacity to integrate biodiversity and conservation into their function	9	19	*		*	25
	Number of people receiving USG supported training in natural resources management and/ or Biodiversity conservation	66	86	*		*	700
	Number of hectares under improved natural resource management as a result of USG assistance	*	*	*		*	*
Publications & Conference Presentations	Number of scientific studies published or conference presentations given as a result of USG assistance for research programs	1	0	*		*	4
Communications	Number of people reached through the social media	5413	2856	*		*	20 000

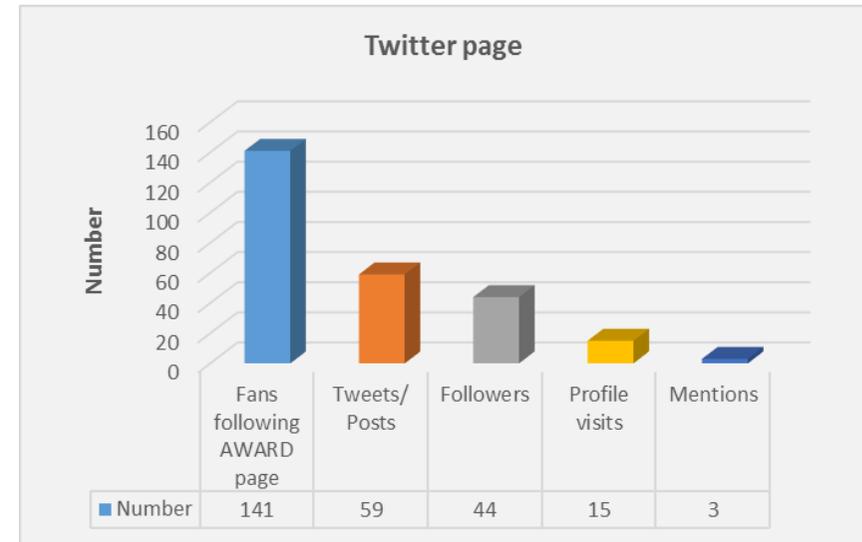
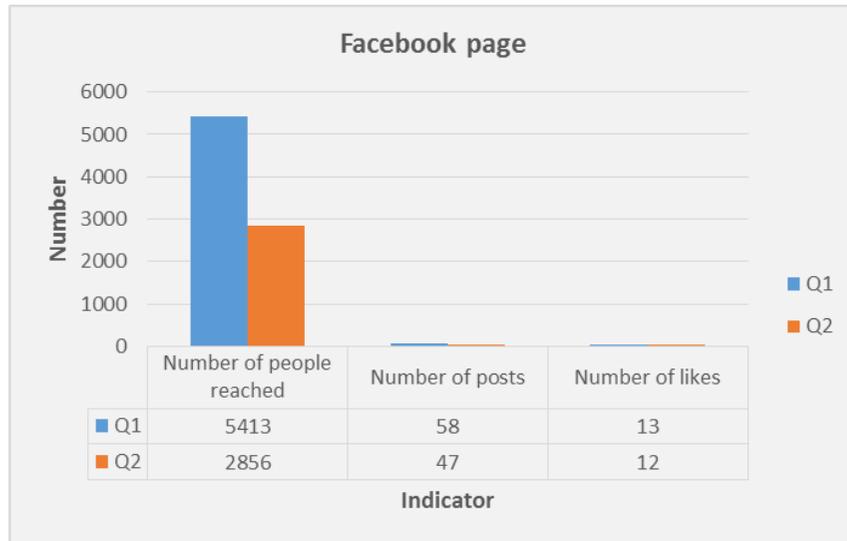
From the data shown in Table 1 above, it is imperative that our 2015/16FY target be reviewed. The need and call to review the target is not necessarily due to poor programme performance but rather an oversight on Phase I and Phase II different dynamic during the targets setting process.

Of the 170 who have been involved in climate change adaptation and NRM and biodiversity conservation capacity development initiatives in the quarter, the gender breakdown is:



¹³ * It shows that either data is *not at all* or *not yet* available.

3.5.2 Social Media



While this quarter (Q2) marks the baseline for the AWARD Twitter page as it has been dormant for a while, there has been a notable decrease of activities on the AWARD Facebook page. Most notably, the number of people reached dropped by 52.8% (2557 people). The reason for the drop in numbers on our Facebook and Twitter pages could be the unavailability of a full-time Media & Communication person to keep the pages alive and active. As such, with the appointment of a Media & Communication Manager Q3 is very likely so show significant improvement.