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AWARD
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Series

Monitoring, Evaluation, Reporting & Learning for the USAID RESILIM-O Program

MERL Framework

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Acronyms & Abbreviations

AWARD	Association for Water and Rural Development
MERL	Monitoring, Evaluation, Reporting and Learning
M&E	Monitoring and Evaluation
NRM	Natural Resource Management
PIRS	Performance Indicator Reference Sheets



1 Purpose & scope of this document

This document describes the approach taken to Monitoring, Evaluation, Reporting and Learning (MERL) in the RESILIM-O (Resilience in the Olifants Basin) program which is implemented through a cooperative agreement between USAID Southern Africa and AWARD (the Association for Water and Rural Development). It describes and provides the rationale for the approach to monitoring and evaluation, which was formulated in 2014. It also shares some of the insights arising from the implementation of the MERL framework, which have shaped ongoing implementation refinements. The MERL framework document is updated annually. The core tenets of the MERL approach have however remained the same since 2014.

This document does not describe the RESILIM-O program itself, which is documented elsewhere. It does however highlight features of the program that are pertinent in shaping the MERL framework (Section 2). As such the Framework document can be helpful to other agencies implementing programs with similar features, regardless of their particular focus. Such sharing is important because, while the challenges of program evaluation are well documented in the development literature, experience in using MERL approaches that aim to address the challenges is not.

Although this document can be shared externally, it is primarily aimed at guiding AWARD and its RESILIM-O partners (USAID, sub-grant holders) in how to approach MERL, providing key orientation and principles that must be taken into account when making strategic and daily implementation decisions about monitoring, evaluation, reporting and learning.

2 Key features of the RESILIM-O program

The first feature of RESILIM-O that is relevant for its MERL framework is that the program is designed with a systems orientation. This orientation assumes that environment and development challenges such as social and ecological resilience in the face of climate change, are issues with a systemic nature. This means there are multiple aspects to these issues, and also dynamic connections between these aspects and between issues. It is difficult to bound systems i.e. to decide where the factors that influence a situation or outcome, end. RESILIM-O consists of multiple, related system-wide actions to address the envisaged problems within its particular scope. Both individual actions and in particular the overall impact need to be evaluated.

A second and related program feature that influences our approach to MERL is that RESILIM-O recognises complexity, and therefore requires what USAID (Patsalides & Britt, 2014¹) call a complexity aware approach to M&E. Kurz & Snowden (2003²) usefully distinguished between simple, complicated and complex systems (and chaos). Interventions and evaluation approaches that work in simple systems (which have regular, predictable outcomes) do not work in complex systems (that are dynamic and largely open-ended, with complex feedback loops and emergent properties).

¹ <https://usaidlearninglab.org/events/complexity-aware-monitoring>

² Kurz, CF and Snowden, DJ. 2003. *The new dynamics of strategy: Sense-making in a complex and complicated world*. IBM Systems Journal, Vol. 42, No. 3, pp.462-483.



Thirdly, RESILIM-O’s multiple, related and system wide actions to build resilience have at their centre the notion of ‘systemic social learning’ and ‘learning together what is not yet known’ (as articulated by Ison, Wals, Engeström and others); this influences the particular approach to capacity development and communications interventions. These are often interactive, participatory and open-ended, of a longer term nature, and centred around changing practices, including institutions and governance, rather than simply raising awareness and passing on technical skills. The latter however are part of a range of broader *systemic social learning* processes, that include more in-depth and reflexive learning processes. For more, practical implications of these features for a MERL framework, please refer to Table 1.

TABLE 1: KEY FEATURES OF A *COMPLEX SYSTEMS AND SOCIAL LEARNING* APPROACH AND THEIR IMPLICATIONS FOR THE RESILIM-O PROGRAM AND ITS MERL APPROACH.

Features of the Context and Program Goals	Implications for RES-O	Implications for MERL
Issues related to environment, development and climate change resilience are multi-faceted and connected	No single initiative or role player can address all the relevant aspects; multiple activities / projects and partners and collaboration are needed and this is how the program is set up, with multiple implementation partners including sub-grant holders, and a variety of different projects with diverse stakeholders.	Multiple activities and role players will be linked to outcomes; it is difficult to have linear pathways to impact; and often difficult to assign direct attribution. Attribution to a single role player (in this case AWARD) is less important if a collaborative approach is desired; e.g. rather than asking “What did AWARD achieve?” we can ask “Would this have happened without AWARD’s contributions?” We also need to provide narrative explanations when reporting on standard indicators that seek attribution (“as a result of US government assistance”).
It is never and in particular initially not fully apparent how to address complex environment and development challenges, even if the general theory of change is clear; given that complex issues may take a long time to resolve and there is often a need to change tack along the way or work on issues simultaneously. In a systems approach <i>the context</i> of a particular development challenge is regarded as an extremely important consideration.	<p>RES-O is a long term program;</p> <ul style="list-style-type: none"> - Implementation is guided by an extensive initial exploratory phase of fact finding and contextual analysis; and a <i>strategic adaptive or reflexive</i> approach throughout; - Ongoing learning and short feedback loops are required; hence MERL needs to be built into the program right from the start, and treated by all staff as an integral part of program planning and implementation, rather than as an add-on or only to be considered for reporting purposes. 	<p>Intended outcomes are only likely to become evident in the later phases of the program;</p> <ul style="list-style-type: none"> - Over the life of the program, the focus and methods of MERL need to change; initially a more open-ended and developmental approach is required, that progressively becomes more focussed, while retaining the system gaze; - Ongoing internal learning is vital to guide the strategic direction of the program interventions; MERL hence plays a strong formative role; - Monitoring, evaluation and reporting processes must stimulate as well as adequately capture and share learning; the purpose of MERL is ongoing internal and external <i>learning</i> as much as it is about accountability on funds spent - hence the (L) in MERL.

³ See Quinn Patton, 2010, *Developmental Evaluation*.



Features of the Context and Program Goals	Implications for RES-O	Implications for MERL
Emergence is a key property of systems	Not everything can be fully planned beforehand; some unexpected outcomes and opportunities are to be expected.	MERL needs to notice and report unforeseen opportunities and outcomes along with expected outcomes. This requires monitoring and evaluation beyond and ‘in between’ fixed indicators of success.
While existing knowledge must be shared more widely, not everything that has to be learned (for resilience) is already known, and much has to be learnt together by diverse role players including scientists, managers, other authorities, and urban and rural communities.	Capacity development involves sharing existing and new knowledge and ways of seeing and doing, but also learning together ‘what is not yet known’ and how to do things better in relation to diverse practices in governing, farming, water or nature reserve management, and more.	Capacity building does not only take the form of formal courses, often combines formal courses and informal learning networks, and may stretch over extended and varying periods of time. We distinguish between ‘training’ and ‘capacity development’; while all training is recorded and tracked for accountability purposes (on TraiNet) capacity development is evaluated based on the program theory related to wider systems theory and social learning theory.

3 The “hybrid” approach & the purpose of MERL

Role-players who confront the complex and systemic nature of issues like resilience, and interventions like capacity building or institutionalisation, recognise that conventional linear-logic and indicator based forms of evaluation are inadequate both for guiding these interventions and for determining their success or failure⁴. Concerns about the limitations of logic models and indicator based evaluation are extensively documented. For example, logic models like logframes tend to assume a simple system and linear pathways to impact (one action leading to one outcome in a predictable way) and through quantification, indicators *reduce* situations and outcomes, so that factors that may be important, but fall outside the realm of measurement, are ignored (Wals, 1993⁵).⁶

At the same time as they have limitations, results frameworks and indicators can also be useful. Results frameworks serve as planning and communication tools, and by constructing them together, based on the program theory of change, teams and partners test and develop a common shared understanding of what they are aiming to achieve, and how they aim to do so, hence agreeing on the purpose of actions and how their success or failure would be recognised⁷. This is an important purpose in a program with multiple team members and partners, rolling out over multiple years.

⁴ Woodhill, J. 2005. *M&E as learning: rethinking the dominant paradigm*. <http://www.tsunario.com/wp-content/uploads/2015/05/Reader-ME-as-Learning.pdf>

⁵ Wals, A.E.J. 1993. *What you can't measure still exists*. In Mrazek, R. (Ed.), *Alternative paradigms in environmental education research*. Troy, Ohio: The North American Association for Environmental Education.

⁶ *Evaluation methods for capturing that which would otherwise be missed include ‘stories of significant change’ and ‘outcomes harvesting’.*

⁷ *Other tools are also useful for broader program management.*



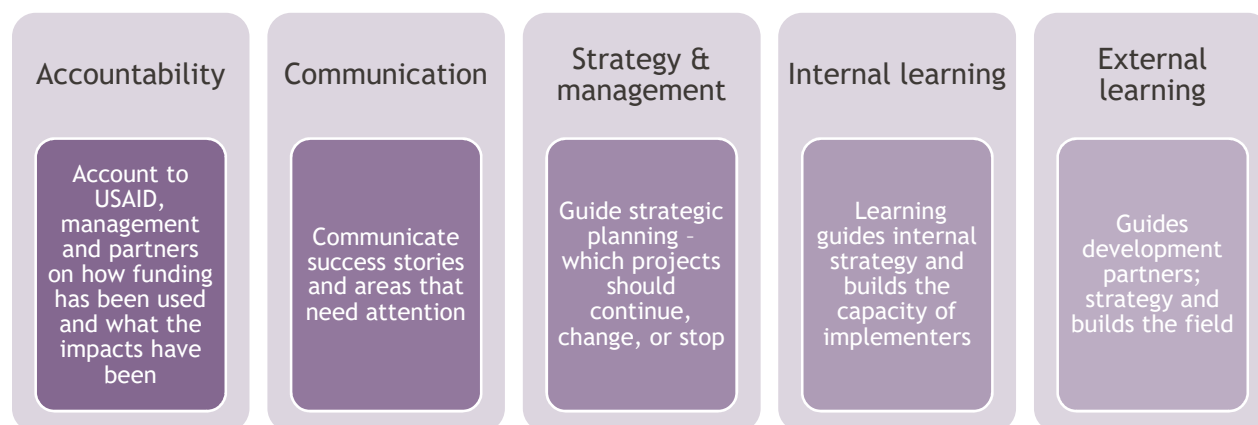
It is vital though that (a) the logic model and associated results frameworks, theory of change and pathway to impact (all related tools) actually reflect the logic of the partners (which should be logical but not necessarily linear) and (b) that there is room to make changes from time to time to the model as the implementers' understanding of how best to achieve desired outcomes evolves over the life of the program⁸.

Quantifiable indicators are useful in that they can be aggregated across projects, programs and regions, thus giving a particular view into the success or not of interventions. Within a program they can quickly point to areas that need attention, and if they are wisely used for a probe into why a desired outcome is not eventuating, they can lead to learning and better action. It may even be that starting assumptions need to be changed. However, to understand why outcomes are met or not met, qualitative and explanatory data and insights are also needed, along with reflection. Furthermore, many of the standard indicators listed and described in USAID's Climate Change and Biodiversity Indicator Handbooks, suffer from a range of data limitations, given that they cannot adequately capture all realities. These include challenges with validity, reliability, precision and attribution. Hence the Indicator Handbooks often *recommend narrative explanations to explain indicator based reporting*.

The *hybrid approach* to MERL in RESILIM-O combines the value of monitoring against indicators with reflective process monitoring and more open-ended processes for obtaining explanatory data and evaluative insights (like case studies). It also applies a logical model that recognises complexity, non-linear pathways to impact, and the possibility of emergence. It is important to realise that this approach is not about running two parallel MERL processes, and not just about using both qualitative and quantitative data. Indicators and logical frameworks are used within *the overarching complexity aware framing* which should guide how they are used and interpreted. Thus far we have not always succeeded in working with the various elements of the approach in an integrated way, and we keep looking for ways in which to do so. In 2017 we will explore the concept of *vectors* to measure progress in a particular direction and at a particular pace (Snowden, 2016 pers. comm.) as well as principle based evaluation (Quinn Patton, in press).

The other key feature of the hybrid approach is the multiple purposes of MERL for RESILIM-O, which foregrounds the importance of learning (Figure 1).

In summary, the purposes of MERL in RESILIM-O are:



⁸ Such learning should be regarded as part of the contribution of the program to the development enterprise, rather than as a weakness.



The Roles of MERL in RESILIM-O

Accountability

Some monitoring and reporting are designed only to meet the needs of the funder. These needs are important, but programs are also accountable to their own managers, staff, partners and intended beneficiaries. Accountability is about counting \$ spent and # of people engaged; *but also* about making sure that the numbers of people reached have indeed benefitted – that capacity and resilience is indeed being built. In complex systems this is difficult to achieve and ascertain and so we also need to *learn*.

Learning & Sharing

So, learning is part of being accountable to ourselves, our funders and other stakeholders. Implementers need learning for adaptive management: what works or not, what to change, drop or expand, how best to build capacity and resilience. Such learning must be shared with the donor partner and with other development practitioners beyond the catchment, to advance broader knowledge & practice. *MERL must support learning.*

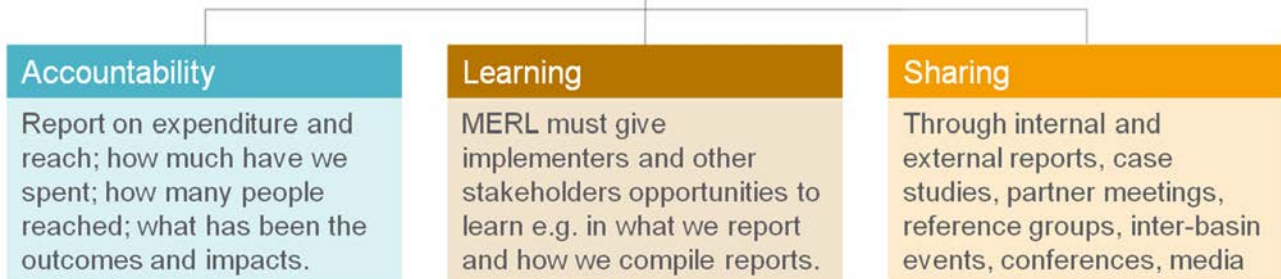


Figure 1: In RESILIM-O MERL has multiple, mutually supportive roles.

4 Theory of change

What do we evaluate?

We monitor and evaluate achievement against intended outputs and outcomes, reflected as quantitative indicators. These are listed in section 5. In addition, we also leave space to notice unexpected outcomes and insights. Therefore, we also monitor and evaluate in a more open ended manner. This is discussed in section 6. Over time we have tried a number of methods for more open ended reporting and reflection, such as process and narrative documentation and case studies. Deciding what to look for, is informed by the program’s theory of change as articulated in the program document and subsequent elaborations and refinements.

All program developers have a theory of how change or transformation may happen through their interventions. Sometimes theories of change are not made explicit, and often they are not well reflected in the monitoring and evaluation frameworks designed for the programs they track.

The MERL team must work on an ongoing basis with the RESILIM-O staff and sub-grantees to continue to reflect on and articulate their theory of change, in order to ensure an *aligned* MERL plan, so that we track, measure and evaluate what is meaningful as defined by the program and project (activity) developers. We are aware that the program theory or theories of change may change over time.



Theories of change are used to develop theories of action, which may differ from project to project. Based on the theory of change, desired outcomes are identified, and mapped. A map of desired outcomes (at various levels, intermediate and high level outcomes) can be used to identify (outcome) indicators, targets we believe we should aim for, and milestones. Activity theories identify the activities that we believe will lead to the desired outcomes or results, and for which we can set performance indicators and targets. Figure 2 is a schematic of how these elements relate. Note that an outcomes map and a results framework are very similar.

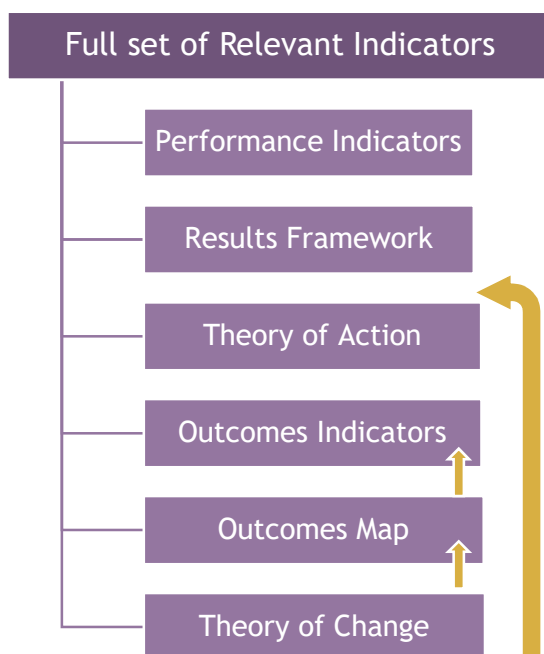


Figure 2: Relationship between Theory of Change, Theory of Action, Outcomes and Indicators.

For an example of a results framework, see Appendix 1.

Figure 3 outlines AWARD's theory of change for RES-O for the purposes of MERL. This is a simplified version that is described more fully in the program document and in a still unpublished core conceptual paper (Pollard, Du Toit and Biggs, 2015). For MERL purposes we are particularly interested in indicators for success⁹, which thus form the backbone of the skeleton in Figure 3.

Central to AWARD's theory of change is the notion of *systemic social learning* by the stakeholders in the catchment, which AWARD aims to stimulate through a number of activities (projects) including communication campaigns and structured training, collaborative risk and resilience assessments, monitoring of water flow and quality, collaborative dynamic modelling, practice focussed processes based on CHAT (cultural historical activity theory), responsive support for governance including forums, and more. Some (but not all) of AWARD's projects are shown at the bottom of Figure 3.

The theory (or hypothesis) is that social learning and an understanding of systems enable stakeholders in government and civil society to plan collaboratively for action, to take action, and to learn from reflection on their actions (reflexive learning and strategic adaptive management). The catchment is viewed as a complex social-ecological system (SES).

⁹ Denoting that desired outcomes have materialized.



In such systems, social learning is not just a pre-cursor to action; learning needs to be ongoing and expand both in quality and quantity (depicted by the concentric blue shapes rippling out in Figure 3). Thus a re-formulation of issues and solutions can also take place, in order to act more strategically. In RESILIM-O 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.

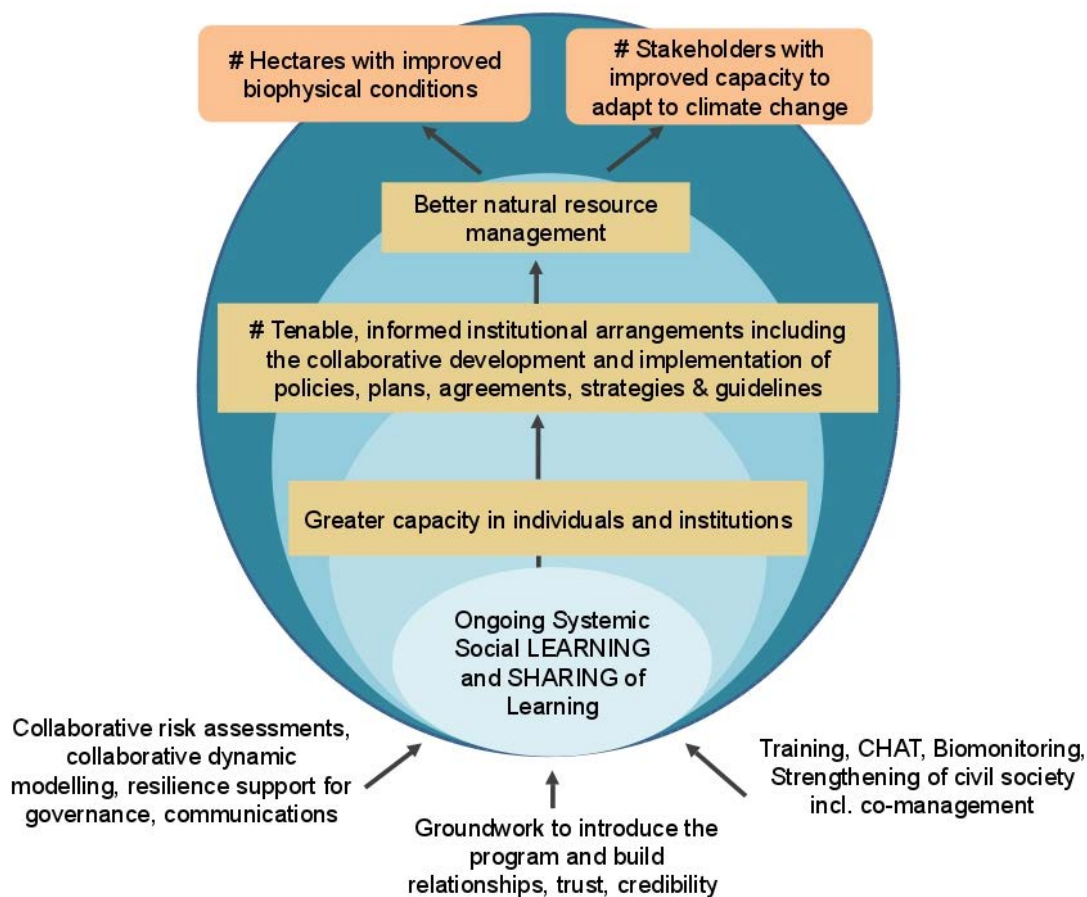


Figure 3: RESILIM-O Indicators in relation to the Theory of Change.

Applying the Theory of Change to MERL

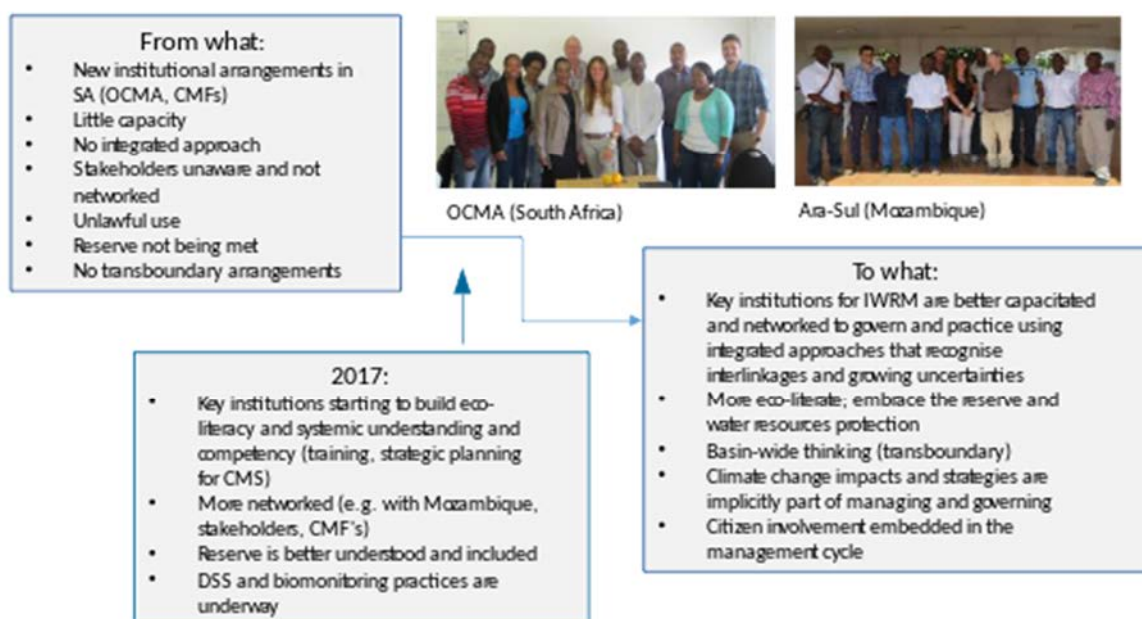
- The theory of change has determined the choice of the hybrid nature of the overall MERL framework, the choice of indicators, and provides the lenses for process and narrative reporting and evaluations, including case studies and a systemic meta-evaluation. Our theory of change integrates indicators, rather than leaving them as isolated self-evident units.
- The theory of change guides the questions asked in case studies and meta-evaluations; this is done by unpacking it in some detail with project implementers, and formulating evaluation questions accordingly. In the 2016 round of case studies we concluded that we need more detailed versions of the theory of change (provided by program staff and facilitated by MERL to guide more in-depth evaluation that will be more useful for guiding program activities).

- Project-specific theories of change are useful to provide narrative explanations to help interpret the figures reported against quantitative indicators, as outlined in the Performance Indicator Reference Sheet (PIRS) and USAID Indicator Handbooks (Global Climate Change, 2016).
- The theory of change should also guide the development of baseline questions for each project that requires a baseline. Theories of change translate into theories of action (what a particular project will do to achieve that which will bring about change). While the overarching theory of change is assumed to be common to all projects within the program framework, some detail and emphases about the actions to be taken, differ between projects. These commonalities and differences must be probed with program staff and sub-grantees so as to draw up baselines with a common core and a few project-specific questions and indicators.
- *Program implementers can and must over the life of this program review and refine their theories of change, based on what they are learning through implementation, evaluation and reflection. If needed this framework and instruments will be refined accordingly.*

Figure 3 is a simplified version of the RESILIM-O theory of change, drawn specifically to show the relationships between the USAID indicators chosen for the program, and program activities. A more fleshed out and nuanced version of the theory of change can be found in the program document.

The simplification in Figure 3 relates in particular to the one-way arrows; for the sake of focussing on the indicators, they go in one direction from one indicator to another. AWARD is however of a view that there are multiple interactions between, for example, greater capacity, and tenable institutional arrangements. Figure 3 also does not include the ultimate intended strategic impact (of resilient ecosystems and communities) - as, again, the focus here is on the indicators. As Table 2 (below) shows, resilience is not ‘measured’ as an indicator.

Theory of Change: Water Governance





Project leads also need to articulate and draw their theory of change and theory of action, so as to ensure a shared understanding of the purpose of project activities and to agree on project-specific indicators and baselines to be monitored¹⁰. In Key Results Area 2, staff drew up the following schematic summarising the transformative path for their work:

This was accompanied by the following narrative theory of change and expected impact:

“Currently the South African portion of the basin is characterised by new and emerging institutional arrangements with little capacity or support to act systemically within a system under severe pressure. In addition there is little evidence of climate change nor the need to be planning for adaptation strategies in the near future. This is true at all levels from the catchment-wide perspective (OCMA) through the more local-level arrangements such as the CMFs, OLLI, LOROC and so on. This provides a window of opportunity for RESILIM-O to support the emerging institutional arrangements for good governance. This requires working with both the formally established institutions (OCMA, Ara-Sul, National Water Act) and the platforms for stakeholder involvement in IWRM. AWARD aims to influence and facilitate a more systemic and integrated approach - particularly for water resources protection under changing climate futures - through collaborative engagement, planning and action that develops the adaptive capacity of key roleplayers and stakeholders. This work was initiated in late 2014 and continued during 2015 through building relationships and networks which provide the foundations for a ‘mentorship’ process in 2017 (see also CoDym). This proved extremely challenging given the uncertain institutional context and delays in establishment of the Olifants CMA. Nonetheless substantial progress was made towards the last quarter of 2016 signaling a more positive basis for 2017. The innovation is around (a) supporting an integrated system for water resources management (see 2.2 and CoDym) and (b) making IWRM more ‘accessible’ through approaches that build custodianship and collective action over the catchment’s water resources (see 2.3, Codym and Water Clinics). This requires greater dialogue, enhanced catchment literacy together with participation in collaborative, systemic practices that facilitate learning-in-action. This approach is commensurate with a social learning framing that supports a process of confronting current understanding, deconstructing ideas and approaches and collectively re-constructing approaches that are more systemic in nature and that embrace participation.”

5 Indicators

USAID requires grant holders to choose indicators of success from a common set of standardised indicators that are described and defined in indicator handbooks. These handbooks are edited from time to time as notes from the field suggest refinements to the indicators¹¹.

RESILIM-O is funded from two USAID-Southern Africa funding sources (one earmarked for climate change resilience; and one earmarked for biodiversity conservation), hence two ‘earmark’ indicators have been chosen for the program at the start. These are not open to change, as they are the indicators against which the program is reported to the US Congress. The other chosen indicators should also stay relatively stable over time, to ensure consistent reporting over the life of the program. However, there is some room for well-motivated change. New standard or customised indicators can be readily added if in time AWARD comes to see new outcomes and impacts as important to report, but not adequately reflected by the chosen indicators.

Table 2 lists the indicators that AWARD had chosen from the standard USAID indicators, and additional customised generic indicators that AWARD chose to add.

¹⁰ For an example of another, more detailed program level theory of change diagram, see Routes to Resilience: Lessons from monitoring BRACED. Paula Silva Villaneuva and Catherine Gould. Undated. Annex 2, p.34. BRACED Knowledge Manage, London, ODI. www.braced.org

¹¹ Such a revision took place in 2016.



TABLE 2: RESILIM-O'S EARMARKS AND OTHER INDICATORS (2016 UPDATE).

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

Table 3 provides some vital guidelines for reporting against these indicators, including their definitions. The PIRS (Performance Indicator Reference Sheets) in the Annexes provide full guidelines including chosen quarterly and annual targets, data sources and means of verification, reporting frequency and responsible parties.



TABLE 3: USAID INDICATORS CHOSEN FOR RESILIM-O AND REPORTING GUIDELINES
(2016 HANDBOOKS).

EG.10.2-1 Number of hectares of biologically significant areas showing improved biophysical conditions as a result of USG assistance [Earmark indicator]

Biologically significant areas are areas that (a) have been identified as important for biodiversity through national, regional, or global priority-setting processes, or (b) areas where sustainable natural resource management (NRM) interventions have the intent to positively impact biodiversity in areas described in “(a)”.

Improved biophysical conditions are demonstrated where biophysical monitoring data shows improvement, stability if previously declining, measurable degradation avoided, or a slower rate of decline in one or more natural resources over time. If an area reported under improved management (see below) also shows improved biophysical conditions, then the corresponding hectares can be reported under both indicators. Improved biophysical condition should be reported for activities where RESILIM-O was plausibly linked to the improvements observed. *Partners should articulate clearly, through a short narrative, (a) the logical sequence of events (theory of change) that link the USG supported interventions with the observed biophysical change, and (b) the milestones that are being used within the program to gauge success.* Hectares reported may include sustained improvements in previously reported hectares and/or new additional hectares.

Measures of this indicator demonstrate the highest level of biodiversity conservation effectiveness and can inform adaptive management of programs. The focus on “biologically significant areas” is consistent with the USAID Biodiversity Policy, and facilitates Congressional Earmark compliance review. The aggregate may be used to report to Congress and other stakeholders.

Some known data limitations when using this standard indicator: (a) Precision - depends on the methods used, such as whether sampling is representative of the whole area of intervention, (b) Reliability - is strong but comparability across different sites and different resources (and in different ecological zones) is difficult, (c) Biophysical change may or may not be detectable on an annual basis or even within the project cycle. Stability where it didn't exist before is also within the definition of biophysical change, (d) Attribution to specific USG supported interventions can be challenging, therefore the need to provide narrative explaining causal effects.

EG.10.2-2 Number of hectares of biologically significant areas under improved natural resource management as a result of USG assistance

Biologically significant areas have been defined above. Improved NRM includes activities that promote enhanced management of natural resources for objectives such as conserving biodiversity, maintaining ecosystems services, strengthening sustainable use of natural resources, mitigating climate change, and/or promoting community participation in NRM. Management should be guided by a stakeholder-endorsed process following principles of sustainable NRM and biodiversity conservation, improved human and institutional capacity for sustainable NRM and biodiversity conservation, access to better information for decision-making, and/or adoption of sustainable NRM and biodiversity conservation practices. An area is considered under “improved management” when any one of the following occurs: management planning and actions are informed by local site assessments, stakeholder participation and other best management practices occur; human and institutional capacity is developed; management plan actions are implemented; monitoring and evaluation is established or improved; adaptive management is demonstrated; or on-the-ground management impacts are demonstrated (e.g. illegal roads closed, snares removed, no-fishing zones demarcated). If a biologically significant area reported as showing improved biophysical conditions (indicator EG10.2-1) is also under improved NRM, the hectares can be reported under both indicators.



Improved management should be reported for activities where the program was plausibly linked to the improvements observed. Partners should articulate clearly the milestones that are being used to gauge success, and provide a short narrative to describe the milestones reached.

The conversion to hectares of some management actions can be challenging. The guiding principle in these cases should be based on the theory of change, i.e. the logic behind how the management action affects the threat to biodiversity. Hectares reported may include sustained improvements in previously reported hectares and/or new, additional hectares. Some known data limitations when using this standard Indicator: (a) Validity, integrity and reliability of data are high but regular data quality analysis is necessary. (b) *Precision is low: "improved management" is a relative term, and narrative is required to explain the quality of this management improved.* Equal weight is given to unequal improvements along a continuum: e.g. creating, adopting and implementing management plans may each be an improvement over a baseline. Likewise, a small management improvement across a large area may be as important as a large improvement across a small area.

AWARD 4.8.2-14: Number of institutions with improved capacity to address natural resources management and biodiversity conservation issues as a result of USGA

Institutions with improved capacity to address natural resource management (NRM) and biodiversity conservation issues have new or increased ability to use new or different approaches, processes, strategies, or methodologies to address biodiversity conservation and NRM issues. Biodiversity conservation refers to direct and indirect actions (including sustainable NRM) with the goal of conserving biodiversity in ways that maintain their long-term viability and preserve their potential to meet the needs of present and future generations. Measuring improved institutional capacity for NRM and conservation requires an initial baseline assessment of the targeted capacity(ies) and a post-intervention assessment. Relevant institutions include national, subnational, or regional government, private sector entities and civil society organizations among others. Indications of increased institutional capacity to engage with NRM and conservation include, but are not limited to:

- Generating or using trend data related to NRM and conservation projections,
- Using NRM and conservation information or vulnerability assessments to inform decisions and actions,
- Hiring qualified staff with responsibility and authority to manage NRM and conservation related issues,
- Having access to equipment or other inputs necessary for planning, assessment and management of NRM and conservation,
- Engaging local-level stakeholders to ensure that policies, plans, budgets, and investments address on-the-ground needs related to NRM and conservation,
- Developing a plan of action to respond to and build resilience to issues related to NRM and conservation,
- Increasing institution funding levels for NRM and conservation,
- Improving coordination with other key institutions, such as government ministries in non-environment sectors, to address NRM and conservation through an economy-wide approach.

An institution can be reported as having its capacity improved in multiple years if it achieves meaningful improvement in more than one year.



EG.10.2-4 Number of people trained in sustainable natural resources management and/or biodiversity conservation as a result of USG assistance

Number of people who has successfully completed a training course. Successful completion requires that trainees meet the completion requirements as defined by the program offered. Training is defined as a learning activity involving: 1) a setting intended for teaching or transferring knowledge, skills, or approaches; 2) a formally designated instructor(s) or lead person(s); and 3) *a defined curriculum, learning objectives, or outcomes*. Training includes long-term academic degree programs, short- or long term non-degree technical courses in academic or other settings, seminars, workshops, conferences, on-the-job learning experiences, observational study tours, distance learning, or similar activities *as long as it includes the three elements above*. Coaching and mentoring, meetings or other efforts that could have educational value but do not have a defined curriculum or objectives are generally not considered to be training unless they meet the three definitional standards for training identified above. Only people who complete the training are counted for this indicator. People who attend multiple, non-duplicative trainings may be counted once for each training they completed in the reporting period.

Sustainable natural resources management is defined above. Biodiversity conservation refers to direct and indirect actions (including sustainable NRM) with the goal of conserving biodiversity in ways that maintain their long-term viability and preserve their potential to meet the needs of present and future generations.

Support from the USG: This indicator counts training hours that were delivered in full or in part as a result of USG assistance. This assistance could include provision of funds to pay teachers, providing hosting facilities, transportation, specialized equipment/supplies, or other key contributions necessary to ensure training was delivered. This indicator does not automatically count any course for which the USG helped develop the curriculum, but rather focuses on delivery of courses that was facilitated by USGA.

EG.10.2-5 Number of laws, policies, or regulations that address biodiversity conservation and/or other environmental themes officially proposed, adopted, or implemented as a result of USGA

Policies, laws, and regulations include those developed and formally endorsed by governmental, non-governmental, civil society, and/or private sector stakeholders to address biodiversity conservation and/or other environmental issues. If such a measure is not yet adopted, it must at least be formally proposed within an official government process to be reported. Biodiversity conservation refers to direct and indirect actions (including sustainable NRM) with the goal of conserving biodiversity in ways that maintain their long-term viability and preserve their potential to meet the needs of present and future generations. “Officially proposed” means that a relevant government official or agency with decision-making authority has proposed the measure publicly. Each piece of legislation can be counted once as “proposed” and once as “adopted,” if applicable. The indicator narrative should include an explanation of when each measure is counted. “Adopted” means officially codified or enacted by the government entity with decision making authority in their legal, regulatory, or policy system.

Legal, regulatory and policy reform has a role to play by incentivizing investment in reducing threats to biodiversity or encouraging more environmentally sustainable behavior. Depending on the context, regulatory and policy reform might include: zoning regulations to prevent or control development impacting biologically significant areas, standards for improved infrastructure, policies to conserve or allocate natural resources more effectively, regulations to encourage the development of renewable energy sources, or trans-boundary agreements related to the use of shared natural resources, among many others. Laws, policies, and regulations that address biodiversity conservation and/or other environmental themes may be integrated in scope (e.g., at a certain spatial scale or political boundary such as municipal, state, or national), or may address certain relevant sectors such as water, forests, wetlands, species, land use, urban development, agriculture or education.



For policies that may affect biodiversity indirectly, it is essential that the indicator narrative explains the connection. For interpretation of this indicator, a qualitative description must be provided to explain what the number represents. Some known data limitations when using this indicator include: Validity - If the intended result is an improved enabling environment, then the numbers of laws, policies, and regulations provides only a partial measure of success, given that effective implementation and enforcement are also critical. Laws, policies, and regulations may not be well-designed or effective. Different scale strategies and plans have different scopes of impact. Timeliness - Preparatory studies and stakeholder relationship building may be required prior to proposal, adoption, or implementation of the measure. Precision - This indicator does not capture progress made along the way in terms of convening stakeholders, gathering and disseminating scientific evidence, fomenting inter-sector collaboration, and evaluating enforcement. Narrative is critical for interpreting this indicator.

4.8.2-26: Number of stakeholders with increased capacity to adapt to the impacts of climate change as a result of USG assistance [Earmark Indicator for Climate Change]

“Capacity to adapt” is the ability to adjust to climate change by either coping with negative effects or taking advantage of positive climate change opportunities. Counting individuals with “increased capacity to adapt” requires a baseline measure of initial capacity to adapt, then a measure of the change relative to that baseline that is plausibly attributable to the USG intervention. USG support aims to increase medium and long-term adaptive capacity. An increase in adaptive capacity can be shown with the use of surveys or assessments of capacities. Actions taken or behaviours changed can be easily identifiable and a reliable marker to count, however increased capacity need not be limited to actions or behaviours. Stakeholders with improved adaptive capacity may include, but would not be limited to, the following:

Implementing risk-reducing practices/actions to improve resilience to climate change, for example:

- Implementing water-saving strategies to deal with increasing water stress due to changing rainfall patterns,
- Utilizing index-based insurance to help deal with climate variability and change, or adopting practices like improved soil or herd management, stress-tolerant crop varieties, to adapt to climate change,
- Diversifying income sources toward less climate-sensitive activities to hedge against climate change impacts,
- Implementing education campaigns to promote the use of risk reducing practices, like use of storm shelters and bed nets that help people cope with climate stress.

Using climate information in decision making, for example:

- Utilizing climate forecasts to inform planting decisions,
- Utilizing forecasts to issue flood warnings, implement water demand management strategies in case of drought,
- Utilizing climate scenarios to inform planning over medium to longer term timescales for resilient infrastructure, water security, disaster risk reduction, or land-use planning.

Having greater knowledge of climate change impacts and response options, for example:

- Individuals with improved understanding of climate risks and vulnerabilities,
- Individuals with improved access to and ability to apply climate information, or
- Individuals with improved knowledge and skills to implement *and disseminate adaptation actions*.

Attending training does not automatically count towards increased capacity to adapt to climate change. Measuring increased knowledge that may have been attained at training requires an initial baseline assessment of the targeted individual(s) and a post intervention assessment.



EG.11-3 Number of laws, policies, regulations, or standards addressing climate change adaptation formally proposed, adopted, or implemented as supported by USG assistance

Laws, policies, plans, strategies, regulations, or standards considered under this indicator are measures developed to address climate change adaptation. Climate change adaptation is increasing the resilience of natural or human systems (e.g. people, places, ecosystems or livelihoods) to actual or expected impacts of climate change, including through improved use of information, planning and action. Plans or strategies, such as national adaptation plans or programs of action, stakeholder engagement strategies, and other nationally significant measures may be reported under this indicator. Nationally significant measures may include sector specific or provincial plans, strategies, policies, or industrial standards which, if successfully implemented, could have a significant impact on the country's resilience to climate change.

“Formally proposed” means that a relevant government official or agency, organization, or non-governmental entity with decision-making authority has proposed the measure, according to established procedures, preferably publicly when this is appropriate to the given context.

“Adopted” means officially codified or enacted by a government, organization, or non-governmental entity with decision-making authority in its respective legal, regulatory, policy, or non-governmental system.

“Implemented” means that a measure is in force or being executed in the intended geographic locations and at the intended administrative levels.

If a measure is not yet adopted, it must at least be formally proposed within an official process to be reported. Each measure can be counted once as “proposed,” once as “adopted,” and once as “implemented,” if applicable, within the same reporting period or across multiple reporting periods. The indicator narrative should include an explanation of when each measure is being reported.

Legal, regulatory and policy reform and new industry standards can create incentives for investment in climate change adaptation. Measures that address climate change adaptation may be integrated in scope (e.g., at a certain political level such as municipal, state, or national), or may address sectors (such as water, forests, wetlands, land use, urban development, agriculture or education).

EG.11-2 Number of institutions with improved capacity to assess or address climate change risks supported by USG assistance

Institutions with improved (i.e. better, additional, or greater) capacity to assess or address climate change risks have new or increased ability to use approaches, processes, strategies, or methodologies to adapt to climate change. The effects of climate change may occur suddenly or gradually, and can include floods, droughts, storms, landslides, salinization, coastal inundation, desertification, heat or cold waves and biodiversity loss, among others. Relevant institutions may include national, subnational, or regional government institutions (such as ministries, departments, or commissions), private sector entities and civil society organizations. Indications of increased institutional capacity to assess or address climate change risks include, but are not limited to:

- Using climate change data, information or analysis to inform decisions and actions
- Improving administrative or organizational capacity of climate-change focused institutions
- Devoting greater (human, financial, equipment, etc.) resources to adaptation planning and action
- Improved access to equipment or data
- Engaging stakeholders and building networks related to climate change adaptation objectives
- Building in-house technical expertise.



This indicator measures both improvements in capacity to address climate change in institutions that do not focus exclusively on climate change as well as general institutional capacity improvements in climate institutions. An institution can be reported as having its capacity improved in multiple years if it achieves meaningful improvement in each of the years it is reported. However, each institution should only be reported once per fiscal year. ... Attribution to specific USG supported interventions can be challenging, therefore the need to provide narrative explaining causal effects.

EG.11-1 Number of people trained in climate change adaptation supported by USG assistance

Extract from the 2016 definition (*Global Climate Change Indicator Handbook*, USAID, 2016, file:///C:/Users/s1500286/Downloads/GCC%20Indicator%20Handbook%20June%2021%202016.pdf): Training is defined as a learning activity involving: 1) a setting intended for teaching or transferring knowledge, skills, or approaches; 2) a formally designated instructor(s) or lead person(s); and 3) a defined curriculum, learning objectives, or outcomes. Training can include long-term academic degree programs, short- or long term non-degree technical courses in academic or in other settings, seminars, workshops, conferences, on-the-job learning experiences, observational study tours, distance learning, or similar activities as long as it includes the three elements above. Coaching and mentoring, meetings or other efforts that could have educational value but do not have a defined curriculum or objectives are generally not considered to be training unless they meet the three definitional standards for training identified above. Only people who complete the training course are counted for this indicator. People who attend multiple, non-duplicative trainings may be counted once for each training they completed in the reporting period.

STIR-12 Number of peer-reviewed scientific publications resulting from USG support to research and implementation programs

This output indicator captures annually the number of scientific publications resulting from USAID support to research and implementation programs. This indicator is not cumulative and captures only new publications not reported previously. ‘Peer-reviewed publications’ are defined as and include: scientific studies published in technical journals which conduct technical peer review of the submissions as part of their decision process; technical reports that are subject to external peer-review and then disseminated; and peer-reviewed conference proceedings. This indicator does not include publications by USAID Staff. STIR denotes the cross-cutting area of Science, Technology, Innovation and Research.

The indicators in Table 2 (and 3) apply differently to individual RES-O projects (activities) which are monitored and evaluated accordingly. Some projects/activities address climate change related outcomes more strongly; some address biodiversity related outcomes more strongly; while to some projects, both sets of indicators apply.

Table 4 shows which of the current (January 2017) projects need to report against the standard USAID and generic AWARD indicators. Neither table includes indicators that individual RES-O projects may additionally choose for themselves, to complement the assigned indicators. The indicators in Table 2 (and 3) are hence referred to as ‘generic’. Note that they are a mix of output indicators and mid to high level outcome indicators.



TABLE 4: RES-O GENERIC INDICATORS AND THE PRIMARY PROJECTS THAT SHOULD REPORT AGAINST THEM.

INDICATOR (STANDARD USAID AND GENERIC AWARD INDICATORS)	PRIMARY REPORTING PROJECTS (OTHERS MAY ALSO DO SO)
EG.10.2-1 Number of hectares of biologically significant areas showing improved biophysical conditions as a result of USG assistance [Biodiversity Earmark Indicator]	Water Governance; Blyde Ecosystem Restoration
EG.10.2-2 Number of hectares of biologically significant areas under improved natural resource management as a result of USG assistance	Municipal Support Initiative (Land Use Planning); Water Governance; Blyde Ecosystem Restoration; River Custodianship; Co-management Support
EG.10.2-5: Number of laws, policies, or regulations that address biodiversity conservation and/or other environmental themes officially proposed, adopted, or implemented as a result of USGA	Municipal Support Initiative; Water Governance; Blyde Ecosystem Restoration; River custodianship; Co-management Support
AWARD 4.8.2-14: Number of institutions with improved capacity to address natural resources management and biodiversity conservation issues as a result of USG	As above, plus CSO Support Initiative; CoDyM; CapDIM; Media & Comms; Institutions of Higher Learning; Sustainable Forestry; Conservation Entrepreneurship; Wastewater Treatment Works
Eg.10.2-4: Number of people trained in sustainable natural resources management and/or biodiversity conservation	MSI; Water Governance; Blyde Ecosystem Restoration; River custodianship; Co-management Support; CSO Support Initiative; CoDyM; CapDIM; Agri Support Initiative; Institutions of Higher Learning; Sustainable Forestry; Wastewater Treatment Works
4.8.2-26: Number of stakeholders with increased capacity to adapt to the impacts of climate change [Earmark Indicator]	Agricultural Support Initiative; Disaster Risk Reduction; CC Dialogues; CoDyM; Civil Society Support; Conservation Entrepreneurship; Wastewater Treatment Works; Water Conservation & Demand Management; Institutions of Higher Learning
Eg.11-3: Number of laws, policies, regulations, or standards addressing climate change adaptation formally proposed, adopted, or implemented	MSI; CoDyM; Disaster Risk Reduction; Water Governance; Co-management Support; Institutions of Higher Learning; Wastewater Treatment Works; Water Conservation & Demand Management
Eg.11-2: Number of institutions with improved capacity to assess or address climate change risks supported by USG assistance	MSI; CoDyM; CSO Support Initiative; CapDIM; Water Governance; Blyde Ecosystem Restoration; Co-management Support; Disaster Risk Reduction; Dialogues; Agricultural Support Initiative; Institutions of Higher Learning; Civil Society Support; Conservation Entrepreneurship; Wastewater Treatment Works; Water Conservation & Demand Management
Eg.11-1: Number of people trained in climate change adaptation supported by USG assistance	As above
Stir-12: Number of peer-reviewed scientific publications resulting from USG support to research and implementation programs	All projects, if this is part of their work plans for 2017



In summary, project leads must report against three kinds of (mostly quantitative) indicators: USAID standard indicators, AWARD generic indicators, and project specific indicators based on a particular project's results framework. Both quantitative and qualitative data is needed to report against the indicators, as qualitative data is needed to explain the figures and how they should be interpreted. This is outlined in the Performance Indicator Reference Sheets (PIRS).

The reporting requirements for individual projects should be kept to a minimum, provided that an attempt at streamlining does not lead to failure to capture data that would contribute to the earmark indicators (in particular). It is an example of how the MERL framework needs to continuously seek an optimum balance - in this case, a balance between facilitating implementation by being simple and streamlined, and providing stimulating opportunities for rich and critical reflection.

The challenging aspects for quantitative reporting include defining the indicators. Furthermore, target setting used to be a hurried and stressful process ('afterthought') with unsatisfactory outcomes. To address this, MERL planning is now integrated with annual project (work plan) planning. In early 2017 the MERL manager and the AWARD director will jointly facilitate the development of each project's results framework, indicator choices and targets.

6 Process & narrative reporting, reflection & learning

In the hybrid approach to MERL indicators are only half the story. The rest of the MERL activity is dedicated to capturing processes and outcomes that are not quantitative in nature, and not always related to indicators. This reporting allows for:

- Producing qualitative data and insights that help to interpret and explain the figures reported against indicators;
- Capturing outcomes and impacts that have not been predicted in the results frameworks, but which are nonetheless relevant to the intended outcomes (either positively or negatively);
- Opportunities for deliberate reflection on the part of program implementers, to encourage and deepen learning, including strategic project and program planning.

The RESILIM-O MERL process includes a variety of evaluation methods to complement (explain and extend) indicator based monitoring. These are:

- **Most significant change stories**

We have used this methodology (based on the concept of Davies and Dart, 2004) in a limited way in 2014/2015 as a means of encouraging program implementers to surface their 'theories of change' and develop a shared understanding of why they are doing what they are doing, and what they would regard as success. This methodology should be considered again as it can be, if well guided, valuable for surfacing, identifying and articulating narratives of success to share with program stakeholders and funders, and its value in encouraging reflection and shared deliberation among internal stakeholders should also not be overlooked.



■ Case Studies

In 2015 we conducted a number of case studies of particular project areas: Water Governance and Forums; the Legalameetse Co-Management Project; the Blyde Restoration Project; and Media and Communications. For the first four of these we used the value-added process methodology of Wenger, Trayner and De Laat¹². Although the findings from these case studies were perhaps not optimally utilised for strategic program and project planning, they informed the MERL team in ways that helped them to engage in supportive and critical conversations as a form of ongoing, often informal strategic planning, that was then taken up in more formal contexts such as the Reference Group and annual strategic planning. The case studies were regarded as a valuable complement to the indicator based monitoring processes and were repeated in 2016, when new case studies were added (to evaluate Capacity development for interns and mentors; and Collaborative dynamic modelling). The evaluation of Media and Communications was not repeated in 2016 as new Media and Comms staff were then just joining RESILIM-O, but should be prioritised for 2017.

■ Meta-Evaluation

2016 saw the first meta-level systemic evaluation of the RESILIM-O program being undertaken. It was done by Prof Ray Ison of the International Reference Group, drawing on the case studies conducted in 2015 and 2016. An internal report was produced and a paper for publication is being planned, based on the proposal that Donella Meadows' framework for places to intervene in a system is applied as a useful meta-evaluative lens.

The 2016 meta-evaluation provided useful reflection on the 2015-2016 case studies, including that:

- Project theories and the case study analyses need to be deepened; if the Wenger, Trayner and De Laat methodology is to be used, its categories must be refined for RESILIM-O. For example, the perspective on systems capacity outlined in 2016 by Ison and Shelley (systemic sensibility; systems literacy; and systems thinking in practice capability) will help us to better evaluate capacity building and 'systemic social learning'.
- MERL team interviews with implementing staff are invaluable opportunities for the staff to reflect on progress and challenges and for the MELR team to surface the project specific theory of change and action, to which the case study evaluations should be more closely tied.
- Some case studies would benefit from bringing in external parties on a short term contract, to provide programmatic expertise lacking in the MERL team (land restitution processes in relation to Co-Management in Legalameetse, and developmental media and communications).
- Case studies require more time and should be completed well before strategic and work planning for the next year starts, so that the insights from the case studies can inform such planning.

¹² Wenger, E., Trayner, B., and de Laat, M. (2011) *Promoting and assessing value creation in communities and networks: a conceptual framework*.



On Attempts to Support Reflection and Strategy

In RESILIM-O, like many other programs, there is a tension between ‘getting on’ and doing the work, and stopping to reflect on the work that has been done and the next best steps. The MERL framework should seek the optimum balance between action, and reflection to guide action and learn from action (the strategic adaptive management process). Attempts to support reflection thus far include:

- Reflection questions in the Back to Office reporting template (to be reintroduced in 2017)
- Brown bag lunches to reflect on most significant change, challenges and other (open-ended) observations
- Process narratives (in 2015) by an on-site MERL team member (social scientist with programmatic understanding) based on the above; this was in 2016 replaced by:
- Monthly reports with both quantitative and qualitative information
- Case study evaluation interviews, reports, presentations and discussions on reports
- **Reference group meeting discussions**
- **Inputs into strategic planning processes.**

In 2017, evaluation to complement indicator-based monitoring, deepen learning and inform strategic planning, will be strengthened with the introduction of theme-based evaluations that will look across projects for emergence and synergistic outcomes. Climate change and capacity development, which are addressed across multiple project activities, will be key focus areas for evaluation in 2017. In addition, the focus on co-management in Legalameetse will continue, with hopefully the introduction of a land restitution specialist to inform both activities and learning in this challenging project with its significant potential to impact on the area of land under better management in the catchment, and its potential to serve as a model for other Communal Property Association contexts. The MERL team have also been sharing the design of this framework and early experiences in implementing it with managers and evaluators of other programs focussed on social learning in contexts of resilience, biodiversity and water. In 2017 we will aim to deepen the learning and practice of the MERL team and program staff and extend the sharing of our insights and experiences, as well as challenges, by producing two papers that reflect on this framework and its implementation.

7 Implementation

This section describes with more practical pointers ‘how’ MERL is to be conducted in RESILIM-O. At the start two important observations should be noted:

Improving and maintaining the quality of reporting requires ongoing motivation, ongoing refinement of reporting frameworks, and supportive engagement with staff on how to report (and how to reflect), in particular to explain the reasons for particular questions and requirements. It also requires visible valuing of the staff’s inputs into MERL processes from the senior management.

For all these aspects, a regular monthly or bi-monthly slot (sometimes up to a fully day) to engage with the assembled staff (in the monthly RESILIM-O Day) has been invaluable, particularly as the program staff expanded almost continuously, but also to ‘find’ staff when they are receptive to engaging with MERL related matters (as they are often focussed more strongly on program matters). Two senior members of the MERL team have been assigned to similarly engaged with sub-grant holders.

The implementation of the MERL framework has become both easier and better over time as the director of AWARD became increasingly involved in guiding the contributions needed, and in directing staff to contribute fully to reporting and evaluations.

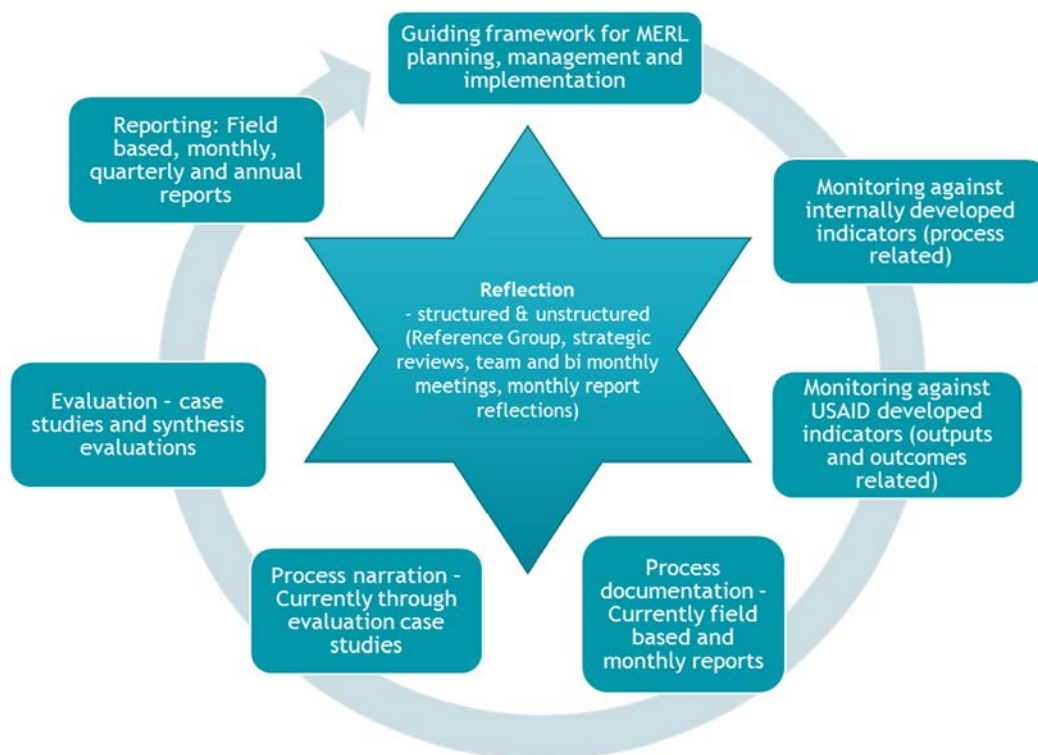


Figure 4: The various elements of the evaluation framework: monitoring, evaluation, reporting and learning (reflection).

Figure 4 shows the various elements of the evaluation framework: monitoring, evaluation, reporting and reflection, which are all informed by this guiding framework. The details of the framework are adjusted over time as reflection on the implementation of the MERL framework suggest that we need to make changes. This includes feedback from AWARD and USAID staff (e.g. on how reporting frameworks are working for them). The most changes have been made to reporting templates (B2O templates, monthly reporting headings, quarterly and annual report formats). We discovered that reporting lies at the heart of the MERL process, and getting it right, or not, is central for the hybrid approach to work. The reporting requirements need to be streamlined and not too difficult and time consuming for implementers and managers (including USAID) as writers and readers of reports, but also not only focussed on accounting for activities, budgets and time spent, without any reflection on what was learnt in the process. Getting this balance right is crucial.

We have constantly sought ways in which we can encourage greater reflection among busy program implementers to inform the evaluation, and also ways in which we can inform reflection and ongoing strategic planning through evaluation findings. Figure 4 reminds us of the central role of reflection, related to the foregrounding of learning as at least equally as important as accountability in this particular MERL framework (refer back to section 1). The star shape indicates that room should be created for reflection in each of the MERL framework elements.



Program leaders have a vital role to play in communicating to staff and sub-grant holders that reporting is more than a compliance exercise; if approached with a reflective orientation it is the key to ensuring that monitoring and evaluation lead to learning, both in-program learning, and learning that can be shared with the development community at large.

How are these elements practically implemented? Figure 5 shows the reporting process, how monitoring data and evaluation findings feed into monthly, quarterly and annual reports and USAID's TraiNet database, and how reports should in turn feed reflection and learning.

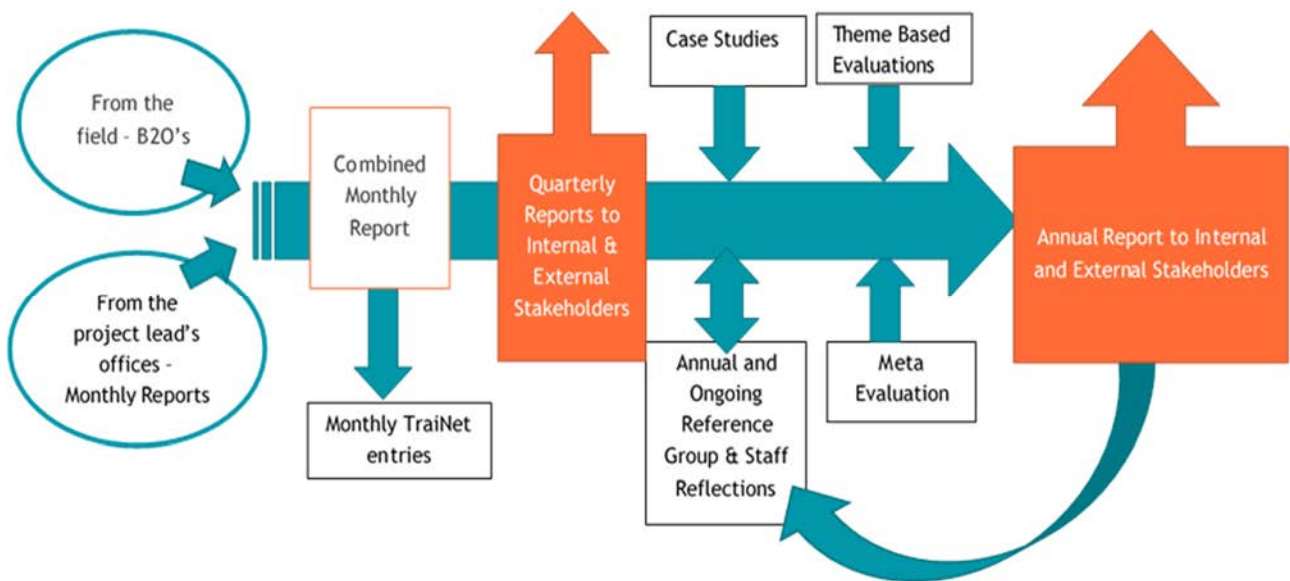


Figure 5: The Reporting Process

Guidelines for reporting and responsible parties may change from time to time but are currently as outlined in Table 5. The reporting templates are appended to this framework document and should also be available online to RESILIM-O staff and sub-grant holders.



TABLE 5: GUIDELINES FOR REPORTING (USE WITH TEMPLATES).

REPORTING	WHEN	BY WHOM	NOTES
BACK TO OFFICE REPORTS ON FIELD ACTIVITY; BASED ON GIVEN TEMPLATE	Submit to MERL Officer by end of each month, with supporting registers	Field staff with team leaders	Encouraged to complete these together as a sense making opportunity to reflect on the field event
MONTHLY REPORT; BASED ON GIVEN TEMPLATE BUT LARGELY OPEN ENDED TO ALLOW FOR PROCESS DATA AND THE UNEXPECTED TO EMERGE	Submit to MERL Officer 5 days after month end	Project leads (RES-O staff and sub-grant holders)	Project leads are encouraged to use half a day a month to reflect with staff as they write up the activities, main outcomes <i>and also the challenges</i> of the month
COMBINED MONTHLY REPORT USING MAIN HEADINGS	By the end of the following month	MERL manager with support from MERL team	The MERL team add a ‘mirror reflection’ in the form of an introduction and conclusion
TRAINET ENTRIES INTO USAID DATABASE	Monthly	MERL officer with input from Finance	Based on B2O reports and registers; compulsory
QUARTERLY REPORTS	Quarters 1, 2 and 3	MERL manager with MERL team and AWARD Senior Staff	Based on B2Os, monthly reports and additional evaluations and reflections
ANNUAL REPORT	Quarter 4	MERL manager with MERL team and AWARD Senior Staff	Based on quarterly reports and additional evaluations and reflections

Figure 6 elaborates on Figure 5. For reporting guidelines and templates, please refer to the appendices.

The RESILIM-O MERL Process & Elements



Figure 6: Details of the implementation process.

Monitoring, Data Capture and Baselines

As explained above two kinds of data are gathered in the hybrid approach:

- Data against quantitative indicators (USAID standard indicators, AWARD generic indicators and project specific indicators) - see Section 4; and
- Narratives and process documentation - see Section 5.

For most projects, or aspects of most projects, a baseline of initial conditions is required against which to judge what progress has occurred during the life of the project. The MERL team should decide with project leads whether a baseline is required. They should do this using the list of indicators that apply to the project (Table 4) and the PIRS which will specify whether a particular indicator require baselines.

Note that baselines need to reflect what is important to track, as outlined in the theory of change, outcomes maps and results frameworks. They can be quantitative (e.g. The number of institutions with the capacity to respond to climate change) or qualitative (narrative - e.g. The quality of biodiversity management) or a combination of both. Also note that baselines can be constructed before or at the start of a project, but also retrospectively. Retrospective baselines are common in complex contexts, where one is not at the start of a project clear on what you would be focussing on or measuring - therefore, you cannot readily produce a detailed baseline.



The expert studies conducted during the first phase of RESILIM-O (2014-2015) may provide valuable contextual data that can be used to construct baselines for individual projects. Similarly, the evaluation case studies also provide useful narratives for baselines.

The most complex baselines seem to be those outlining biophysical conditions. The procedures and concepts used for determining these baselines should be carefully documented.

Closely aligned with AWARD's detailed theory of change (as outlined in the program document) a set of generic baseline questions have been constructed with RESILIM-O staff (see Appendix 4). Project leads are encouraged to use these baseline questions, and add one or two project specific questions, in order to track whether they are 'on the right track' and 'making progress'.

B2Os and Monthly Reporting

These two reporting processes provide the basis for monitoring as well as useful additional evaluation data. Back to Office reports are field notes which should be compiled by the project staff as they return from the field. In the ideal scenario a team of implementers discuss the implementation activity on their way from the field, 'back to the office'. They fill in basic details that will be necessary to identify the activity later on, but they also reflect together on the merit of the activity, what they have found encouraging and challenging, what they would do differently in future, and what they have learnt that might require a change of direction. We have tried various versions of this template, to strike the optimum balance between being quick and easy to complete, and being a stimulus for critical and creative reflection and learning. The B2O template also reminds field staff that they should be collecting and submitting evidence ranging from registers to photographs. It is important when making changes to the templates that past experiences in using them (and staff reflections on this use) be taken into account, so that we do not re-invent wheels.

Monthly reporting was introduced in 2016. It became necessary as program activity increased and a process narrator (member of the MERL team) could no longer adequately summarise the month's activity based on B2Os. Each team leader compiles a report using the template in the Appendix, the MERL Officer collates these and assists the MERL manager in compiling a composite program-wide monthly report. Provided that they have supporting evidence, these field and monthly reports are used to report into TraiNet (from 2015), AIDtracker+ (from 2017) and to compile quarterly reports.

■ **AidTracker+**

In 2017 AWARD will use a new online reporting system introduced by USAID, called AIDtracker+. This system requires input of results against targets for a subset of the full suite of indicators, either on a quarterly or an annual basis. Both the MERL manager and the MERL officer have access to the system.

■ **TraiNet**

This is a USAID database that captures data on the number of training events and associated aspects, including the financial resources used. The MERL officer has been trained in using the system and has access to it. The senior research associate has reviewed the system and also has access in order to provide oversight. A good working relationship with the financial department is essential as their timeous input is needed for capturing the data. As data sometimes needs to be captured before all financial records are available, the finance division together with a director has developed a formula for estimating the average cost of different training interventions e.g. a two-day course with travel and accommodation, or a half day workshop without travel and accommodation. These are used to enter estimates until actual expenses are available, when the system is updated.



Critical for capturing data on TraiNet is the definition of training, which is as follows (from the Automated Directives Service ADS Chapter 253, p.4, 09/26/2014 Revision):

“Participant Training is:

- *A learning activity involving Participants taking place in the U.S., a third country, or in-country, in a setting predominantly intended for teaching or imparting knowledge or skills, with formally designated instructors or lead persons, learning objectives, and outcomes, conducted fulltime or intermittently.*
- *The transfer of knowledge, skills, or attitudes, as well as ideas and sector context, through structured learning and follow-up activities to solve job performance problems or fill identified performance gaps. Participant Training can consist of long-term academic degree programs, short or long-term non-degree technical courses in academic or in other settings, seminars, workshops, conferences, on-the-job learning experiences, observational study tours, and the use of technology such as distance or e-learning, and online courses. (Site-visits carried out for the purposes of internal USAID administrative business are not Participant Training.)”*

There was a tendency in the first years of the program to under-report on training, because the approach to capacity development (based on systemic social learning) tended to focus on recursive longer term interventions, where participants often attend a series of (sometimes diverse) events before they are likely to have the necessary competencies to do the high level resilience related work that is often required of them. There have also been concerns about double counting the same person as having been ‘trained twice’.

However, clarification and feedback from USAID has been that it is important to apply the narrower definition of training *for the purposes of TraiNet data capturing*, given that each training event may have an associated financial implication, and that for the same reason, double counting is not a concern. For example, if a key government official has attended three workshops over the life of the programme, these workshops and their associated costs should all be recorded (as 3 training events) for this individual.

To track longer term training and in particular the ways in which individuals participated in capacity development initiatives in RES-O, a stakeholder database was designed, to capture all engagements with all stakeholders. This was designed as a sophisticated tool with multiple purposes but unfortunately it has due to a number of challenges not been available for consistent reporting.

It should also be noted that in the latter half of the program, several more focussed and shorter-term training events will also be offered as part of a diverse array of capacity building initiatives. These should be straight forward to document and report.

TraiNet entries also require information about the training provider and considerable detail about the cost of each training activity; this reporting therefore requires both RES-O’s financial staff and MERL staff, as well as the field staff responsible for conducting training. Training data is based on signed registers that must be handed in as means of verification.



Clear guidance to staff is needed for deciding whether RESILIM-O should report participants in an event that is not organised by RES-O, but where RES-O staff (supported by USG assistance) give a presentation aimed at building new knowledge, skills or values, in a setting set up for learning (such as a conference presentation or workshop) should be counted as having had their capacity built as a result of US Government Assistance. This is difficult to report with evidence, partly because event organisers are not always willing to share their registers. RES-O personnel are required to request permission to obtain (or circulate their own registers) at events where they give inputs as defined here, so that there is evidence of participants in training or capacity development. In the absence of this, the participants will not be counted towards the training or capacity development indicators and will not be entered on TraiNet, even though USG funding has been used to enable the presentation by RESILIM-O staff, and even though stakeholders have not only reported that they have found RES-O presentations important sources of relevant and inspiring information, but there is also evidence that they have acted on such information.

MERL Personnel and their Roles

In the course of implementing RESILIM-O's MERL framework it has become apparent that the competencies required for implementing complexity aware MERL are most likely to be distributed across a team of people, rather than residing in a single individual. These competencies include among others a sound understanding of quantitative and qualitative research methods; research design skills; an aptitude and requisite skills for methodological innovation and an openness to working in a pioneering context; organisational sensitivity and inter-personal communication and advocacy skills; meticulous recording, data capturing, record keeping and data management skills; team management; time and work flow management; report production management; writing and reporting skills; and a requisite level of ability to interpret data, which in our experience requires a deep understanding of the nature of the program, its take on the issues it is trying to tackle, and its intervention logic or theory of change.

The RESILIM-O team currently consists of:

- One full time MERL officer (graduate)
- One near full time MERL manager (PhD)
- One part time researcher (Masters)
- One part time senior research associate with oversight role (PhD)

In 2017 we will also seek additional human resources as follows:

- A researcher with an understanding of developmental media and communications work, to help evaluate this component of the program through a case study and to refine the ongoing monitoring of (social) media and communications activities;
- An expert in land restitution to work alongside the co-management teams with a 'sounding board' role and to provide an evaluative case study.



It is vital that the MERL team work closely with program staff including senior management. Senior managers have a key role to play in, among others, the following:

- Motivating all staff to contribute to reporting and reflection towards learning
- Participating in strategic design decisions with regards to MERL
- Ensuring that MERL is integrated during planning
- Ensuring that MERL findings are used to guide project refinement and strategic decisions.
- Allocating adequate human and financial resources to MERL.

Financial Resources

The MERL budget is used for the above personnel and their operations including travel and field work. The MERL budget, including all MERL activities in the program, comprises approximately 9% of the total budget for the financial year (excluding sub-grants).

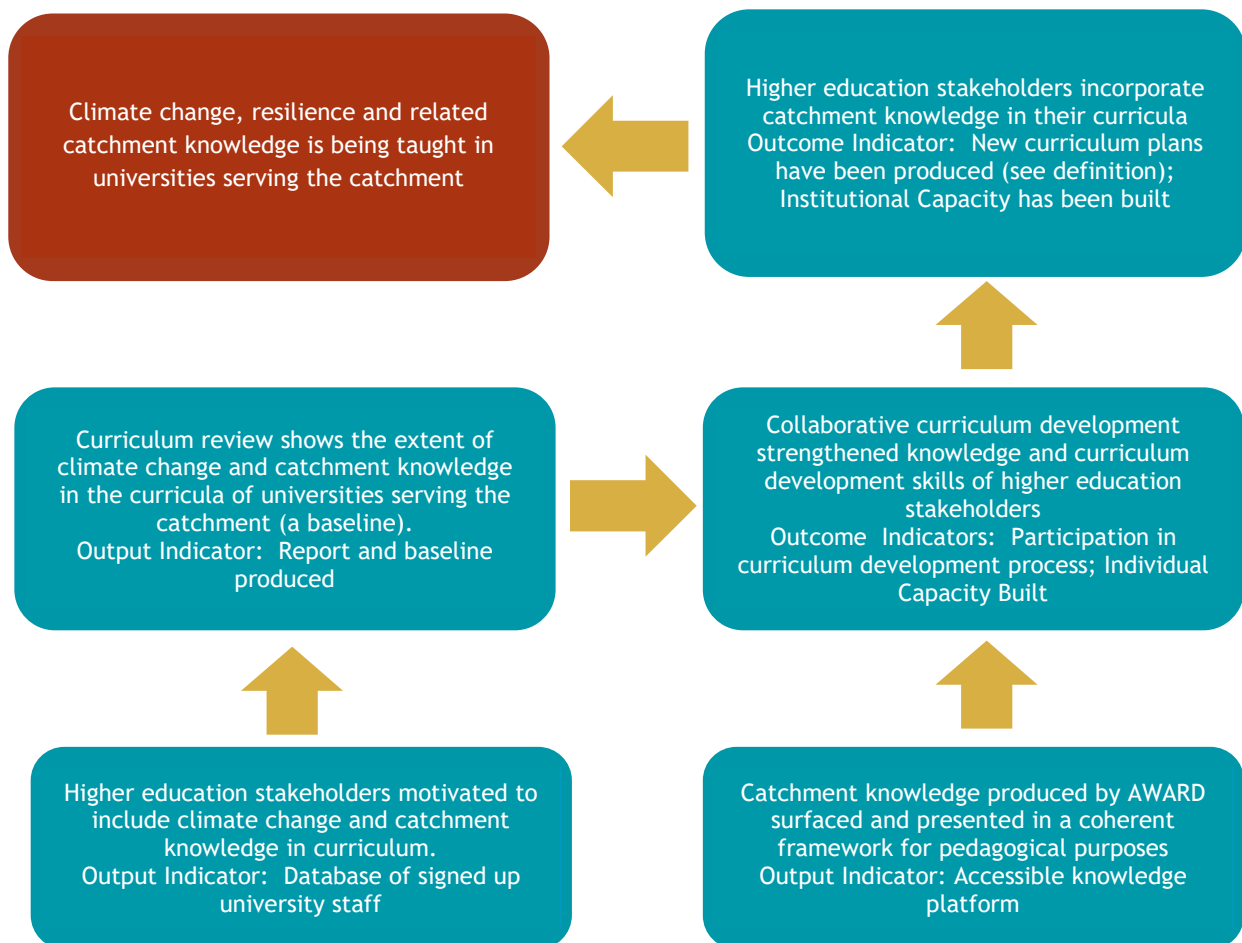
8 Annexes

ACCOMPANYING DOCUMENTS (NOT ATTACHED - FOR INTERNAL USE ONLY)

- **RESILIM-O Program document:** Provides the program context, rationale, strategic objectives and intended high level outcomes, and the principles that inform them.
- **RESILIM-O Work Plan 2017:** Outlines the projects and activities planned for 2017, towards achieving the intended outcomes. Includes detail on how MERL will be implemented in 2017 and budget allocations.

APPENDICES (FOR INTERNAL AND EXTERNAL DISTRIBUTION)

Appendix 1: Example of a Results Framework (for the Institutions of Higher Learning Project)





Appendix 2: MERL Tools: Reporting frameworks

RESILIM-O Monthly Project Report Guide (2017 Update)

The writing and collection of monthly project reports is one of the primary ways in which we collect both narrative and quantitative data for monitoring, evaluation and learning. These reports should be compiled each month by project leaders (preferably in reflection *with* other project staff and accompanied by the following supporting documents (means of verification):

- Attendance registers
- Minutes of meetings
- B2O / field reports, and
- Photographs.

Monthly project reports should be promptly submitted to the MERL Manager(karen.kotschy@gmail.com) and the MERL Officer (Vhutshilo@award.org.za) by the 5th working day of the next month. They will be verified against the supporting evidence and then compiled with other monthly project reports from across the program into a consolidated monthly program report. This internal document will be circulated to keep staff and sub-grantees up to date on program progress, to identify media and communication material for wider sharing, and to encourage systemic reflection.

Every third month, the consolidated monthly reports and supporting evidence form the main substance for the quarterly report that is submitted to USAID. Thus monthly project reports should be accurate, reflective of the main project activities, and well supported by evidence. The accompanying registers and other figures submitted are also the basis for statistics submitted to USAID's TraiNet system where data is aggregated with other USAID programs' data.

Monthly reports are based on projects within Key Results Areas as outlined below. Each KRA leader will decide how many project reports will be written within the KRA, and by whom.

Key Result Areas (KRAs) for Reporting

KRA 1: To institutionalise systemic, collaborative planning and action for resilience of ecosystems and associated livelihoods through enhancing the capacity of stakeholders to sustainably manage natural resources of the Olifants Basin under different scenarios.

KRA 2: To enhance long-term water security and protection by supporting collective action, informed adaptation strategies and practices and tenable Institutional arrangements for transboundary Integrated Water Resources Management.

KRA 3: To conserve biodiversity and sustainably-managed high-priority ecosystem conserved through supporting collective action, informed adaptation strategies and practices and tenable institutional arrangements.

KRA 4: To reduce vulnerability to climate change and other factors by supporting collective action, informed adaptation strategies and practices and tenable Institutional arrangements.

KRA 5: To facilitate the sharing of experiences and lessons within the ORB and other basins.

KRA 6: To strengthen organisational learning, integration and coherency through continuous reflective and collaborative process.

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



Monthly Project Report Template and Completion Guide

Introduction

- A very brief background and overview of the activities carried out during the month.
- Make a brief connection (if any) with previous activity or activities How do these activities connect with what you have done in the past?

Activities

- Specify the relevant KRA and project(s)
- Briefly describe what happened and the role of USG supported staff /sub-grant holders
- Include the purpose of the activity
- Indicate which of these activities (if any) should be counted as capacity development in relation to climate change, and why
- Indicated which activities (if any) should be counted as capacity development in relation to biodiversity conservation, and why

Reflection

- What has been the most significant development this month and why?
- What has been the role of RESILIM-O in this development, if any?
- Has this development made a contribution to your objectives and / or the catchment? How?
- What were your main challenges this month? (These could be contextual, programmatic or implementation difficulties.)
- What should or could be done to address these challenges?
- Do you have anything to share on the AWARD website or facebook page? Why do you regard this as worth sharing?

Pictures

- Include wherever possible some pictures in the report, with captions. Please also include the pictures as jpg files when you submit the report.

Conclusion

- Imagine you meet Dr Sharon Pollard or Doreen from USAID making tea and you have two minutes to update her on activities, achievements or challenges this month. Write down what you would say as a conclusion to your report.



Phase II B2O Report

Bringing Process Data and Statistics from the Field Back to the Office

Complete after a field event and submit to MERL via Vhutshilo@award.org.za within a week or the last day of the month.

1. Making the Connection

What was the field event? (Workshop, meeting, course, conference, talk, etc.)	
Where did it take place?	
When did it take place? (date)	
Purpose of the event	
KRA and Project to which the event relates	
Intended RES-O Outcome Towards Which the Event Contributes	
Name(s) of Author(s) Complete with colleagues where possible	
Who else from AWARD attended?	
Who else should you (the author) send this B2O to?	



2. TraiNet Data

To decide if the data from this event should be logged on TraiNet, please complete:

Could participants learn new information or skills relating to climate change, biodiversity and/or water management?	
Was there a lead facilitator or instructor?	
Was there a defined learning program with learning objectives/ outcomes?	
Was the event run/organised/initiated or funded either by the Sub-Grantee or by AWARD?	
Did the Sub-Grantee or AWARD make a substantial input in the event (e.g. a presentation or planning the program)?	

3. Reflections

Reflect on the event and what you have learnt about the catchment and your work. Consider things not immediately obvious from the agenda, that struck you individually or as a collective.

<p>What new insights did you gain from this event, or this event in relation to previous ones?</p> <p>Please summarise any key observations regarding the context and/or about your role in the process or AWARD’s work in general.</p>	
Have any new questions emerged (from you or others) about the context and / or your work arising from this event?	
Have you identified any new challenges regarding the context and/or your work? Do you have any ideas as to what should / could be done about this?	
Have you gained any new insight regarding progress in relation to the baseline conditions there were previously in this context? (You need not reflect on this if this is a new context or project.)	



4. Communications

Help us communicate about the catchment and our work.

- Submit photographs of the event to the Media and Communication or MERL Unit.
- Send a note about potential social media posts to the Media and Communication or MERL Unit
- Did you hand out any RESILIM-O pamphlets, media packs, calling cards, reports, educational materials, etc? Please name the items and the number you distributed:

RESILIM-O material distributed	Number of Copies Distributed

Were you given any pamphlets, reports, calling cards, educational materials etc.? Please list these below and send copies to the AWARD Media and Communications team.

- 1.
- 2.

You are Done! Please submit your B2O to Vhutshilo@award.org.za with copy of supporting documentation like the register, minutes or a report.

.....
NAME

.....
DATE

ADDITIONAL DOCUMENTS APPENDED:

.....



Appendix 3: List of Projects by Staff, Sub-Grant Holders and Consultants (2017)

TABLE 6: LIST OF PROJECTS BY STAFF, SUB-GRANT HOLDERS AND CONSULTANTS (2017)
(Sub-grants highlighted in yellow)

	PROJECTS BY KEY RESULT AREA	IMPLEMENTED BY	PROJECT LEADS
	KRA 1: Enhancing resilience through systems approaches and capacity development		
	Collaborative Resilience Assessment		
1.1	CoDyM: Collaborative exploration of water resources protection (SES) under different scenarios	AWARD	SP; JCH ++
	Capacity development for enhanced praxis		
1.2	Municipal Support Initiative: management	AWARD	DdT
1.3	Municipal Support Initiative: land use planning	AWARD	DdT
	Municipal Support Initiative: wastewater treatment works	WRP	DdT
	Municipal support: improved water conservation and demand management	WRP	DdT/SP
1.4	CSO Indabas	AWARD	DdT +
	Civil society capacity development (Changing Practice course)	EMG	DdT +
	Skills and training		
1.5	CapDIM: RESILIM-O interns and mentors programme	AWARD	CC (ER)
	Building resilience through institutions of higher learning	Rhodes University	DdT
1.6	Water & CC clinic	AWARD: IWR	SP; TK; DdT
	Conservation entrepreneurship	INR	DdT; SP; JG
	KRA 2: Water security and water resources protection for improved IWRM		
2.1	Support for systemic, integrated water governance in the ORC (including forums and CMFs)	AWARD	SP; DdT
2.2	Development and use of an integrated decision support system (InWaRDs)	AWARD	HR + DWS + ERiddell (SANParks)
2.3	Building custodianship through river health monitoring	AWARD	HR; SP



KRA 3: Natural resources management of high-priority areas			
3.1	Blyde Ecosystem Restoration & NRMP support project	AWARD	JG
3.2	Legalameetse co-management support project	AWARD	LG (SP)
	Compliance, monitoring and enforcement in the forestry industry	INR	JG
KRA 4: Support for climate change adaptation strategies and practices			
4.1	Integrating climate change (CC) into Disaster Risk Reduction (DRR)	AWARD	TK
4.2	Dialogues for climate change literacy and adaptation (DICLAD)	AWARD	TK/ SP
4.3	AgriSI Management of Grants/ Agricultural work	AWARD	RH/SP
	Support for small-scale climate smart agric (lower Olifants)	Mahlathini	SP
	Support for small-scale climate smart agric (Sekhukhuneland)	Ukuvuna & SOL	SP
KRA 5: Learning exchanges			
5.1	CMA learning tours and meetings	AWARD	SP
KRA 6: Organisational learning (MERL), Media and Comms (Ops budget)			
6.1	Media & Communications	AWARD	DdT
6.2	MERL activities	AWARD	ER



Appendix 4: Generic Baseline Questions

Generic Baseline Questions

Adapt According to Own Project

1. To what extent do the stakeholders understand interactions within and between systems?

YES	NO	PARTLY	Please Explain/Qualify
DATA SOURCES:			

2. To what extent do the stakeholders have shared understanding of the issue and appropriate responses?

YES	NO	PARTLY	Please Explain/Qualify
DATA SOURCES:			

3. To what extent do the stakeholders understand climate change/ecosystems/natural resources and its relevance to themselves?

YES	NO	PARTLY	Please Explain/Qualify
DATA SOURCES:			

4. To what extent are stakeholders using networks/relationships to access and share information, resources and power?

YES	NO	PARTLY	Please Explain/Qualify
DATA SOURCES:			

5. To what extent are informed tools, plans, frameworks, guidelines, strategies in place to address the issue? Informed means Climate Change and NRM meaningfully integrated.

YES	NO	PARTLY	Please Explain/Qualify
DATA SOURCES:			



6. To what extent are stakeholders using tools and acting on plans, guidelines, frameworks, strategies to address the issue?

YES	NO	PARTLY	Please Explain/Qualify
DATA SOURCES:			

7. To what extent are there informed and enabling rules, norms and practices in place?

YES	NO	PARTLY	Please Explain/Qualify
DATA SOURCES:			

8. To what extent do stakeholders have a sense of responsibility for the ORB and are motivated to act?

YES	NO	PARTLY	Please Explain/Qualify
DATA SOURCES:			

9. To what extent are stakeholders taking collective action?

YES	NO	PARTLY	Please Explain/Qualify
DATA SOURCES:			

10. To what extent are stakeholders learning from action and re-framing issues and responses?

YES	NO	PARTLY	Please Explain/Qualify
DATA SOURCES:			

Possible Methods and data sources for collecting baseline data

Several options - possibly use a mix, *always* choose a method that will not be to the detriment of programme activities. Examples include: focus group discussions, reports and minutes of meetings (past and future) meetings, questionnaires, MERL team member takes notes during workshops, events, reflection meetings, etc.



Appendix 5: Performance Indicator Reference Sheet (PIRS) 2017 Update

Provides the full definitions, targets, and data sources for all the indicators to be used.



award

The Association for Water and Rural Development

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

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Company Reg. No. 98/03011/08

Non-profit org. Reg. No. 006 - 821

About USAID: RESILIM-O

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

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info@award.org.za

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