RESILIM-O:
Resilience in the Limpopo Basin Program– Olifants

MILESTONE 5: Progress Report #4: April- June 2017

Under the
Lower Olifants catchment
Agricultural Support Initiative (AgriSI)

Implemented by

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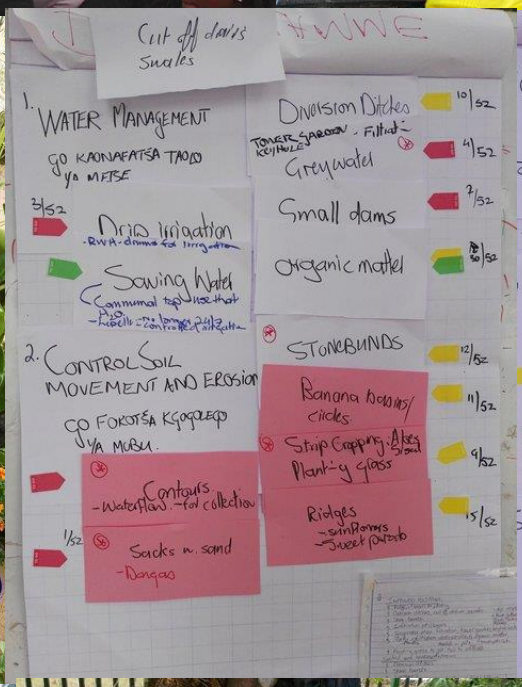
Cut off drains
Swales
1. WATER MANAGEMENT
GO KAONAFATSA TAOLO
YA METSE
Drip Irrigation
Sowing Water
2. CONTROL SOIL
MOVEMENT AND EROSION
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Contours
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Strip Cropping: Aloes
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Ridges
-sinPotatoes
-Sweet potato


CROP MANAGEMENT
GO KAONAFATSA HLOKOMELO
YA DIBYALWA
Basins, mulching
Direct water monocul
Close spacing
Afternoon Shade
Crop rotation
Intercropping
Fallows
- aloes extract
Pest Control
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SOIL FERTILITY
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Mulch
Legumes
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Manure:
Chicken
Cattle.
Compost.
Organic Matter
Bury Bones,
Looking after Indige
Plants
HLOKOMELO YA DIME
TSA TLHAGO
Stop burning
Veldt
Don't chop trees
-Cut/prune
Bring wild trees into
homes, plant.

Summary

During this quarter water shortages have once more come to the fore as the most severe constraint in production. In both the Oaks, and Sedawa the municipal water provision systems failed completely; thus joining the Willows and Botshabelo in their plight. Householders buy water at R30-R35/210l drum. Flourishing gardens have shrivelled to sand and little winter vegetable planting has been undertaken.

A further visioning process was conducted in Lepelle, including also AWARD staff and the INR team focussing on value adding and non- farm small business development under the Resilim O programme. A strong focus of this process was the development of opportunities for youth in the area.

Other networking and stakeholder interactions included a community event for World Biodiversity Day (held at Sedawa community hall) and the AgriSI Open Day in Sedawa, showcasing the climate smart agriculture practices and processes being implemented to the broader community and role players, including the Municipalities, officials from the Department of Agriculture and participants from Lima RDF and Ukuvuna. The event included participants from all 6 villages linked to this programme and introduced the newly elected local facilitators.

This quarter has seen a focus on monitoring processes:

- Garden monitoring was commenced using the newly designed form and local facilitators were provided with training for their work and their monitoring responsibilities. A total of 24 garden monitoring interviews have been conducted.
- An open day was held in Sedawa, including all the learning groups and community members, reviewing the learning to date as well as monitoring the implementation to date through a community review (five fingers) process.

Learning and innovation workshops and sessions continued apace. Learning in the groups has continued and focused on soil fertility management, including liquid manures with some input also on natural pest and disease control options. A range of multipurpose plants, trees and herbs were introduced in these sessions for participants to plant in their gardens - serving as windbreaks, pest repellent plants, medicinal plants, culinary plants, indigenous fruit and shade plants. Learning workshops have now been held in Botshabelo (11), Sedawa the Willows (9), Oaks and Finale (13). And Lepelle (33).

Ten learning group participants across Botshabelo, Sedawa and the Oaks have been provided with the materials for construction of tunnels and drip kits. These participants fulfilled the criteria of digging and packing 3x6m trenches for their tunnels. This was put forward in group meetings and agreed to as a process for support. The participants are to work as small subgroups in their villages constructing the tunnels by themselves, with some initial support from the field team if still required.

Learning group participants volunteered for construction of underground RWH storage structures in their years (24m^3). The understanding is that the householders will provide sand for construction and all labour required for construction of the tanks, to be eligible to receive the materials. Further criteria were set at a village level, with assistance from local facilitators and included need- both in terms of water shortages and finances (poor woman headed households have been prioritised) and level of gardening activity. Each plot was

assessed for technical viability and the required tank type (ferro cement or geofabric & bitumen). With financial assistance from DKA, through AWARD, 4 underground RWH storage tanks have been sited, the holes dug and are in the process of construction.

PARTICIPANTS THIS PERIOD

SEEDS OF LIGHT: Trygive Nxumalo
MAHLATHINI: Erna Kruger, Sylvester Selala, Chris Stimie
AWARD: Richard Hatfield, Bigboy Mkhabela,

This report contains the following annexures:
Attendance registers

1. Annexure 1 _Open day _ Joint community based review of learnings to date and Local Facilitator training_Sedawa_20170425
2. Annexure 2_ Cluster activity record_ Learning Workshop_ Soil fertility and natural pest and disease control_Sedawa-20170419-20
3. Annexure 3_ Cluster activity record_ Learning Workshop_ Natural pest and disease control_ Willows_20170430
4. Annexure 4_ Cluster activity record_ Learning Workshop_ Soil fertility and natural pest and disease control_Botshabelo_20170530
5. Annexure 5_ Cluster activity record_ Learning Workshop_ Soil fertility and natural pest and disease control_Finale_20170621
   Annexure 5.1_Learning materials
6. Annexure 6 monitoring forms_ GARDEN MONITORING AND INDIVIDUAL EXPERIMENTATION PLAN
7. Annexure 7_Local Facilitators Training Workshop_Sedawa_20170607-09 Annexure 7: Learning materials_ Workshop pics_20170314
8. Annexure 8_Collaborative work_ RWH storage tanks progress report_ July 2017
9. Annexure 9_Compilation of B2Os for the reporting period.
10. Annexure 10:Examples of garden monitoring forms filled in by local facilitators-end June 2017

2. Activity record for the period

This section gives an indication of activities undertaken during the reporting period. to achieve the outcomes for this period, time spent and people involved.

DATE	DESCRIPTION OF ACTIVITY	WHO WAS INVOLVED
2017/03/27-29	Writing up field reports and doing Milestone 4 documentation -3 days respectively	Erna, Sylvester
2017/04/12-13	Translation of garden monitoring form into Pedi and liaison with Trygive for monitoring (1 day), Designing Open day programme and sending out invitations (1 day), Monitoring in Mametja (2 days)	Sylvester, Trygive, Christina Thobejane
2017/04/12	Review of verifiables, rework of Milestone 4 report and documentation – 6 hours	Erna
2017/04/17	Preparation for AWARD weeks and travel to Tzaneen (12hours)	Sylvester

2017/04/18	Tzaneen; procurement of plants and trees from various nurseries and travel on to Hoedspruit (8hours)	Sylvester
2017/04/19	P&D control training in Sedawa (8hours)	Sylvester, Trygive, Christina
2017/04/20-21	Continuation with preparation for Open day, monitoring in Oaks, Mametja, Botshabelo-trench beds for tunnels (16hours)	Sylvester
2017/04/24-25	Preparation for and running open day in Sedawa (20hours ea for E and S), (8 hours-BB and Try	Erna, Sylvester, Trygive, BB,
2017/04/26	P&D control training in Willows (10hrs)	Erna, Sylvester, Trygive
2017/04/27-28	Household monitoring – (16 hours ea), return travel	Erna, Sylvester
2017/05/15-17	Write up garden monitoring forms (2 days)	Erna
2017/05/18,19,20	Bank details, year end financials DKA proposal rework, ordering of more tunnels, arrangement for tank construction, (3 days)	Erna
2017/05/21	Travel to Tzaneen	Sylvester
2017/05/22	Tzaneen; procurement of plants and trees from various nurseries and travel on to Hoedspruit (8hours) Skype meeting; DICLAD and visioning, with prep (2,5hrs)	Erna, Sylvester
2017/05/23-26	Training of LF's and garden monitoring (3 days)	Sylvester, Trygive
2017/05/29	Planning of visioning, office admin (1 day)	Sylvester, Richard
2017/05/30	Garden monitoring, checking for RWH storage tank sites (1 day)	Sylvester
2017/05/31	World biodiversity day; Sedawa Community Hall (1 day)	Sylvester, Trygive, BB
2017/06/01	Lepelle visioning workshop (1day)	Sylvester, Trygive, Richard, INR
2017/06/02	Botshabelo Soil fertility learning and innovation workshop (1 day)	Sylvester
2017/06/06-08	Summarising homestead assessment information in excel format (3 days)	Erna
2017/06/08-09	Field reports (2,5 days)	Sylvester
2017/06/10	Bookings and logistical arrangements- next field visit (4hrs)	Erna
2017/06/13	Travel to Hoedspruit – office admin (1 day)	Sylvester
2017/06/14-15	Garden monitoring, checking RWH sites for preparation to build. Tunnel sites checking of trench packing (3 days)	Sylvester
2017/06/17	Field reports (1,5days)	Sylvester
2017/06/18-21	Travel, deliver tunnel materials and get work team going on tunnel construction x10. Do underground RWH tanks construction training for 2 sites (ferro cement and geofabric & bitumen (5 days)	Erna, Sylvester, Chris

2017/06/22-23	Continuation with construction of tunnel in Botshabelo and initiation of construction in Mametje	Sylvester, Trygive, Lenkie
2017/06/26-28	Milestone 5 report and documentation	Erna, Sylvester

Sylvester: 40 days, Erna: 27 days

3. Progress

Milestone 5: April- June 2017: Progress according to deliverables

Below is the summary table of all activities and outcomes undertaken during this reporting period**.**

Table 1: Summary of deliverable completion under Milestone 5: April- June 2017

	Activities planned	Completed?	Expected outcomes	Completed?	Verification documentation	Completed?	Reference
Learning & Mentoring: In all 6 communities each 2 days	Learning & Mentoring: Local Facilitator training Local Facilitator mentoring of new practices Farmer ongoing self-monitoring, -assessment and learning	C	-Training of LFs in mentoring, learning and monitoring (2 days x 6 villages) -LF's undertake garden mentoring and monitoring with farmers (3-4 days ea) -Learning groups review session- 5 fingers assessment by farmers and LFs	C C C	Progress report on outcomes including the following documentation: 1. Photos & photo diaries 2. Farmer work plans 3. Garden monitoring 4. Monthly assessments 5. Monitoring forms 6. Cluster activity records 7. Event materials, attendance registers 8. Vision and scenarios record	C	1. Photos in reports and– All photos saved in directories and kept by Erna and Lenkie 2.Farmer work plans are recorded in the garden monitoring forms 3. 24 forms across four villages 4. In this report 5. 24 garden monitoring forms 6.Appended to this report 7.Appended to this report 8.Written up by AWARD team.
Intro to innovations and experimentation: In all 6 communities each 2 days	Mentoring by trainers and LFs'	C	- Garden monitoring including trainers and LFs'	C		C	
Collaborative work: In all 6	Site assessments and	C	-Preparations for tunnel and RWH storage tank construction complete.	C		C	

communities each 2 days	community contributions to infrastructure support; tunnels, drip kits and RWH storage tanks		Process initiated for collaborative construction work				
Networking: Villages 1 & 2 (Botchabelo & Sedawe) open day (each 1 day) Exchange visit 1 to Sekhukhune (35 farmers) Local Facilitators networking: with Sekhukhune	Open day for implementation review No activity planned- under milestone 5	C NC	- Open day for all six villages - World biodiversity day- Community workshop in Sedawa	C		C	

3.1 Description of progress to date

NETWORKING

- An open day was held in Sedawa for participants from all six villages to showcase implementation and practices introduced for the 2016-2017 summer growing season. See attachment 1 and 2 for the invitation and programme for the day. Stakeholders (NGOs, Department of Agriculture, Local Municipal Officials) were also invited to the workshop.
    - Around 66 community participants attended. The workshop provided a platform for review of practices, by farmer participants themselves and also for learning and building understanding of different practices fit together to build a more sustainable and resilient gardening system.
    - Local facilitators for all six villages were formally introduced to farmer participants. These facilitators ran the thematic information ‘stations’ for the day – including soil and water conservation, intensive homestead vegetable production, production in a shade house/tunnel, using drip kits and greywater, multipurpose trees and shrubs and nursery management and conservation agriculture.
    - Institutional stakeholders promised to come, but were conspicuous in their absence.
    - Three extension officers from the Venda office joined the workshop. They were extremely enthusiastic and complimentary and wanted to set up a working relationship and a cross visit to their area.

    - Field staff and local facilitators from Lima RDF joined – they were given the opportunity to introduce the food security programme –"Arelemeng" that they are implementing in the area. An agreement was made to synergise activities and training across this programme and the AgriSI initiative.
- A community workshop was run for World Biodiversity day in Sedawa. This was led by the Department of Economic Development and Tourism. Stakeholders presented their programmes and implementation approaches. Community members were given an opportunity to discuss issues and suggestions. This workshop helped to raise the awareness of the importance of conserving biodiversity in the community and additionally provided some ideas for projects and small business development around biodiversity conservation and promotion.
- Follow-ups were made with Lima RDF staff to ensure that the two gardening based programmes implemented by them and AgriSi do not cause trouble for each other.
- A visioning exercise was held in Lepelle which included the AgriSi team as well as the INR – who are working with alternative livelihoods and micro-enterprise development. The agenda for the visioning workshop is outlined in Attachment 5. The aim was produce a broader community level vision and action plan for activities that potentially include the AgriSi climate smart agricultural practices, but include also broader aspects such as enterprise development and social and institutional change options.

LEARNING AND MENTORING

- Learning workshops were continued and soil fertility sessions and sessions on natural pest and disease control have now been conducted for all six villages (See Annexures 2-5). See Annexure 5.1 for learning materials used.
  The process included an introduction into multipurpose plants, that included indigenous trees and shrubs as well as herbs and medicinal plants. Plants that have a significant role to play in pest control were also introduced. Samples of plants were procured from Tzaneen nurseries and also from Trygive Nuxamlo through his nurserying work in his home area. Some examples of trees supplied include Moringa, Maruals, Dikgogomo and Umthungulu. The herbs include lemon balm, chives, comfrey, lavender, rosemary, thyme, wild basil, mint, pennyroyal, coriander, parsley and fennel.

  Different planting arrangements were agreed to in the different villages by the learning group participants. In some cases, the suggestion was made that the local facilitators plant all the herbs as a demonstration; in other cases the plants were distributed between participants.

  Vegetable seed was also distributed in these workshops to provide for diversified production in the participants' winter gardens. Seed included; Chinese cabbage, mustard spinach, kale, broccoli, cauliflower spring onions, celery, parsley, coriander, leeks and spring onions.

INTRODUCTION TO INNOVATIONS AND EXPERIMENTATION

- A training session was held for all Local Facilitators to go through their job descriptions, filling in of timesheets and also use of the garden monitoring forms. See annexures 6 for the monitoring forms and 6 for the LF training workshop report.

  LF's are expected to visit gardeners in their village on a monthly basis and to complete at least one garden monitoring form for each of the learning group participants. To this end the form was translated into isiPedi. Two days were spent in the field working with sub groups of the LFs to ensure their ability to confidently work with these forms and fill them in. The LFs were then asked to continue visiting learning group participants and complete forms by themselves. On average 8-10 visits were conducted by the LFs during the month of May 2017. A sample of garden monitoring forms filled in by local facilitators is shown in Annexure 10.

  An arrangement will be put in place for the new intern for AgriSI to support the LFs in garden monitoring. They are finding the filling in for the monitoring forms somewhat onerous. They also need to plan for mini workshops where some of their participants are still unclear on the implementation of some of the intensive homestead food production techniques introduced through the learning process.

  Garden monitoring was conducted for a number of participants by the AgriSi facilitation team as well, prior to handing over this responsibility to the LFs. These have been compiled as

  Some preparation was made for running the CC dialogues in the 6 villages in the Lower Olifants. Discussions were held by the team and an outline or process was jointly designed. See attachment 4. Unfortunately, the days chosen for running these sessions in two of the communities overlapped with an urgent process related to the RWH underground storage structures and the workshops have been postponed for July-August.

COLLABORATIVE WORK

- A process was set up for individual participants who want to implement the construction of tunnels/ shade houses in their homesteads. Volunteers are required to dig three 6x1m trenches and pack these to be eligible for receiving the materials for the tunnel. They are expected to construct the tunnels themselves, with some assistance form the facilitation team. A list of volunteers was generated at the open day and further additions were made by the Local Facilitators. Household visits were conducted for those volunteers who had completed their trenches.

  The team was surprised by the large number of volunteers who made their trenches – around 18 in total spread across Sedawa, Mametje, Botshabelo and the Oaks. Due to limited budget availability 10 volunteers were prioritised for the initial supply of tunnels. This was based on the following criteria, which had been discussed and ratified by the Local Facilitators:
    - Women headed households are to be prioritised
    - Households who have little or no access to municipal water supply.
    - Poor households

- Active and enthusiastic gardeners

10 Tunnel kits have now been delivered and work parties have been put together to construct the tunnels over the next month or two. The joint construction of one of the tunnels in Botshabelo has been started.

Village	Name	Description
Botshabelo	Miriam Malepe	Trenches dug, partially filled. Still collecting manure and organic matter
	Mosebu Ntlamo	Trenches dug- tins and green organic matter collected. She still need to collect manure and finalise packing of her trenches
	Gogo Mogotho	Trenches dug, packed and ready for the tunnel
Mametje	Matibeng Morema	Trenches finalised and planted. She has in addition built a small fence around her gardening plot.
	Norah Mahlaku	Trenches finalised and planted, along with a number of other trench beds and shallow trenches in her garden
	Dronah Marepe	Trenches finalised. Seedlings planted and ready for transplanting into the tunnel
Sedawa	Magdalene Molepe	Trenches finalised, planted and mulched, along with a number of other trenches and beds in her garden.
	Norah Malepe	Trenches dug and packed- ready for tunnel.
The Oaks	Betty Mokgobo	Trenches dug and packed- ready for tunnel
	Florence Lewele	Trenches dug and packed- ready for tunnel

Right and far right Matibeng Morema's trenches at the end of April- in process of being dug by family members and end June- packed and planted to seedlings- ready for the tunnel. In addition she constructed a fence around her small garden – which she started after the AgriSi learning workshops

Right: Norah Mahlaku's trenches – planted to seed and watered. She has also started a garden since her involvement in the learning groups as has

Far Right: Magdalene Marepe. Here she planted and mulched her trench beds for the tunnel. She has a beautiful garden alongside these trenches.

In addition, the support from DKA for piloting the construction of 4 underground RWH storage tanks was finalised. 4 Volunteers were chosen on the basis of a number of carefully chosen criteria, they were visited and siting for their tanks and water inflow and outflow paths was done. They started on the digging of their holes. These have now been inspected and some of the materials required for construction have been delivered to the volunteers. They are Miriam Malepe and Gogo Nthlamo in Botshabelo and Norah Malepe and Christina Thobejane in Sedawa. See Annexure 8 for a report on implementation progress.

4. Summary of baseline and implementation progress per village

This table provides an overview and summary of all activities undertaken on a village by village level. It is not always possible to keep the agendas in all the villages synchronised over time and so some of the activities will have been undertaken in some of the villages and not others. This summary allows the team to track where the process is in each village.

AWARD baseline and implementation per village: 2016-2017								Jun-17																			
VILLAGE	Baseline							Learning and mentoring															Introduction to innovations and				
	Current practices	CC mapping	Baseline w/s 2 (Cropping practices	Visioning and scenarios		Champions/ Local facilitators		New practice training															Farmer experimentation	Individual farm experiment designs	Tunnel construction	Drip kit construction	RWH and erosion control assessments
				Five Fingers	Vision and scenarios	Selection	Training	Contours	Diversion ditches,	Mulching	trench beds	Shallow trenches	greywater bucket filter	Keyhole beds	Tower gardens	Soil properties	Soil fertility (manure, compost liquid manure, fertilizers)	Planting seed and seedlings	CA	Ecocircles	Natural pest and disease control					
Sedawa	√	√	√	√	√	√		√	√	√	√	√	√			√	√	√	√	√	√	√	√	√	√	√	√
Botshabelo	√	√	√	√	√	√		√	√	√	√		√			√	√	√	√	√	√	√	√	√	√	√	√
Willows	√	√	√	√	√	√		√	√	√	√		√			√		√	√	√	√	√	√	√	√	√	√
Oaks	√	√	√	√	√	√		√	√	√	√		√		√	√		√	√				√	√	√	√	
Finala	√	√	√	√	√	√		√	√	√	√		√		√	√		√	√				√	√	√	√	
Lepelle	√	√	√	√	√	√		√	√	√	√		√			√		√	√					√	√	√	√

5. Individual Experimentation

Here a summary is provided of the individual experimentation undertaken in each of the villages. This will be updated in all future reports.

INDIVIDUAL EXPERIMENTATION				Jun-17
Date	**Village**	**Description of experiment**	**No of participants**	**Name of participants**
Nov-16	Sedawa, Lepelle, Oaks, Finala, Willows, Botshabelo	Diversion ditches, contours (using line levels), trench beds, planting seeds and seedlings, greywater filtration for irrigation,		See attendance registers
Dec-16	Sedawa, lepelle, Oaks, Finala, Willows	Conservation Agriculture plot : 10mx10m tramline intercropping of maize and sugar beans and maize and cowpeas. Planted in basins and rows.	50	See attendance registers
Feb-17	Sedawa, Oaks and Finala	Liquid manure, shallow trenches	27	See attendance registers
2017/01/31	The Oaks	Diversion ditches, trench beds, CA	4	Mr Makudu, Janet Lewelle, Florence Lewelle, Betty Ncgogo,
2017/01/31	Finala	Tower garden, CA, drip kits	27	Sarah Nyathi
2017/02/01	Sedawa	Tunnel: vs normal production experiments	1	Christina
2017/02/01	Lepelle	CA, diversion ditches, trench beds	4 (8)	George Sebatane, Jane Kobeni, Sias Sebuyane, Londi Tsilwane
2017/02/06	Sedawa	Basin planting: Control is the normal way 30cmx30cm basins 50cm apart, Trial is inclusion of manure nad lucerne hay in the basin prior to planting and mulching between basins	1	Mrs Matene

2017/02/06	Sedawa	Planting a selection of vegetable seeds: Butternut, onion, rosemary, coriander, chilli, green pepper, squash, lazy house wife (beans), Swiss chard, chinese cabbage, carrot, okra, parsley, spring onion, turnip (2 types (white and red), egg plant, tomatoes	19	See Learning and Innovations report -Sedawa
2017/02/28	Oaks, Finala,Sedawa	Mulching CA plots	27	See attendance registers
2017/04/19,26	Sedawa, Willows	Pest and disease control brews, planting of herbs and indigenous trees	24	See attendance registers
2017/03/14	Sedawa	CA, trench beds, diversified cropping		Maria Malepe
2017/04/19-2017/06/02	Botshabelo, Sedawa, Willows,	Natural pest and disease control brews, planting of indigenous and multipurpose plants	47	See attendance registers
2017/06/19	Botshabelo, Mametje, Sedawa, the Oaks	Individaul homestead based tunnel construction, with three 6x1m trenchbeds	10	See Milestone 5 report
2017/06/19	Botshabelo, Sedawa, Willows,	Household implementation of underground RWH storage tanks	4	See Milestone 5 report
2017/06/20	Sedawa	Trench beds and shallow trenches used extensively in their gardens	4	Alex Mokgopa, Norah Mahlaku, Christina Thobejane, Magdalene Molepe

6. Summary of milestone implementation across villages.

MAHLATHINI	MILESTONE COMPLETION: target completion to date % (in black) vs actual (in red)						
Key activities / Milestones	**MILESTONE 1**	**MILESTONE 2**	**MILESTONE 3**	**MILESTONE 4**	**MILESTONE 5**	**MILESTONE 6**	**MILESTONE 7**
Inception report	100% / 100%						
Setting the scene ***Comment:***		67% / 65% less coverage, more villages	100% / 80% visioning + final LFs outstanding	100% / 90% Some visioning + 2 LFs outstanding	100% / 100% LF selection and training complete. Additional visioning in Lepelle		
Learning and mentoring ***Comment:***		10% / 15% 6 villages not 4	30%/ 40% 6 villages Some garden mon + LF outstanding	50%/65% 6 villages; continuation with learning schedule; LFs elected in 3 villages	70%/85% 6 villages; continuation with learning schedule; soil fertility and P&d control. Mentoring and garden monitoring by LFs	90%	100%
Experimentation & intro to innovations ***Comment:***		25% for all 6 villages	25% / 50% 6 villages not 4	50%/75% 6 villages	75%/85% For all 6 villages	90%	100%
Collaborative work ***Comment:***				25%/40% 6 villages: Introduction to drip kits and tunnels; 3 villages RWH and erosion control options	50%/65% 6 villages; tunnels, drip kits, greywater management, RWH and erosion control options	75%	100%
Networking and cross visits ***Comment:***				25%/25% cluster based workshop in good farming practices	50%/50% Open day: cross visit of all learning groups. World biodiversity day workshop	75%	100%

7. Monthly team assessment

Indicators: Assessment June 2017

Figures in the table reflect numbers for the period of reporting, in this case April-June 2017.

A combined team meeting to review this assessment sheet has not been conducted in the reporting period. Figures have been summarised from field reports and discussions with the field team.

Indicator	Overall target	Actual_ Nov 2016	Actual_ June 2017
No of participants in learning groups	100	108	73 (Open day, Soil fertility and natural P&D control workshops)
No of learning groups	5	5	5
No of local facilitators	5		7
Percentage of participants engaged in CC adaptation responses	1-2 (45%) 2-3 (25%) >3 (10-15%)	1-2 (10%)	1-2 (67%) 2-3 (15%) – for this time period OVERALL: 1-2 (60%) 2-3(15%)
No of participants experimenting with new innovations -local -co-designed	 15 45	 5	 5 50
No of participants showing increased knowledge	80		73
Percentage of participants engaged in collaborative activities	45%	-	14%- individual implementation of tunnels and drip kits- 10 Underground RWH tanks - 4
Percentage of participants with improved livelihoods -increased availability of food -increased income -increased diversity of activities and livelihoods options	 40% 5% 5%	 - - -	(summarised from garden monitoring -15% - -
Qualitative assessments; -stakeholder engagement -Increased understanding and agency to act towards increased resilience - Adaptation and innovations into local context	Stories, case studies, photos, cluster activity records, group session minutes,		Stories: -Open day -Underground storage tanks implementation - garden monitoring

-Potential for increased resilience -Social engagement			
Understanding: Examples of people showing an increased understanding of CCA adaptation	- For many participants, the value of the open day was the realisation of how the different practices introduced work together to create a more robust gardening system. They mentioned repeatedly how they initially thought we were playing, but now they could see how the different elements fit together .		
Actions: Examples of people showing an increased agency towards increasing their resilience	- For the winter planting season a substantial number of participants have initiated their intensive homestead food gardens under difficult conditions and with very little water available. Participants have made trench beds, planted seedlings, used mulching, implemented mixed cropping, planted herbs and multipurpose trees and shrubs, made liquid manure, used pest control brews and constructed diversion ditches and stone bunds. - Miriam Malepe has commented that she only needs to water every 3rd day with the organic matter and mulching in her trench beds. This has given her time to embark on other activities, such as making grass brooms that she sells at the local pension pay-out point. - Patricia Ngobeni from Lepelle mentioned that mulching surpasses weed growth and that she now has more time to stay by the side of the road and sell her produce- as her weeding time is substantially reduced.		
Examples of increased potential towards resilience	- Tunnel, trench beds, diversion ditches, conservation agriculture, grey water management and use, rainwater harvesting and storage		

Project Life Change Questions:

1. *Do we have examples or stories of how we or others are in the process of adaptive management related to CC? (adapt, reflect and respond to….) and examples of what this adaptive management is?*
   This is evident in a number of small changes and improvements made by participants in the gardening practices:
   - The traditional practices of using furrows and ridges for planting have been combined with the introduced shallow trenches by at least 5 participants. Shallow trenches provide for incorporation of organic matter into the soil and improve fertility and water holding
   - Trench beds are being used for production of seedlings and have been expanded substantially by a number of participants. A few have now constructed as many as 10-14 of these beds- in different shapes and sizes
   - Participants have been cutting grass and collecting leaves for mulching their gardens
   - Participants have used the diversion ditches to plant sweet potatoes and other crops on the ridges and fruit trees and other plants in the ditches

themselves. Additionally, a few have mulched the ditches and ridges to good effect.

- A number of participants have put contours in their gardens and made stone lines, swales and terraces to reduce run-off form their plots.
- Small nurseries are being implemented by a selection of the more enthusiastic gardeners –prorogation of fruit trees, indigenous fruit and moringa is common.
- A few participants have used diversion ditches to lead water to specific sections of their gardens
- Mixed cropping within the vegetable beds is no consciously being practiced.
- Surplus production is being offered to creches and vulnerable people in the community.

2. *Do we have stories that show innovation or lack of innovation towards positive change? What insights have we gained into how innovation can lead to positive change?(INCREASED RESILIENCE)*

   About 65% of participants have tried out some of the new innovations introduced and are able to clearly articulate the potential benefits of these practices.

3. *Do we have stories that show evidence of, or an interest in self organisation towards collective action? What insights have we gained into how self organisation can lead to collective action?*

   Local facilitators are already playing an important role in bringing people together and providing for collective action, albeit on the level of working in the gardens. They are dealing with conflict in the groups and supporting individuals in their implementation. They are coordinating some collective action in the villages.

4. *Do we have stories to show that learning together is happening or that there is an interest in learning together? What insights have we gained about how to learn together?*

5. *Do we have stories of how we and or others are able to think systemically? What insights have we gained?*

6. *Do we have stories of how we and or others are able to be inclusive and democratic? What insights have we gained about how this can be achieved? (STAKEHOLDER ENGAGEMENT).*
   Stakeholder engagement has been somewhat difficult to achieve. Mostly stakeholders become involved to ensure that others are supporting their agenda and to further particular projects or programmes of their own. There is little appreciation of the concept of sharing.

7. Work Plans for the coming three months.

See the attached calendar (Attachment 6) for July-September 2017- Specific activities have not been included for August - September as these will be dependent on progress made in the July-August session)

The focus for the coming three months will be consolidation of [practices and activities introduced, garden monitoring and finalisation of construction of tunnels and RWH tanks. In addition, cross visits are to be arranged for local facilitators and participant farmers. The CC dialogues process is to be implemented and supported in all six villages. Below is a more detailed list of planned activities.

1. Continuation of garden monitoring and support for Local Facilitators in this process is planned. In addition, local facilitators are to be supported to run mini workshops on practices with gardeners who are still unclear or were not involved in those learning workshops.
2. Collaborative work around construction of the 10 individual tunnels in Botshabelo, Mametje and Sedawa is to continue. Participants have undertaken to build these tunnels together
3. The construction of the 4 underground rainwater storage structures is to be continued and supported by bringing in an experienced building team to assist. These two gentlemen will work with the householders and stay in Sedawa for 1-2 weeks during July and August
4. Collaborative work on erosion control in and around homesteads will be initiated if possible.
5. A cross visit to Ukuvuna or another appropriate site is to be planned for farmer participants
6. Small cross visits for the Local Facilitators to neighbouring villages will be important, for them to see different examples of good gardening practices and how they can support such initiatives in their own areas
7. The DICLAD CC dialogues are to be set up and run in the area
8. Learning processes around nutrition and value adding as well as fruit production will be introduced as appropriate.

Attachment 1: Invitation to Farmers' Open day for the AgriSI programme

award
The Association for Water and Rural Development

mahlathini
development foundation

Invitation to attend farmers cross visit organised by Mahlathini Development Foundation in collaboration with AWARD under the AgriSI project

To whom it may concern

You are cordially invited to the smallholder farmers cross visit (farmers day) meeting of the agricultural support initiative (AgriSI) in Sedawa village on the 25th of April 2017. AgriSI is a sub programme of the resilience in the Olifants River basin cross country programme funded by USAID and managed by Association for water and rural development (AWARD). The AgriSI provides a systematic exploration of climate change impacts in 6 villages (Botshabelo, Sedawa, The Oaks, The Willows, Fenale and Lepelle) along the Olifants River in the Hoedspruit area of Limpopo.

In partnership with AWARD and Seeds of Light (SOL), Mahlathini development foundation (MDF) has been implementing various innovations and experimentation with the 6 villages in the Hoedspruit area. These innovations include design of trench beds, design of water diversion channels, construction of tunnels, conservation agriculture, making liquid manure and making natural pest control mixtures.

The aim of the cross visit is to bring farmers from the 6 villages and the stakeholders interested in agricultural development in the area together to share information regarding the innovations and providing a platform for building networks for farmers.

The cross visit will be held at Sedawa village on the 25th of April 2017 at 09: 00 AM. The theme of the day will be around experimentation with current local farming practises and newly introduced farming innovations. Farmers will be sharing results of their experimentation with the innovations they have been introduced to and how their involvement in the AgriSI project has contributed to their knowledge in farming.

Kindly find directions bellow and RSVP to the following people:

Mahlathini Development foundation
Mr Sylvester Selala
Snr Researher and Facilitator
071 596 5866
Or
Association for Water and Rural Development
Mr Bigboy Mkhabela
Community Facilitator
082 305 7760

Attachment 2: Programme for the Farmers' Open day in Sedawa, 25 April 2017

Sedawa Farmers Cross Visit Day

THEME: Experimentation with current local farming practises and newly introduced farming innovations

Date: 25 April 2017

Time: 09:00 AM

Venue: Sedawa village

Program Director: **Sylvester Selala**

ITEM	RESPONSIBILITY
Opening prayer	Tomson Motseo
Welcoming of guests	Erna Kruger
Stakeholder Introductions	Bigboy Mkhabela
1. Introduction to innovation	Sylvester Selala
Demonstration of innovations	
1. Water movement and design of diversion channels	Orbet Motseo (Willows)
2. Conservation agriculture	Kgasudi Lema and Meisi
3. Liquid manure	Esinah Malepe
4. Trench beds	Alex Mogopa and Florence Lewele
5. Planting in tunnel vs. outside the tunnel	Christina Thobejane
General (introduction to other projects in the area)	Lima, Department of Agriculture, K2C, LED office
Vote of thanks	George Sebatana
8. Closing Prayer	Tomson Motseo
LUNCH	

Attachment 3: Programme for World Biodiversity Day workshop in Sedawa

LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
ECONOMIC DEVELOPMENT, ENVIRONMENT & TOURISM

INTERNATIONAL BIODIVESITY DAY- BIODIVERSITY AND SUSTAINABLE TOURISM WORKSHOP

VENUE: SEDAWA COMMUNITY HALL (MARULENG MUNICIPALITY)

DATE: 31 MAY 2017

TIME: 10H00

PROGRAMME DIRECTOR: Cllr Malepe Rebecca

Item	Lead by
Opening	
Welcome Remarks	Traditional Authority Representative
Acknowledgment of Guests	
Purpose	LEDET – Mathole PD
Presentations	
LEDET – Sustainable Tourism	Makhubele RD
AWARD – Biodiversity Conservation and beneficiation in tourism through co-managing protected areas	William Mponwana
Institute of Natural Resources (INR) – Opportunities for conservation-based enterprises	
CSA- Rangelands,Enterprise/cooperatives development	Agnes Rapau
Sustainable Tourism	Mr. Mametja Tebogo
LEDA	Nchabeleng Jacob
Discussion	All
Vote of thanks	Mudau NR
Announcements	LEDET-Sono MM
Closure	National Anthem

MARULENG MUNICIPALITY

KRUGER TO CANYONS BIOSPHERE REGION

award

Attachment 4: Programme for CC dialogues at community level.

DICLAD – Module 1 outline of dialogue topics

Participants are broken up into small groups (no more than 8 in each). There is a facilitator per group.

1. Facilitator asks,

What does climate change (CC) mean for you?

[Each participant uses small cards to write down whatever they think CC mean for them.] 2.

Facilitator asks,

What do you think CC means for your area (referring to a geographical area)?

[Again, each participant uses small cards to write down their thoughts. One thought per card.]

3. Facilitator asks each participant to take turn to explain their cards from the first question.

4. Facilitator asks each participant to take turn to explain their cards from the first question.

5. Temperature and rainfall exercise (refer to the table below).

Process & facilitation questions
1. **Participants break out into four small groups**, according to a common geographical area where participants work.
2. The facilitator **opens** the conversation by asking each participant: *Where do you work/live?* Go around the group, giving each participant an opportunity to answer.

3. emperature chart for a typical year

3.1. The facilitator draws an y and x axis on a blank flipchart, and asks the participants:
How many months are there in the year?
Can you please write down the months evenly spaced along this line (indicating the x axis)?

3.2. The facilitator begins to discuss temperatures by asking the following:

In this area where you work/live, which month is typically the hottest *month?*
Which month is typically the coldest *month?*

3.3. The facilitator asks participants to use the sticks to represent the temperature, using a short stick to indicate the coldest month and a long stick to indicate the hottest month.

3.4. Continue with the process by guiding participants to put in sticks to represent the temperatures of the other months. For example, ask:

Is January hotter than February but cooler than December? If so, then January will have a longer stick than February, but a shorter stick than December, correct?

4. Temperature chart under climate change

4.1. The facilitator introduces climate change by adding length with a koki to all the temperature sticks, demonstrating how the temperature increases for all the months (i.e. it gets hotter). Note that the approach is that of “show-and-tell” instead of asking prompting questions.

5. Rainfall chart for a typical year

5.1. As with temperatures, the facilitator draws the y and x axis of the chart, and asks a participant to add the months.

5.2. The facilitator begins to discuss rainfall by asking the following:

In this area where you work/live, which month typically gets the most *rain? Which one is the wettest?*
Which month do you get the least *amount of rain? Which month is the driest?*

Please use these sticks to represent the rain, using a short stick indicate least amount of rain and a long stick to indicate the most rain.

5.3. The facilitator asks participants to use the sticks to represent rain, using a short stick to indicate the least amount of rain and a long stick to indicate the most rain.

5.4. Continue with the process by guiding participants to put in sticks to represent the rainfall of the other months. For example, ask:

Is January wetter than February but drier than December?

6. Rainfall chart under climate change

6.1. The facilitator introduces climate change by giving the following explanation:

Climate change can mean various changes to the rainfall. One possible change is the timing of rainfall being shifted later. For example, some of the rain in October/November may only come in December…
[While explaining this, facilitator takes the stick for October/November and breaks a small piece off to add to December]

…and the rainy season may end earlier.
[While explaining this, facilitator takes the stick for May and breaks a small piece off to add to January.]

6.2. The facilitator asks the following question:

How do these changes affect the pattern of rainfall?

6.3. The Facilitator explains further:

The rainfall amount for the year may stay the same, but it is concentrated in fewer months.

6.4. The facilitator asks:

Can you think of any way that rainfall can change? Can you show it with the sticks or draw it with the koki?

6.5. The facilitator wraps-up this part of the activity by stating:

With rainfall, there are multiple ways that it can change. This presents a special challenge. Why? Because we have to consider multiple scenarios instead of one. For example, we need to address both dry periods and flooding.

7. **Plenary discussion**

As groups finish their charts, these are pasted onto the wall for all to see.

When all groups have completed their temperature and rainfall charts, participants regroup for a plenary discussion around the following:

We've talked about what climate change could look like, how it can change what we now see as a "typical year" regarding temperature and rainfall. Reflecting on this, how do you think will this change impact you and your work?

The main facilitator of this session will lead this discussion with support from the other facilitators.

8. Closing

The main facilitator of this session wraps-up the process, stating how this exercise will feed into the next Indaba Cycle where we will be looking in more depth at the impacts and what can be done about them.

6. Facilitator uses the photographs (i.e. of increasing temperature, flood and drought) as three separate entry-points, and asks each participant to choose five top impacts (may be framed as concerns) that he/she has for each of the entry-points.
7. Based on what participants say, facilitator helps them to think of the relationship between these different impacts of CC by prompting how the different cards relate to each other and the entry-point.
8. Facilitator helps the group to look at the completed concept maps and prepare a designated rapporteur to report back in plenary.
9. Plenary. Each group reports back.

10. At the plenary, someone from the KRA4 can add any additional impacts that may not have been discussed. This is to enrich the group's understanding about CC impacts.

Activity: Systemic look at risks, vulnerability and potential adaptation actions Instruction sheet for facilitators

There would be 3 groups, randomly composed. Each group would have a facilitator to following the same steps below.

1. **Setting up the concept map**

At each group, there will be a partially constructed concept map (CM). Each facilitator explains to the group:

This is a CM done by the AgriSI group in the last DICLAD training. The yellow cards capture what increasing temperature and changing rainfall mean for smallscale farming in the Lower Olifants.

Each facilitator walks his/her group through the yellow cards on the CM, explaining the linkages. Then, facilitator explains,

We have thought of some additional impacts of increasing temperature and changing rainfall. These are represented by blue cards. Where would these cards fit in the CM?

Facilitator prompts the group to place the new cards, and explain the relationship between them and the entry-points and other cards on the CM.

NB: At the end of the process, the new cards are added to the CM with linkages drawn.

2. Stating the objective for the next few steps.

Facilitator explains,

Now we will do an exercise with you to address the question of whether this sub-system of smallscale farming in the Lower Olifants is at risk.

3. Exploring threats

Facilitator explains,

If a threat is something that could cause harm, then where do you see threats in this CM?

Facilitator may use an analogy of "a knife in a kitchen" to further explain the concept of threat if the participants struggle with the earlier explanation.

If participants confuse threats with impacts, then ask participants,

Is this a consequence of a threat, or something that can cause harm?

Facilitator may acknowledge that it can be difficult sometimes to tease apart the consequences and threats.

Facilitator asks participants to mark "T" on the cards that are threats.

3. Exploring vulnerability & resilience

Facilitator explains,

If vulnerability refers to either how likely for something to be affected by a threat, or how well can something/someone cope/adapt to a threat, then where do you see vulnerability in the CM?

Facilitator may use the analogy of an adult's vs a toddler's vulnerability to a knife in the kitchen.

To help participants to think through this, the facilitator can prompt,

How is this a vulnerability?

Facilitator asks participants to mark "V" on the cards that are vulnerability.

Facilitator explains,

If we are referring to resilience as the opposite of vulnerability, then where do you see resilience in the CM?

To help participants to think through this, the facilitator can prompt,

How does this give resilience?

Facilitator asks participants to mark "R" on the cards that are resilience.

Tying it together…

Facilitator summarizes the threats and vulnerabilities on the CM. Then, facilitator asks,

Is this sub-system at risk?

3. Potential adaptation Facilitator asks, *Can you think of potential ways to adapt to these threats and vulnerabilities?* Facilitator prompts further discussion by asking, *What do you mean by this adaptation? How does this idea work?* Facilitator can purposely suggest some untenable adaptation options. **NB: Participants write the adaptation on small cards in a different colour than those already on the flipchart.**
4. Ranking Facilitator asks the participants to vote on the potential adaptation options. If you were to choose three most tenable adaptation options – by that we mean socially appropriate and financially feasible as well – which one would you pick? You can use the sticker to indicate your vote.
Facilitator asks participants on each of the chosen options, *Why did you choose this option?*
5. Action planning, relating to other Res-O projects Facilitator wraps up the exercise by explaining that the adaptation options that would emerge from the CC dialogue should eventually be embedded in the activities supported by other Res-O projects. The step that would follow is action planning, which would not be done in this session.

Attachment 5: Agenda for Commuity based Visioining Exercise in Lepelle_1 June 2017

PROPOSED VISIONING EXERCISE – LELPELLE – MDF/AWARD - MAY 2017

Draft May 12 2017 – R Hatfield

Note: the following is an outline for comment, rather than describing a full methodology.

It is based on a methodology that I have used quite extensively and successfully in East Africa.

OBJECTIVES:

1. To provide **context** for a proposed or current project's activities (AgriSI, INR CbE, etc).
2. To facilitate **action planning** for a proposed or current project.

Note: this exercise compliments the VSTEEP process.

Component 1: Looking Back

- Self-assessment reviewing past, present, future including drivers of change.
- Self-assessment of drivers (desired, undesired; level of influence over them).

Component 2: Looking Forwards

- Future visioning consisting of 3 main parts:
  A. Quality of Life (value-based) = how life needs to BE
  B. Future Resource Base = what is needed to support A = HAVE
  C. Forms of Production = what needs to put in place or created = DO

(note: A is a 'blue-sky' vision which B & C help channel into more concrete terms)

Component 3: Strategic Planning

- Prioritizing priority areas emerging from C.
- (preceded by): Decision-making criteria for priority areas (social-environmental-livelihood basic set if criteria).

Component 4: Action Planning

- Identifying and prioritizing project action / activities in the context of Component 3.
- Work planning detail: what, who, when, how.

Attachment 6: Detailed upcoming milestone (Milestone 6) activity plans (July-September 2017)

AWARD AgriSi calendar-Mahlathini July-September 2017

CALENDAR	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Feb-17	27	28	1	2	3	4	5
Jul 2017	3	4	5	6	7	8	9
	10	11	12	13	14	15	16
	17	18	19	20	21	22	23
	24 Sylvester, building team RWH tanks, garden monitoring	25 Sylvester, building team RWH tanks, garden monitoring	26 Sylvester, Erna, Chris RWH tanks ,DICLAD - Botshabelo	27 Sylvester, Erna, Chris RWH tanks, garden monitoring	28 Sylvester, Erna, Chris RWH tanks, garden monitoring	29 Sylvester, Erna, Chris RWH tanks, DICLAD-Fenala, Oaks	30
	31 Sylvester, Trygive garden monitoring	1 Sylvester, Trygive LF cross visit	2 Sylvester, Trygive LF cross visit	3 Sylvester, Trygive garden monitoring	4 Sylvester, Trygive garden monitoring	5	6
Aug 2017	7	8	9 National Women's Day	10	11	12	13
	14	15	16	17	18	19	20
	21	22	23	24	25	26	27
	28	29	30	31	1	2	3

Sep 2017	**4**				**8**	**9**	**10**
	11	**12** AWARD partners meeting	**13** AWARD partners meeting	**14** AWARD	**15** AWARD	**16**	**17**
	18 AWARD	**19** AWARD	**20** AWARD	**21** AWARD	**22** AWARD	**23**	**24** Heritage Day
	25	**26**	**27**	**28**	**29**	**30**	**1**