ADAPTATION FUND

AFB/PPRC.15/17
17 September 2014

Adaptation Fund Board
Project and Programme Review Committee
Fifteenth Meeting
Bonn, Germany, 7-8 October 2014

Agenda Item 6 m)

PROPOSAL FOR SOUTH AFRICA (2)

Background

1. The Operational Policies and Guidelines (OPG) for Parties to Access Resources from the Adaptation Fund (the Fund), adopted by the Adaptation Fund Board (the Board), state in paragraph 45 that regular adaptation project and programme proposals, i.e. those that request funding exceeding US$ 1 million, would undergo either a one-step, or a two-step approval process. In case of the one-step process, the proponent would directly submit a fully-developed project proposal. In the two-step process, the proponent would first submit a brief project concept, which would be reviewed by the Project and Programme Review Committee (PPRC) and would have to receive the endorsement of the Board. In the second step, the fully-developed project/programme document would be reviewed by the PPRC, and would ultimately require the Board's approval.

2. The Templates approved by the Board (OPG, Annex 4) do not include a separate template for project and programme concepts but provide that these are to be submitted using the project and programme proposal template. The section on Adaptation Fund Project Review Criteria states:

> *For regular projects using the two-step approval process, only the first four criteria will be applied when reviewing the 1st step for regular project concept. In addition, the information provided in the 1st step approval process with respect to the review criteria for the regular project concept could be less detailed than the information in the request for approval template submitted at the 2nd step approval process. Furthermore, a final project document is required for regular projects for the 2nd step approval, in addition to the approval template.*

3. The first four criteria mentioned above are:
   1. Country Eligibility,
   2. Project Eligibility,
   3. Resource Availability, and
   4. Eligibility of NIE/MIE.

4. The fifth criterion, applied when reviewing a fully-developed project document, is:
   5. Implementation Arrangements.

5. It is worth noting that since the twenty-second Board meeting, the Environmental and Social (E&S) Policy of the Fund was approved and consequently compliance with the Policy has been included in the review criteria both for concept documents and fully-developed project documents. The proposals template was revised as well, to include sections requesting demonstration of compliance of the project/programme with the E&S Policy.

6. In its seventeenth meeting, the Board decided (Decision B.17/7) to approve "Instructions for preparing a request for project or programme funding from the Adaptation Fund", contained in the Annex to document AFB/PPRC.8/4, which further outlines applicable review criteria for both concepts and fully-developed proposals. The latest version of this document was launched in conjunction with the revision of the Operational Policies and Guidelines in November 2013.

7. Based on the Board Decision B.9/2, the first call for project and programme proposals was issued and an invitation letter to eligible Parties to submit project and programme proposals to the Fund was sent out on April 8, 2010.

8. According to the Board Decision B.12/10, a project or programme proposal needs to be received by the secretariat no less than nine weeks before a Board meeting, in order to be considered by the Board in that meeting.

9. The following fully-developed project document titled “Taking adaptation to the ground: A Small Grants Facility for enabling local level responses to climate change” was submitted by the South African National Biodiversity Institute (SANBI), which is the National Implementing Entity of the Adaptation Fund for South Africa. This is the second submission of the project. It was first submitted as a concept for the 21st AFB meeting, along with a request for Project Formulation Grant (PFG) and the Board decided to:

(a) Endorse the project concept, as supplemented by the clarification response provided by South African National Biodiversity Institute (SANBI) to the request made by the technical review;

(b) Request the secretariat to transmit to SANBI the following observations:

(i) Based on the vulnerability assessment to be undertaken during project preparation, the sectors covered by projects to be supported and the possible adaptation activities to be funded through the Community Adaptation Small Grant Facility should be identified for each site.

(ii) The fully-developed proposal should provide detailed expected benefits, including the economic benefits and the approximate number of expected direct beneficiaries should also be included.

(iii) To better assess the project’s cost effectiveness, further analysis of the costs of establishing and operationalizing the small grant mechanism should be provided.

(iv) A more detailed presentation of the synergies to be sought and lessons to be learned from current and past initiatives should be provided in the fullly developed document.

(v) A more comprehensive consultation process, including local communities and vulnerable groups, should be undertaken, demonstrating full participation of these stakeholders in the vulnerability assessment and identification of adaptation actions.

(c) Approve the Project Formulation Grant of US$ 30,000;

(d) Request SANBI to transmit the observations under item (b) to the Government of South Africa; and

(e) Encourage the Government of South Africa to submit through SANBI a fully-developed project proposal that would address the observations under item (b).

(Decision B.21/7)

10. The present submission of the fully-developed project document was received by the secretariat in time to be considered in the twenty-fourth Board meeting. The secretariat carried out a technical review of the project proposal, assigned it the diary number ZAF/NIE/Multi/2013/2, and completed a review sheet.

11. In accordance with a request to the secretariat made by the Board in its 10th meeting, the secretariat shared this review sheet with SANBI, and offered it the opportunity of providing responses before the review sheet was sent to the PPRC.

12. The secretariat is submitting to the PPRC the summary and, pursuant to decision B.17/15, the final technical review of the project, both prepared by the secretariat, along with the final submission of the proposal in the following section.

Annex I. Project Summary

South Africa – Taking adaptation to the ground: A Small Grants Facility for enabling local level responses to climate change

Implementing Entity: *SANBI*
Project/Programme Execution Cost: USD 195,320
Total Project/Programme Cost: USD 2,251,320
Implementing Fee: USD 191,362
Financing Requested: USD 2,442,682

Project/Programme Background and Context: The overall goal of the project is to ensure that local communities in the project focal areas have reduced vulnerability and increased resilience to the anticipated impacts of climate change. The objective is to incorporate climate adaptation response strategies into local practices so that assets, livelihoods and ecosystem services are protected from climate induced risks associated with expected droughts, seasonal shifts and storm-related disaster events. To do so, the project will seek to increase climate resilience in productive landscapes and socio-economic systems in communities in two pilot district municipalities in South Africa, by working directly with local stakeholders and anticipated beneficiaries through a small grant mechanism.

In addition to delivering direct and tangible benefits through the implementation of the small grants themselves, the project will seek to pilot and develop an understanding of small grant development and implementation in the context of climate finance, with a view to scaling up and replicating this model as appropriate. This approach responds directly to calls from civil society to bring the principle of 'direct access' closer to vulnerable communities themselves, thus empowering them to determine how climate finance will be used, and building institutional capacity for the implementation of adaptation efforts at the local level.

It is believed that one of the most important factors of success for the SGF will be its processes of project identification, development, review and learning, and the processes that are put in place to build local capacity and support project implementation. These have been carefully addressed in the design of the project.

The project presents three components as follows:

- Component 1: Small grants – Small grants to vulnerable communities deliver tangible and sustainable benefits
- Component 2: Institutional capacity – Local institutions empowered to identify and implement adaptation response measures
- Component 3: Lesson learnt – Lessons learnt facilitate future up-scaling and replication of small grant-financing approaches

Component 1: Small grants – Small grants to vulnerable communities deliver tangible and sustainable benefits (USD 1,542,000)

This component will support planning and implementation of concrete adaptation measures that strengthen livelihood strategies, adaptive capacity, infrastructure and assets in vulnerable communities in the Mopani and Namakwa District Municipalities through a suite of interventions that are supported through at least 12 small grants to local level CBOs and NGOs that will be in

order of $100 000 each. The grants may be phased and will be disbursed in tranches to ensure a sound implementation process and effective integration of project-level monitoring and evaluation processes. All grants will deliver tangible, measurable benefits that reduce the vulnerabilities of local communities to existing and anticipated impacts of climate change through strengthened livelihood strategies, increased adaptive capacity and ecosystem resilience. The facility will encourage and pursue projects that enhance and facilitate that sharing of knowledge on best practices from the local to the national level.

Component 2: Institutional capacity – Local institutions empowered to identify and implement adaptation response measures (USD 325,000)

This second component will focus on supporting local institutions to identify, develop and implement small grant projects in the context of climate change adaptation at all stages of the project cycle. Under this component, the Facilitating Agencies will facilitate sound project identification, development and implementation support processes including local level project administration, reporting and financial management. These processes will be guided by a set of principles that ensure that projects clearly respond to experienced or anticipated climate induced stresses, and meet the criteria of the Small Grants Mechanism, the NIE and the AF.

Component 3: Lesson learnt – Lessons learnt facilitate future up-scaling and replication of small grant-financing approaches (USD 189,000)

In order to facilitate the proposed process learning and reflection approach successfully, it will be important to ensure that local organizations play an effective role in supporting project development and implementation, while at the same time documenting the process to ensure lessons learnt inform the compilation of a methodology that identifies effective strategies and policy recommendations for scaling up and replication. In support of this, the project will support innovative participatory approaches including a practitioner's forum, to discuss effective approaches of community empowerment and challenges, and a community forum, to discuss climate change adaptation challenges and possible integrated adaptation strategies. It will also seek to build local knowledge sharing mechanisms that create opportunities for reflection and learning within Districts and between Districts, and link these to relevant national adaptation processes with a view to developing insights that are relevant beyond the project intervention sites themselves. Independent learning processes will be conducted to reflect on implementation successes and challenges, and develop insights. Learning outputs from the small grants projects will be supported to align with and support local government climate change response strategies, and to inform provincial adaptation plans where possible. Where relevant, policy recommendations will be developed to inform South Africa's processes of climate finance establishment, with a view to creating a long term small grant facility for supporting climate change adaptation in vulnerable communities.

ADAPTATION FUND BOARD SECRETARIAT TECHNICAL REVIEW OF PROJECT/PROGRAMME PROPOSAL

PROJECT/PROGRAMME CATEGORY: Regular-sized Project

Country/Region: **South Africa**
Project Title: **Taking Adaptation to the Ground: A Small Grants Facility for Enabling Local Level Responses to Climate Change**
AF Project ID: **ZAF/NIE/Multi/2013/2**
IE Project ID:
Requested Financing from Adaptation Fund (US Dollars): **2,442,682**
Reviewer and contact person: **Daouda Ndiaye**
Co-reviewer(s): **Mikko Ollikainen**
IE Contact Person: **Gigi Laidler**

Review Criteria	Questions	Comments on 20 Aug. 2014	Comments on 5 Sept. 2014
Country Eligibility	1. Is the country party to the Kyoto Protocol?	Yes.	
	2. Is the country a developing country particularly vulnerable to the adverse effects of climate change?	Yes. More specifically, the target regions, i.e. the Mopani District and Namakwa District, are prone to droughts, seasonal shifts and storm-related disaster events.	
Project Eligibility	1. Has the designated government authority for the Adaptation Fund endorsed the project/programme?	Yes. Letter dated 30 July 2014.	

	2. Does the project / programme support concrete adaptation actions to assist the country in addressing adaptive capacity to the adverse effects of climate change and build in climate resilience?	Yes. The project seeks to incorporate climate adaptation response strategies into local practices so that assets, livelihoods and ecosystem services are protected from observed and anticipated climate induced risks. This will be done through piloting a Community Adaptation Small Grants Facility (SGF). The SGF will fund climate change adaptation interventions that fall into three prioritised Investment Windows, i.e. Climate-Smart Agriculture, Climate-Resilient Livelihoods and Climate-Proof Settlements. The identification of the Investment Windows was based on climate projections and findings of the Mopani District and Namakwa District Vulnerability Assessments. Twelve small grants of around 100,000 USD each will be allocated to local institutions which will be responsible for implementing these adaptation actions. The project will empower those local institutions to identify and implement the adaptation response measures. Finally, the project will help compiling and sharing lessons learned to facilitate future scaling up and replication of small grant-financing approaches. However, it is not clear how the grant recipients will involve local communities in project identification. Also, in the project proposal submission process, it is not clear who is "endorsing" the proposals to be submitted to the EE, and in which capacity such endorsement would be done. Please clarify. **CR1.** Also, from an external point of view, without a clear knowledge of the number of qualified local institutions in the target regions in South Africa, the criteria for selection of small grant recipients seem to be very stringent. Please provide us with more baseline information on existing organizations that may qualify for the grants. **CR2.** Also, please clarify whether one particular institution could be entitled to one or more grants. **CR3**.	**CR1**: Addressed. **CR2**: Addressed. **CR3**: Addressed.

		Also, please clarify the implications of the conditional approval of grants by the PSC (p.26). Does it entail disbursement of funds following conditional approval? Or eligibility to capacity building support for project development? **CR4** Lastly, to facilitate mainstreaming of climate change adaptation into the IDP/SDFs and ensure the projects sustainability, it is not clear if the proposed level of involvement of municipal and other government officials in the project activities will be enough. As it is, those stakeholders are only planned to be invited to the Community Adaptation SGF's learning events in order to "be exposed to the experiences of the small grant recipients". More specifically in the Mopani district, as stated in p.47, the municipality clearly has not integrated climate change into its operations yet. If this project is not addressing such issue, which may be a barrier to the sustainability of the small projects to be funded under the SGF, please clarify if it will be done through other initiatives or how this project will take such barrier into account. **CR5**.	**CR4**: Addressed. **CR5**: Addressed.
	3. Does the project / programme provide economic, social and environmental benefits, particularly to vulnerable communities, including gender considerations, while avoiding or mitigating negative impacts, in compliance with the Environmental and Social Policy of the Fund?	Yes. However it is difficult to anticipate the environmental impacts of projects which have not been developed yet. Also, the description of social, environmental and economic benefits needs to entail more tangible and intangible assets that would be created through the project. **CR6** (for more explanation on this, please see CR12 below)	**CR6**: Addressed.
	4. Is the project / programme cost effective?	Yes.	

	5. Is the project / programme consistent with national or sub-national sustainable development strategies, national or sub-national development plans, poverty reduction strategies, national communications and adaptation programs of action and other relevant instruments?	Yes.	
	6. Does the project / programme meet the relevant national technical standards, where applicable, in compliance with the Environmental and Social Policy of the Fund??	Yes. However, for compliance with the E&S Policy, see below.	
	7. Is there duplication of project / programme with other funding sources?	No.	
	8. Does the project / programme have a learning and knowledge management component to capture and feedback lessons?	Yes.	
	9. Has a consultative process taken place, and has it involved all key stakeholders, and vulnerable groups, including gender considerations?	Yes.	
	10. Is the requested financing justified on the basis of full cost of adaptation reasoning?	Yes.	
	11. Is the project / program aligned with AF's results framework?	Yes.	
	12. Has the sustainability of the project/programme outcomes been taken into account when designing the project?	Yes.	
	13. Does the project / programme provide an overview of environmental and social impacts / risks identified?	Yes. However, although the results of the pre-screening of potential projects under the SGF identify no potential impacts and risks given the size of the grants, they are not absent, and therefore the project should be categorized as Category B. **CAR1**	**CAR1**: Addressed.

		For example, there remain some risks of being located in a biodiversity hotspot, and possibly some others related to equity, indigenous peoples, or human rights. **CR7:** The proposal should further demonstrate that there is no potential environmental and social impact or risk, and if there is, how it is addressed.	**CR7**: Addressed.
Resource Availability	1. Is the requested project / programme funding within the cap of the country?	Yes.	
	2. Is the Implementing Entity Management Fee at or below 8.5 per cent of the total project/programme budget before the fee?	Yes.	
	3. Are the Project/Programme Execution Costs at or below 9.5 per cent of the total project/programme budget (including the fee)?	Yes.	
Eligibility of IE	4. Is the project/programme submitted through an eligible Implementing Entity that has been accredited by the Board?	Yes. SANBI is the accredited NIE for South Africa.	
Implementation Arrangements	1. Is there adequate arrangement for project / programme management?	Yes. However, please explain the small size and low level of representation (i.e. absence of representatives of local and national government, civil society, project beneficiaries or academia) of the Project Steering Committee which, as it is, is comprised by the NIE members and adaptation experts. It is not clear if the PSC's sole responsibility is to review and take decision on the small grants only or if it has been established for the overall governance of the Adaptation Fund project. **CR8.**	**CR8**: Addressed.
	2. Are there measures for financial and project/programme risk management?	Yes. However some of the risks identified and related to the involvement of local communities seem to be redundant. Please correct as appropriate.**CR9**	**CR9**: Addressed.

	3. Are there measures in place for the management of environmental and social risks, in line with the Environmental and Social Policy of the Fund?	Yes. However, a management plan needs to be prepared, which should include a detailed description of the project-level review mechanism that will be put in place to review the applications and ensure that the applications meet the ESP requirements, either because they have no risks or impacts, or by imposing conditions to manage/mitigate any risks. The proposal's approach to review the applications and ensure that the applications meet the ESP requirements is acceptable, provided that the system put in place is sufficiently solid. This is important since the responsibility of compliance with the ESP lies in full with the NIE, and the review process is how it will be demonstrated. Therefore it is very important that the grant application review process is duly documented, that the NIE can substantiate the conclusions that will be reached regarding ESP risks, and, the case being, how the environmental and social management plan for the activity is adequate. The proposal contains many elements of such a project-level assessment and review mechanism, however it would be good to have that information all gathered under a single heading with clear indication of roles and responsibilities and capacities and commitments. That will allow the secretariat at this approval stage to assess if the mechanism will be sufficiently performing and credible. **CR10** A regular ESP screening for the whole programme may also identify a number of additional attention points, which can be used as eligibility criteria for the small grants, e.g. no-go areas, or preferential methods. In this way, the NIE excluding grants that don't meet the requirements for no ESP-risk is fine.	**CR10**: Addressed.
	4. Is a budget on the Implementing Entity Management Fee use included?	Yes.	

	5. Is an explanation and a breakdown of the execution costs included?	Yes. However, please clarify if the programme M&E budget Includes mid-term review and terminal evaluation costs. **CR11**	**CR11**: Addressed.
	6. Is a detailed budget including budget notes included?	Yes.	
	7. Are arrangements for monitoring and evaluation clearly defined, including budgeted M&E plans and sex-disaggregated data, targets and indicators?	Yes. However, as currently defined, the small projects' related indicators and targets under Outcome 1 will barely help monitor the improvement of the beneficiaries' resilience to climate risks. They seem to be more relevant to the monitoring of the efficiency of SGF operations, through the grant approval process. Moreover, the selected indicators are not in line with Fund output indicator 6.1.1. "No. and type of adaptation assets (tangible and intangible) created or strengthened in support of individual or community livelihood strategies" which was identified as being aligned with outcome 1 under Table F (p.66). Therefore, it is suggested to set a target of tangible and intangible assets that should be created through the AF project, to help strengthen the adaptive capacity and ecosystem resilience in vulnerable communities in two District Municipalities in South Africa. **CR12**	**CR12**: Addressed.
	8. Does the M&E Framework include a break-down of how implementing entity IE fees will be utilized in the supervision of the M&E function?	No.	

	9. Does the project/programme's results framework align with the AF's results framework? Does it include at least one core outcome indicator from the Fund's results framework?	Yes, it aligns with AF results framework. However, Outcome 3 indicator presented in the Alignment table (p.67), i.e. "Number of local level mechanisms developed to increase community resilience through direct access to climate finance", is different from the one in the project results framework, i.e. "Number of methodologies for enhanced direct access to climate finance". Please clarify. **CR13** Also, it does not include a core outcome indicator from the Fund's results framework. **CAR2**	**CR13**: Addressed. **CAR2**: Addressed.
	10. Is a disbursement schedule with time-bound milestones included?	Yes. However, please modify the date of signature of agreement to take into account the expected time between the agreement signature and the project inception date. **CAR3**	**CAR3**: Addressed.

Technical Summary	The proposed project seeks to incorporate climate adaptation response strategies into local practices so that assets, livelihoods and ecosystem services are protected from climate induced risks associated with expected droughts, seasonal shifts and storm-related disaster events. It will do so by developing and implementing a small grant financing mechanism, i.e. the Community Adaptation Small Grant Facility (SGF), with a view to scaling up and replicating this model as appropriate. The two project target areas are the Mopani District (Limpopo Province) and the Namakwa District (Northern Cape Province) that have been identified as prone to droughts, seasonal shifts and storm-related disaster events. The project presents three components as follows: • Component 1: Small grants to vulnerable communities deliver tangible and sustainable benefits. • Component 2: Local institutions empowered to identify and implement adaptation response measures. • Component 3: Lessons learned facilitate future up-scaling and replication of small grant-financing approaches. The initial technical review recognized the innovative nature of the proposal of piloting enhanced direct access to adaptation finance and found the project document very clear and concise. However, a few information gaps and one major issue related to the Environment and Social Policy needed to be addressed, including the involvement of local communities in project identification, the criteria for grant recipient

	selection, the level of involvement of municipal and national government representatives in project activities and the set of indicators under the project results framework. The final review finds that the revised proposal has adequately addressed the clarification and corrective actions requested by the secretariat.
Date:	15 September 2014.

PROJECT PROPOSAL TO THE ADAPTATION FUND

PART I: PROJECT INFORMATION

Project Category:	Regular
Country:	South Africa
Title of Project:	Taking Adaptation to the Ground: A Small Grants Facility for Enabling Local Level Responses to Climate Change
Type of Implementing Entity:	National
Implementing Entity:	South African National Biodiversity Institute
Executing Entity:	SouthSouthNorth Trust
Amount of Financing Requested:	USD 2,442,682

Short Summary

Climate change projections have indicated that both the Mopani District, in Limpopo in the north east of South Africa, and the Namakwa District, in the Northern Cape in the north west of South Africa, will be subject to increasing temperatures and changing rainfall patterns. According to local scale analysis of historical trends and future projections, there is a distinct warming trend for both Mopani and Namakwa, which will be far more severe by 2050 if global mitigation efforts are unsuccessful. Rainfall changes are much less certain, with temporal and spatial variability. Yet in historical trends there are indications of an increase in the intensity of heavy rainfall events in both areas, evident through a decrease in the number of rain days coupled with an unchanged average annual rainfall. Warming, and the associated increase in the number of extremely warm days, is set to impact evaporation rates and water availability. This is a concern as water is already scarce in Namakwa and in parts of Mopani. Greater amplitude of dry and wet spells, along with increasing temperatures, will negatively impact already stressed communities in both areas – thus rendering them more vulnerable to the impacts of climate variability and change, more specifically droughts, seasonal shifts and storm-related disaster events.

Climate-related risks are generally greater for disadvantaged, rural and poor communities because of limited adaptive capacity and greater sensitivity to climate-driven impacts. Both Mopani and Namakwa Districts are characterised by the prevalence of rural, poor communities vulnerable to the impacts of climate variability and change. This threat requires climate finance for adaptation activities to find its way to these most vulnerable communities. However, such communities typically lack the capacity required to access the necessary funding. The project thus entails the implementation of a small grant finance mechanism to address this financial, capacity and adaptation need.

The Community Adaptation Small Grants Facility (SGF) will increase climate resilience in rural communities and socio-economic systems in these two pilot district municipalities in South Africa, by working directly with local stakeholders and anticipated beneficiaries through a small granting mechanism. The overall goal of the project is to ensure that vulnerable, rural communities in the project target areas have reduced vulnerability and increased resilience to the anticipated impacts of climate variability and change. The objective is to incorporate climate adaptation response strategies into local practices so that assets, livelihoods and ecosystem services are protected from climate-induced risks associated with expected droughts, seasonal shifts and storm-related disaster events. The project will do so through three main components: i) providing small grants to vulnerable communities that deliver tangible and sustainable benefits; ii) empowering local institutions to identify and implement adaptation response measures; and iii) compiling and sharing lessons learned to facilitate future scaling up and replication of small grant-financing approaches.

The Community Adaptation SGF will be led by SouthSouthNorth (SSN) Trust, who will act as the Executing Entity (EE), and Conservation South Africa (CSA), who will act as the Facilitating Agency in the Namakwa District. The Facilitating Agency for the Mopani District is still to be selected.

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Acronyms

ACDI	African Climate and Development Initiative	KDOR	Catholic Development Orange River
AF	Adaptation Fund	LAMOSA	Land Access Movement of South Africa
ALERT	Association of Limpopo Early Childhood Development Resource & Training	LEDET	Limpopo Department of Economic Development, Environment and Tourism
AWARD	Association for Water and Rural Development	LIOFA	Limpopo Organic Farmers & Excillie Co-operative
CARE	Cooperative for Assistance and Relief Everywhere	LTAS	Long Term Adaptation Scenarios
CBOs	Community Based Organisations	M&E	Monitoring and Evaluation
CDW	Community Development Workers	NAMKO	Namakwa Ontwikkeling
CEO	Chief Executive Officer	NCCC	National Climate Change Committee
CEPF	Critical Ecosystem Partnership Fund	NCCRP	National Climate Change Response Policy
CPA	Communal Property Association	NDP	National Development Plan
CSA	Conservation South Africa	NGOs	Non-Government Organisations
CSIR	Council for Scientific and Industrial Research	NIE	National Implementing Entity
DBSA	Development Bank of Southern Africa	NPC	National Planning Commission
DEA	Department of Environmental Affairs	PM	Project Manager
DRR	Disaster Risk Reduction	PSC	Project Steering Committee
EbA	Ecosystem-based Adaptation	RCP	Representative Concentration Pathway
EE	Executing Entity	RESILIM	Resilience in the Limpopo/Olifants Basin
EIA	Environmental Impact Assessment	SAHP	South Atlantic High Pressure
EMG	Environmental Monitoring Group	SANBI	South African National Biodiversity Institute
ENSO	El Niño Southern Oscillation	SDF	Spatial Development Frameworks
ESP	Environmental and Social Policy	SGF	Small Grants Facility
FA	Facilitating Agency	SKEPPIES	Small Grants Facility for Conservation and Development in the Succulent Karoo
FANPRAN	Food, Agriculture and Natural Resources Policy Analysis Network	SNC	Second National Communication
FAO	Food and Agriculture Organisation	SSN	SouthSouthNorth
FSC	Food Sovereignty Campaign	SST	Sea Surface Temperatures
GCM	General Circulation Models	TC	Tropical Cyclones
GDP	Gross Domestic Product	ToR	Terms of Reference
GEF-SGP	Global Environment Facility Small Grants Programme	UCT	University of Cape Town
Gender CCSA	GenderCC Southern Africa	UIGC	University of Venda Income Generation Centre
IDP	Integrated Development Plan	UNFCCC	United Nations Framework Convention on Climate Change
IGCCC	Intergovernmental Committee for Climate Change	VA	Vulnerability Assessment

Project Background and Context:

South Africa's National Climate Change Response Strategy clearly emphasizes that climate change will place additional stress on South Africa's agricultural systems and water security. More intense storms and floods, droughts and fires are already apparent, and extreme climatic events are causing severe damage to the agricultural sector, with a devastating impact on the country's rural poor. Marginalised groups in South Africa are already experiencing a range of stressors. Climate variability and change is an existing, additional stressor that is anticipated to increase in intensity. Thus, adaptation measures that build climate resilience of rural communities in the short- and long-term are crucial.

While South Africa has a National Climate Change Response Strategy at the national level, policy development processes for climate change, and tools for planning for climate change responses, there is still limited implementation at the grassroots level. The need for vulnerable groups to be provided with opportunities to directly access finance for climate change adaptation emerged in various South African stakeholder processes, including community workshops run by grassroots organisations and the inaugural stakeholder consultation workshop of the National Implementing Entity (NIE). The project, which responds to this urgent need to support vulnerable groups in responding to observed and anticipated impacts of climate variability and change, entails the implementation of a small grant financing mechanism. The project, hereafter referred to as the Community Adaptation Small Grant Facility (SGF), will ensure that appropriate and effective local adaptation measures are developed and implemented through a number of small grant projects that build the climate resilience of vulnerable groups and the long-term sustainability of livelihoods – taking into account short- and long-term climate forecasts.

The emphasis of the Community Adaptation SGF will be to support projects that generate tangible adaptation responses, with a particular focus on rural areas. In order to plan and implement adaptive strategies that increase the resilience of these groups, the approach will harness local creativity while appropriately integrating scientific and local knowledge in the planning and implementation of integrated adaptation responses in order to reduce the risk of maladaptation. By providing a direct finance opportunity for these groups, coupled with a process that empowers communities to participate meaningfully in project identification and implementation, the Community Adaptation SGF will effectively inform national South African policy processes by providing concrete examples of integrated adaptation responses at the local level.

To test the small grant mechanism for community-based adaptation, the Community Adaptation SGF will focus on two district municipalities that are already experiencing climate stress through the changing frequency and intensity of extreme weather events (including greater incidence of heat stress, dry spells and extreme rainfall events) and rising air temperatures. The two project target areas represent valuable contrasts to maximize learning opportunities, in terms of climate (summer vs. winter rainfall area), aridity (sub-tropical climate vs. semi-desert), population density (high vs. low population density) and agricultural practices (cattle farming and locally relevant crop production vs. sheep and goat farming). It is envisaged that the proposed approach will provide robust lessons and insights for future funding mechanisms that are currently being planned by South Africa's National Treasury Department in support of the green economy generally and adaptation more specifically.

The two project target areas are the **Mopani District** (Limpopo Province) and the **Namakwa District** (Northern Cape Province) (Figures 1, 4 and 5). Both districts have been actively working on defining response strategies to climate change, thus providing a good basis for supporting practical adaptation initiatives in these areas to increase resilience of vulnerable groups. Recent work to assess climate change projections has indicated that both regions will be subject to increasing temperatures and changing rainfall patterns.

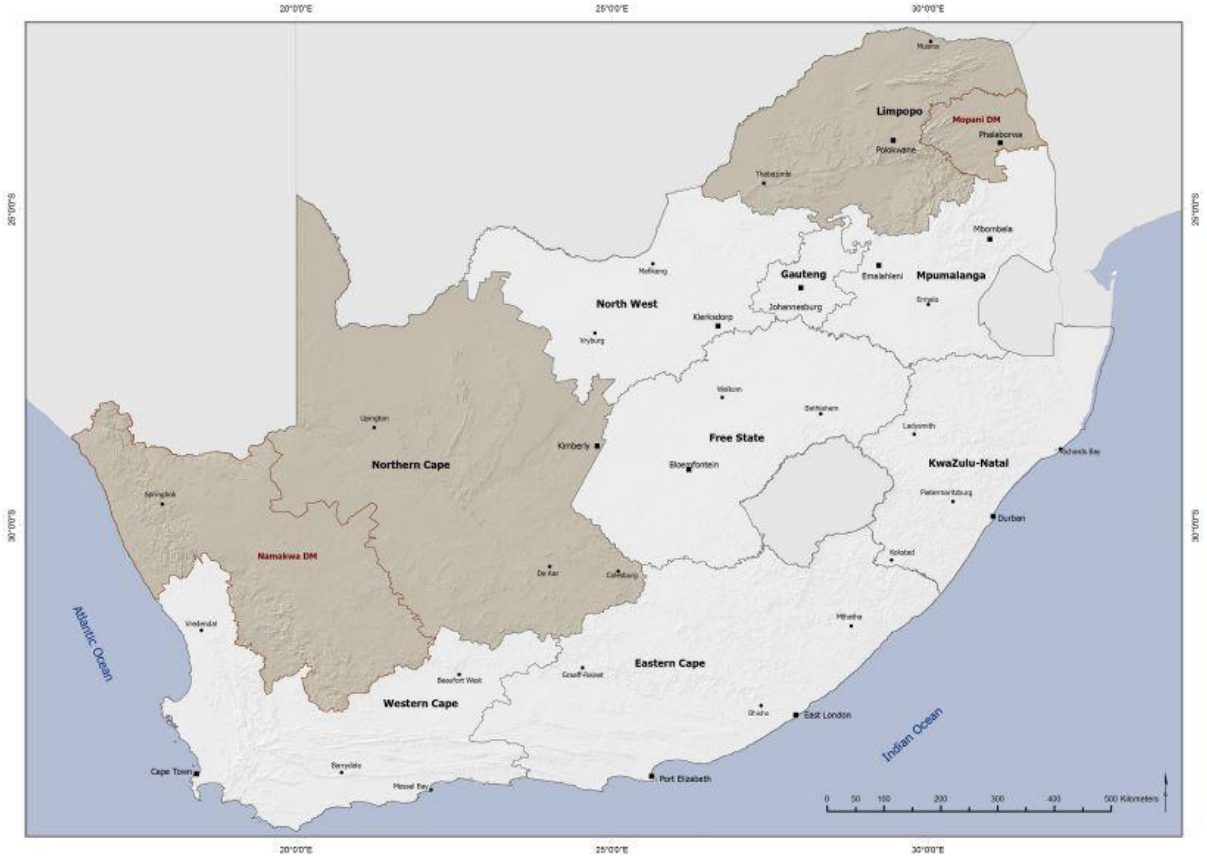

Figure 1: Map of South Africa showing Mopani District and Namakwa District, located in Limpopo Province and Northern Cape Province, respectively.

The climate analysis is based on the latest climate change projections, prepared under South Africa's Long Term Adaptation Scenarios (LTAS) Flagship Research Programme[1] Phase 1 process[2]. The LTAS data analysis includes historical trends, as well as statistically and dynamically downscaled projections for South Africa. In order to gain a better understanding of the local scale projections for the two project target areas, a study was commissioned for a spatially specific analysis of data from the downscaled projections produced under the LTAS. A full report, developed by the African Climate and Development Initiative (ACDI) at the University of Cape Town (UCT), and can be found as Annex I.2[3].

Results from a South African trend analysis, conducted under South Africa's LTAS Phase 1 process, provide up to date insight into historical temperature and rainfall trends for the two project target areas extending to the year 2010. These analyses confirm and extend several previous published analyses summarised in South Africa's Second National Communication (SNC) to the United Nations Framework Convention on Climate Change (UNFCCC) that extended to the year 2000. Based on zonal analysis for the country, both the zone within which Mopani is based and the zone within which most of Namakwa is based show a steady increase in annual maximum temperatures for the historical period 1960 to 2010. Additionally, the analysis shows a steady increase in the number of extremely warm days. In terms of rainfall, the zonal analysis shows that while there has only been a very slight decrease in the annual average rainfall for both areas, there has been a steady decrease in the number of rain days. This indicates that while the overall precipitation is more or less unchanged, rainfall events have become less frequent and more intense, and with longer dry spell

[1] The Long-Term Adaptation Scenarios (LTAS) Flagship Research Programme (2012-2014) is a multi-sectoral research programme, mandated by the South African National Climate Change Response White Paper. The LTAS aims to develop national and sub-national adaptation scenarios for South Africa under plausible climate conditions and development pathways. During its first Phase (completed in June 2013), fundamental climate modelling and related sector-based impacts and adaptation scoping were conducted and synthesised.

[2] Department of Environmental Affairs, 2013. Long-Term Adaptation Scenarios (LTAS) Research Programme for South Africa. Climate Trends and Scenarios for South Africa. Pretoria, South Africa.

[3] Brodrick, Rahiz and New, 2014. Analysis of downscaled climate model results for the areas of Mopani and Namakwa, South Africa, at the district municipality scale. Report prepared by ACDI for the SANBI NIE.

duration in-between, exacerbated by higher air temperatures. The historical trend figures can be found in Annex I.1.

These historical trends are to varying degrees aligned with future projections, which indicate significant temperature increases across South Africa, but with rainfall projections being less consistent and more spatially variable[4]. Projections from General Circulation Models (GCMs) indicate that mean annual rainfall changes will vary across the country. Temperature change projections are more spatially consistent than those of rainfall, with projections showing substantial increases across South Africa, but with the interior warming at a greater rate than the coastal areas.

According to the local scale analysis conducted by ACDI it is clear that for both Mopani and Namakwa there is less uncertainty in the temperature projections than the precipitation projections. All approaches show a distinct warming trend, growing stronger towards the end of the 21st Century. Many of the projected changes fall within the range of historical natural variability, and – especially in the long-term – the inherent uncertainty is high.

Mopani falls into the summer rainfall zone of South Africa. Summers are warm (mean maximums of ~30°C), and wet, with the majority of precipitation falling in mid-summer. Winters are mild (mean minimums of ~8°C) and dry. Annual rainfall in the Mopani district varies between 400 and 900mm, largely as a result of the complex topography. To highlight this, Tzaneen – surrounded by large hills – receives mean annual precipitation of 881mm[5], while Giyani only 421mm[6]. There is large inter-annual variability, with monthly maximum rainfall sometimes reaching 340mm, in comparison to the usual 50-100 monthly totals[7] for the summer months.

For Mopani appreciable warming over the area is projected, in line with the recent LTAS trend analysis. In the short-term future (2020s), temperature rises will be in the range of 1 – 2°C, with greater warming in summer than in the other seasons. The north, and to a lesser extent the west, of the district is projected to warm more than the south and east. Mid-term (2050s) sees warming between 1 and 3°C, as can be observed in Figure 2 below, with greater warming in the west than the east, and particularly in spring. For the long-term future (2080s), warming of between 2 and 5°C is projected, particularly in the south and in winter, with less warming in the central regions in autumn. The Representative Concentration Pathway (RCP)8.5 emission pathway (no mitigation) results indicate very significant warming in the long-term future – up to 6°C.

Precipitation projections are less clear. As observed in Figure 3, in the short-term (2020s), a weak annual wetting trend is shown, especially in the east, with more robust evidence of wetting in autumn. In the summer and winter months, however, weak drying is projected, mostly in the north-east and west respectively. In the autumn of mid-term (2050s), the south-east is set to receive slightly more precipitation, whereas in summer, the north and east are projected to become drier. With the exception of winter, the long-term future (2080s) is projected to dry more in the north than the south.

The El Niño Southern Oscillation (ENSO) is responsible for appreciable inter-annual variability in the summer rainfall zone of South Africa. Climate change will increasingly affect ENSO, which in turn will influence the formation of Tropical-temperate troughs, and Indian Ocean sea surface temperatures (SSTs). Accordingly, it is possible that inter-annual variability in rainfall will increase further in this region. Furthermore, while few tropical cyclones (TCs) have penetrated South Africa in recorded history, the mean global increase of SSTs due to climate change is causing the 26°C isotherm (integral to the formation of TCs) to move further south[8]. Along with increased energy in the global atmospheric system, it is possible that these TCs may contribute towards heavy rainfall and flooding in the eastern parts of the Limpopo province, further exacerbating rainfall variability.

[4] Department of Environmental Affairs (2011) *South Africa's Second National Communication Under the United Nations Framework Convention on Climate Change*.
[http://www.sanbi.org/sites/default/files/documents/documents/201111sasncpubl.pdf]
[5] South Africa Explorer. 2014. *Tzaneen climate*. [Online]. Available: http://www.saexplorer.co.za/south-africa/climate/tzaneen_climate.asp [16 July 2014].
[6] South Africa Explorer. 2014. *Giyani climate*. [Online]. Available: http://www.saexplorer.co.za/south-africa/climate/giyani_climate.asp [16 July 2014].
[7] FAO. n.d. Drought impact mitigation and prevention in the Limpopo River Basin - Chapter 2: Biophysical characteristics. *FAO Natural Resources Management and Environment Department*. [Online]. Available: http://www.fao.org/docrep/008/y5744e/y5744e05.htm#TopOfPage [17 July 2014].
[8] Fitchett, J.M., & Grab, S.W. 2014. A 66-year tropical cyclone record for south-east Africa: temporal trends in a global context. *Int. J. of Climatol.* (2014). Published online in Wiley Online Library.

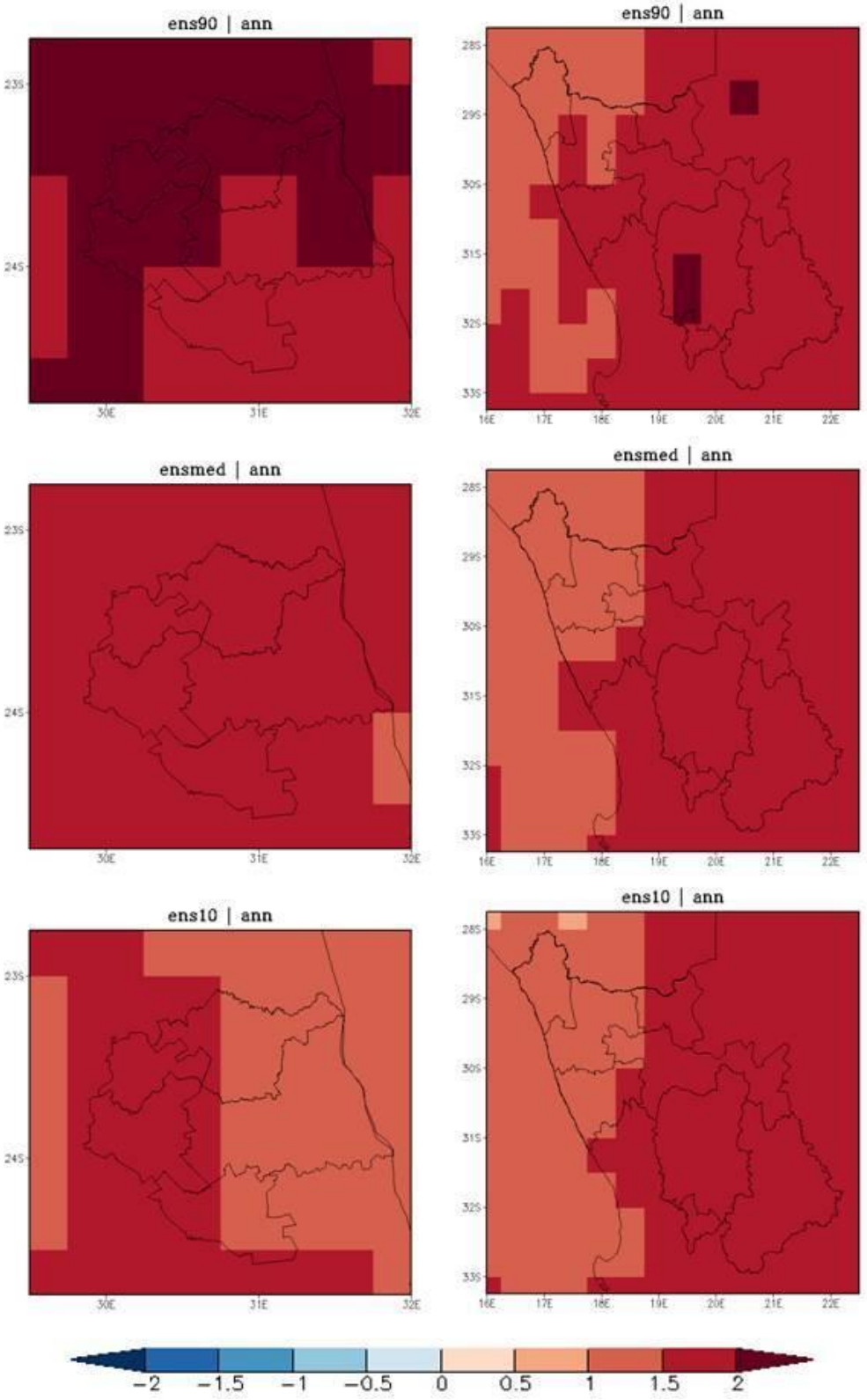

Figure 2: The annual maximum temperature anomaly for the 2020s with respect to the historical period, based on the RCP4.5 emission scenarios. Mopani District is shown on the left, and Namakwa District on the right. Rows 1-3 represent the anomaly of the 90th percentile of the model ensemble (top), the ensemble median (middle) and the 10th percentile of the ensemble (bottom), respectively[9].

[9] Brodrick, Rahiz and New, 2014. Analysis of downscaled climate model results for the areas of Mopani and Namakwa, South Africa, at the district municipality scale. Report prepared by ACDI for the SANBI NIE.

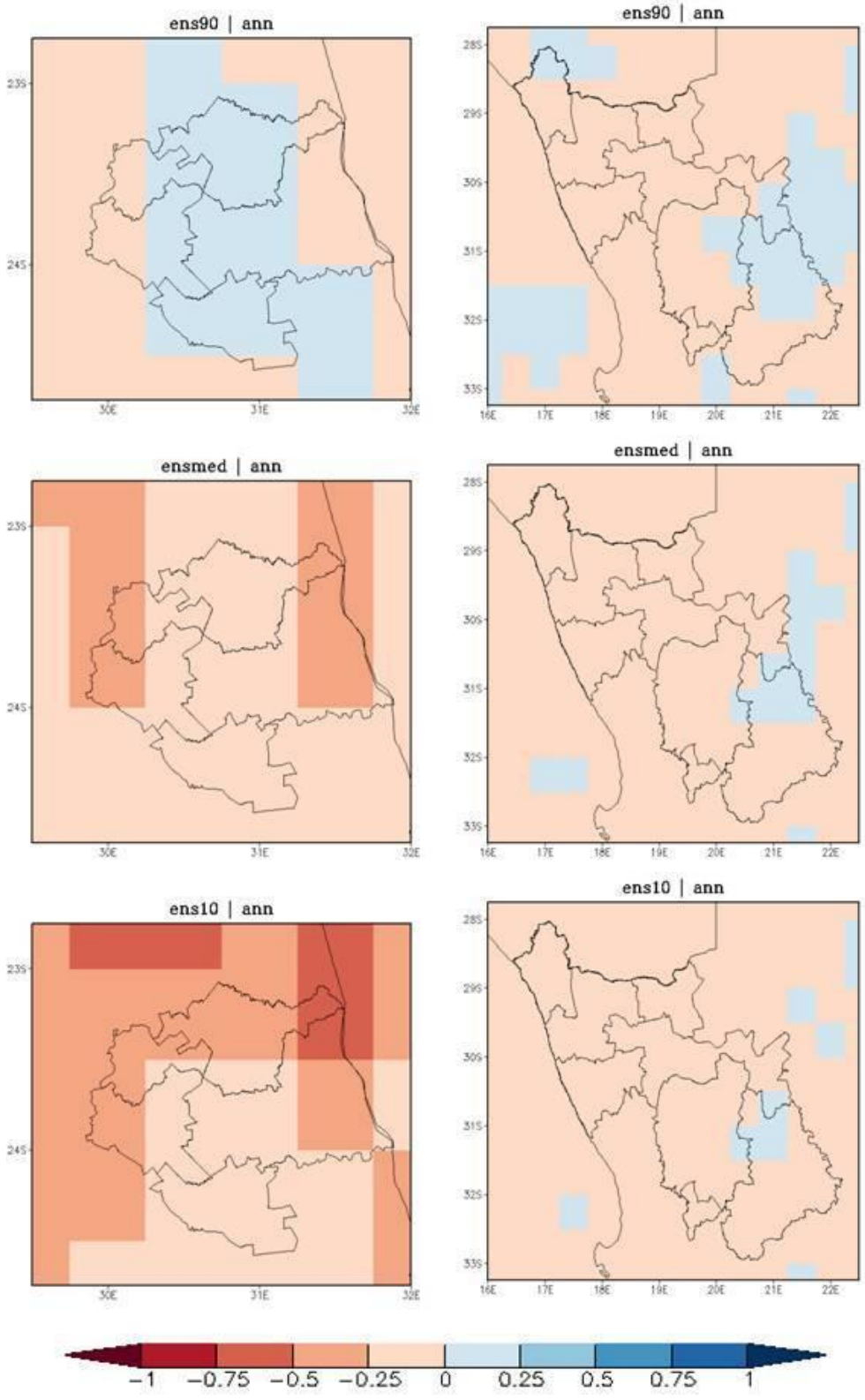

Figure 3: The annual precipitation anomaly for the 2020s with respect to the historical period, based on the RCP4.5 emission scenarios. Mopani District is shown on the left, and Namakwa District on the right. Rows 1-3 represent the anomaly of the 90th percentile of the model ensemble (top), the ensemble median (middle) and the 10th percentile of the ensemble (bottom), respectively[10].

[10] Brodrick, Rahiz and New, 2014. Analysis of downscaled climate model results for the areas of Mopani and Namakwa, South Africa, at the district municipality scale. Report prepared by ACDI for the SANBI NIE.

The Namakwa District Municipality is very large – thus a single climate is difficult to characterise. The vast majority of the District falls into the winter rainfall zone of South Africa, mostly receiving its rainfall from mid-latitude cyclones (cold fronts). It is not uncommon, however, for the extreme east of the district to experience thunderstorm-associated rainfall in the summer months. Summers are hot (mean maximums of ~30°C) and dry. Winters are cool (mean minimums of 1°C) and wet in places. The Namakwa area is classified as semi-desert, due to its low precipitation amounts. The mean annual rainfall in the Namakwa district varies between less than 100mm along the coastal belt to between 100 and 250mm inland. Much of the district receives low – but more importantly – largely predictable winter rainfall[11].

As with the Mopani region, projected temperature rises in Namakwa in the short-term future (2020s) will be in the range of 1 – 2°C, with greater warming is spring than in the other seasons. For all the seasons, there is a fairly strong warming bias to the north east. Mid-term (2050s) sees warming between 1 and 3°C, with greater warming in the east, particularly in summer. Long-term (2080s) sees warming between 2 and 5°C, in winter particularly, with greater warming projected in the east than the west, across the seasons. Warming is generally less pronounced over the coastal areas of the region.

For short-term (2020s) precipitation, there is high variability within and between datasets. As with the Mopani region, weak annual wetting is projected, particularly to the east in autumn, with a drying summer. The north east is set to dry in autumn, while the south west is set to wet slightly. Mid-term (2050s) shows weak wetting in autumn, particularly in the south-west. In spring and summer, however, it is set to dry weakly and moderately respectively, especially in the south-west. In autumn and winter of the long-term (2080s), weak wetting is projected in the south-west, while weak drying is projected for the south-west in spring and summer.

The western interior of South Africa – which incorporates the Namakwa region – receives in excess of 80% of possible sunshine, in both summer and winter[12]). This pre-disposition to solar radiation makes the region particularly sensitive to increasing temperatures, particularly maximum temperature. The extreme eastern parts of the Namakwa District can receive summer rainfall linked to thunderstorm activity. Because total radiation directly affects cloud-producing weather systems[13], this region may receive increased rainfall from such systems in the summer months.

The South Atlantic High Pressure (SAHP) largely drives the Benguela current[14], which has an enormous influence on the climate of Namakwa. Also linked to the SAHP is the West Coast Trough, which produces widespread rain over the western parts of South Africa, from early summer to autumn[15]. Under climate change increases in energy to the system may affect the SAHP, thus having a direct effect on the area's climate and particularly rain-producing systems. As a result of a possibly strengthening SAHP, the frontal systems that provide the majority of Namakwa with its winter rainfall are projected to move further south, but also increase in intensity. This may result in fewer rainfall events, but with heavier rainfall during such events, as is already apparent in the historical trend analysis outlined above. This will further increase the variability of rainfall in the region.

For further details on the local scale analysis, see Annex I.2 for the abridged report from ACDI. The full report is available on request.

Project target areas

The Mopani District: Mopani District Municipality (Figure 4) is one of the six districts of Limpopo province of South Africa. It comprises of five local municipalities i.e. Maruleng, Ba-Phalaborwa, Greater Giyani, Greater Letaba and Greater Tzaneen. Agriculture is the most important economic sector in Maruleng, Greater Giyani, Greater Letaba and Greater Tzaneen. In addition to citrus fruits, sub-tropical fruit, including mangoes, avocadoes and bananas are grown. The mining sector contributes 30% to the Gross Domestic Product (GDP), followed by the general government services sector (17%) and finance and business services (15%).

[11] Desmet, P.G., & Cowling, R.M. 1999. Biodiversity, habitat and range-size aspects of a flora from a winter-rainfall desert in north-western Namaqualand, South Africa. *Plant Ecology,* 142: 23-33.
[12] Tyson, P.D., & Preston-Whyte, R.A. 2000. *The Weather and Climate of Southern Africa*. Cape Town: Oxford University Press.
[13] Ibid.
[14] Ibid.
[15] Ibid.

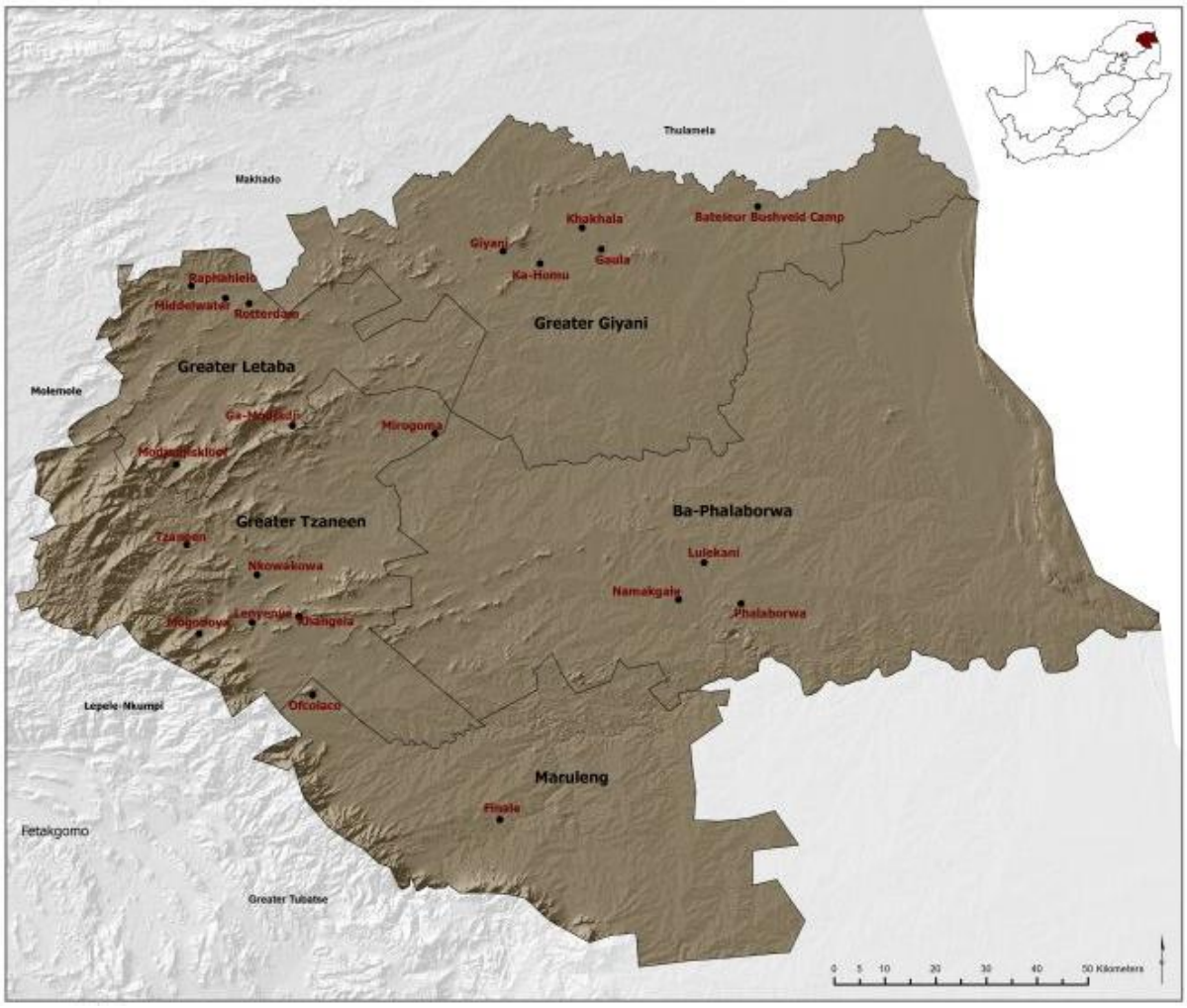

Figure 4: Mopani District Municipality is situated in Limpopo, along the north east boundary of South Africa.

According to Census 2011, the district has a population of 1,092,507 within an area of 20,011 km^2 with 296,320 households. Of these people, 81% reside in rural areas, 14% reside in urban areas and 5% stay on farms. The population density varies and is on average 23 people/ha. The district has a high unemployment rate, and approximately 60% of the unemployed people are women.

According to the Fiscal and Financial Commission's submission for the 2013-14 Division of Revenue, two of Mopani's local municipalities, Greater Letaba and Greater Giyani, are said to be among the twenty municipalities in South Africa most vulnerable to climate change[16]. This is supported by the District's Reviewed Integrated Development Plan (IDP) 2006-2013, which states that Mopani contains some of the country's least developed and poorest communities. In 2006 11% of Mopani residents lived in a state of absolute poverty, and approximately 77% of the population live below the poverty line. Government and the farming sector are the greatest employers in the district, followed by industry, mining, trade, transport, tourism and manufacturing[17].

As mentioned above, the majority of people in the district live in rural areas and the majority of these rural residents are poor. Income in rural areas is constrained by the rural economy that is unable to provide people with remunerative jobs or self-employment opportunities. In this context the additional stressors due to climate variability and change are increasingly having a devastating impact on already marginalised and vulnerable groups.

[16] Turpie, J and Visser, M, 2012. *Chapter 4: The impact of climate change on South Africa's rural areas.* Technical Report: Submission for the 2013/14 Division of Revenue. Published by the Financial and Fiscal Commission. Accessed at http://www.ffc.co.za/index.php/reports/technical-reports. [20 March 2014].
[17] Mopani District Municipality (2010). Reviewed Integrated Development Plan: 2006-2013.

The Mopani District is characterized by low rainfall, especially in the lower-lying areas. While there are no formal records of past extreme events, the historical trends outlined above and experiences on the ground indicate an increasing frequency of dry spells[18] and extreme rainfall events, together with increasing temperature trends. A recent heavy rainfall event with subsequent flooding in Mopani District was, for instance, reported to have destroyed more than 668 houses and a bridge[19]. In February 2013, at the GenderCC Southern Africa (GenderCCSA) dialogue on 'Grassroots women and climate finance' in Polokwane, Limpopo, a representative of Limpopo Department of Agriculture indicated that anecdotal experience on the ground shows that "when rain does fall these days, it often rains continuously for almost a week, with significant negative impacts on crop yields".

The observed dry spells result in limited water resources culminating in severe water shortages and regular drought conditions. Subsequently, there is competition between the different water users such as agriculture, mining and forestry. The strongly adverse effect of anthropogenic climate change on agriculture and the availability of clean water in the province, where many people rely heavily on local agricultural production for household food security, are of particular concern.

The main surface water resources for Mopani District is the Letaba River catchment and its tributaries. Research has found that climate change, and the projected changes in rainfall patterns and associated flood events, is expected to exacerbate the poor health of this river system[20], possibly leading to increased erosion and land degradation. Such impacts will have other knock-on effects including increased expenditure and effort on water treatment, loss of biodiversity and increased dependence by humans on a few species of plants and animals to meet food, fibre and construction needs.

Changing and unpredictable rainfall patterns, soil erosion and increasing temperatures are also likely to impact farming activities in this drought-prone area. This will include the ability of small-scale farmers to predictably produce food such as maize and beans in this drought-prone area. For example, a research study to determine the impact of climate variability on tomato production in Limpopo province[21] indicated that there is sufficient evidence to conclude that agriculture could be affected by future climate variability and change, as the results demonstrated a strong negative correlation between temperature and tomato production. In fruit farming, quality, supply and sustainability of supply could also be affected, potentially compounded by projected challenges in water availability and supply in Mopani District.

Growing malnutrition has led to reports of disease-related deaths among young children weakened by hunger. Drought has also been seen to weaken animal stock and cause losses due to hypothermia during extreme rainfall events. Greater climate variability is thus costing communal farmers significant livestock losses due to a lack of grazing and water shortages in this district. With changing rainfall patterns women in Mopani are likely to find it difficult to grow food and access water for daily use. These beneficiaries have little "voice" and access to decision-making to address these challenges. A small grant facility could support the joint development of appropriate adaptation responses linking community-level needs to the policy level.

Vulnerability Assessment for Letaba and Giyani

Following a request from the Mopani District to specifically focus the Community Adaptation SGF on two of their most vulnerable local municipalities, i.e. Greater Letaba (Letaba) and Greater Giyani (Giyani) (see letter from the Municipal Manager in Annex III.2), and supported by the national assessment of the South African local municipalities' vulnerability to climate change[22], the Mopani component of the Community Adaptation SGF was set up to support projects in these two local municipalities.

[18] http://www.iol.co.za/news/south-africa/limpopo/drought-cripples-limpopo-farmers-1.1448228.

[19] http://www.citypress.co.za/news/no-end-in-sight-to-the-rains/, http://oldsanews.gcis.gov.za/rss/13/13012215051001.

[20] Davis C.L, Stevens N, Archer E.R.M, Van der Merwe M, Maserumule R and, Nkambule C (2009) The Impacts of Climate Change on the Kruger to Canyons Biosphere Reserve: Stakeholder Engagement Strategy Document.

[21] Tshiala M. F and Olwoch J. M (2010) Impact of climate variability on tomato production in Limpopo Province, South Africa [http://repository.up.ac.za/handle/2263/16115].

[22] Turpie, J and Visser, M, 2012. *Chapter 4: The impact of climate change on South Africa's rural areas.* Technical Report: Submission for the 2013/14 Division of Revenue. Published by the Financial and Fiscal Commission. Accessed at http://www.ffc.co.za/index.php/reports/technical-reports [20 March 2014].

To determine how local vulnerabilities will be exacerbated by projected climate change, and to settle the focus areas for climate change adaptation responses based on a sound understanding of the local dynamics and needs, a Vulnerability Assessment (VA) was conducted as part of the detailed design phase of the Community Adaptation SGF. See Annex II.1 for the full VA report. The VA followed a participatory approach, and comprised consultation with 111 stakeholders from Letaba and Giyani through the running of six vulnerability assessment workshops. Two different methodological approaches were adopted for these workshops i.e. a livelihoods and a sectoral approach. The livelihoods approach was used to identify the main livelihood activities of the communities within Letaba and Giyani, the challenges facing those activities, the underlying causes and possible solutions to those challenges. The sectoral approach made use of a step-by-step method to identify sector-specific stressors (climatic and non-climatic), impacts, sensitivities, adaptive capacity and possible adaptation responses.

A seventh workshop was held in June 2014 where the findings of the VA were presented to the relevant stakeholders. The approach was informed by earlier consultations with various departmental heads of the Mopani District Municipality who also assisted with stakeholder identification and logistics.
The VA resulted in the identification of the following priority risks for Letaba and Giyani:

- **Insufficient access to clean water:** This is a climate change related concern in Mopani. Increase in average temperatures and increase in extreme temperatures will lead to increase in water demand, with people, plants and animals all requiring more water. Yet a subsequent increase in evaporation due to higher temperatures will decrease water supply. Water supply may be put under further pressure due to an increase in the intensity of heavy rainfall events, as infrastructure is unable to deal with the increase in volumes and turbidity, leading to mixing of water and sewage and foreign materials entering the water supply system.
- **Reduced food security:** Mopani's agricultural productivity and quality, in terms of both livestock and crops, is at risk in the face of projected climate change. Increase in average temperatures and the number of days with extreme temperatures, coupled with a shift towards rainfall falling in shorter and more intense events, can lead to heat stress, water scarcity as well as flooding and erosion. This may result in decreased grazing capacity and subsequent livestock mortality, as well as wilting and death of crops. At the same time, high intensity rainfall events can lead to soil erosion, as well as water logging of crops and grazing areas. Increasing temperatures may also lead to the introduction of or increased spread of pests, such as chilo, a moth that causes damage to fruits.
- **Additional health challenges:** Climate change may put people's health under stress, due to both direct and indirect impacts of increasing average temperatures and increase in days with extreme temperatures. Direct exposure to heat can lead to high blood pressure and diarrhoea associated with dehydration and fatigue. Increasing temperatures can also lead to the spread of disease, through for example the spread of mosquitos carrying malaria into areas that were previously too cold for transmission.
- **Economic losses for small businesses and traders:** The running of small businesses and traders might become increasingly challenging in the face of climate change, as increasing temperatures impacts products for which there is insufficient cooling storage. Sales of food that has gone off due to lack of access to appropriate cooling storage is already a problem in the present, and increasing temperatures will compound this problem. The health of traders without proper stalls or outlets may also be impacted by the heat.
- **Damage to infrastructure:** Communities in Mopani are set to be put under further stress as infrastructure damage from high intensity rainfall events wash away roads and bridges, cutting communities off from economic hubs and service delivery. There is also the potential for damage to housing and in the worst cases drowning.

These priority risks, together with the priority risks that were identified for the Namakwa District (as discussed below), were used as the basis to identify the Community Adaptation SGF "Investment Windows" where small grant project funding will focus, i.e. Climate Smart-Agriculture, Climate-Resilient Livelihoods and Climate-Proof Settlements.

As part of the vulnerability assessment process stakeholders also identified a number of possible climate change adaptation responses. These are outlined in Box 1 below.

Box 1: Adaptation interventions suggested by stakeholders for the Mopani District.

Insufficient access to clean water:

- Water harvesting, such as water tanks.
- Water storage facilities, such as reservoirs.
- Increase water use efficiency through, for example, drip irrigation.

Reduced food security:

- Introduce agroforestry, which among other things stabilises the soil and reduces nutrient and soil runoff.
- Plant pastures for supplementary feeding for livestock.
- Shift towards an increased use of Nguni breeds, a resilient breed of cattle.
- Construction of more drinking troughs for livestock.
- Encourage stock owners to keep livestock at minimal numbers to ensure sufficient grazing.
- Soil conservation structures, such as gabion baskets, to prevent erosion.
- Contour ploughing, to prevent erosion.

Additional health challenges:

- Shifting working hours to avoid the warmest times of the day.
- Provision of sufficient water, clothing and shelter for workers.
- In the case of disease, ensure timely access to treatment.
- Provision of mosquito nets to prevent malaria infections.

Economic losses for small businesses & traders:

- Development of modernised stalls/ shops that protect customers and sales people from the direct sun and the heat.
- Provision of proper storage facilities for perishable foods.
- Enabling traders and other sales people to sell products that correspond with temperatures and seasons, i.e. gem tomatoes in winter and cold drinks in summer.

Damage to infrastructure:

- Construction of climate resilient roads and bridges.
- Construction of gabions on the side of the road to prevent landslides across the roads.
- Grow grass to avoid erosion.

The Namakwa District: The Namakwa District (Figure 5) is one of the largest districts in South Africa, covering an area of approximately 12 million ha. According to Census 2011, the Namakwa District has a population of 115,842, with 33,856 households. Due to the arid climate and limited economic opportunities, the area has a low population density, with only slightly more than one person per square kilometer. The district population distribution is concentrated in less than 50 settlements, where water is available.

The decline in diamond mining in the area over the past few decades has led to an increase in unemployment (40-75 % across the local municipalities) and high poverty (52 %) (defined as a monthly income of less than USD 200). In communal areas, where education and skill levels are lower, the poverty rate is much higher with up to 67 % of the population living beneath the poverty line.

The majority of households in the Namakwa District are involved in agricultural livelihoods (46%)[23]. Agricultural activities tend towards non-intensive rangeland production due to the semi-arid conditions, and the main livelihood strategies include farming livestock (mainly goats and sheep), some cropping (rain-fed, but marginal) and, in the southern area, farming an indigenous hardy shrub crop, rooibos tea, as a cash crop.

The District is characterised by succulent plant shrublands, recognised for containing exceptional botanic diversity of global significance. This diversity, particularly large spring floral displays, plays a large role in the tourism sector.

[23] Census 2011 Namakwa District Municipal Factsheet. Statistics South Africa (2012) [Retrieved 13 December 2012].

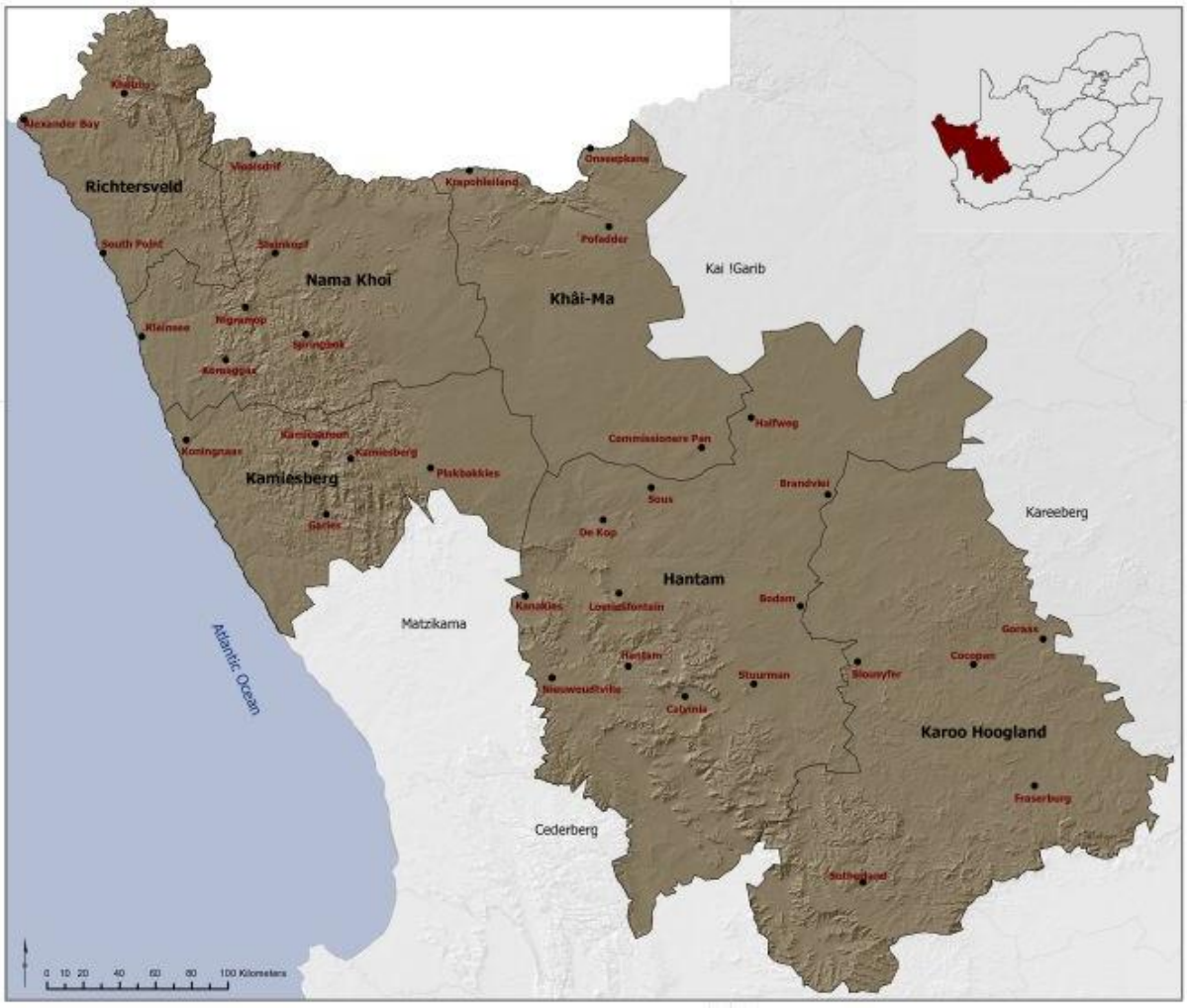

Figure 5: Namakwa District Municipality is situated in the arid areas of the Northern Cape, in the north west of South Africa.

Climate change projections compiled for the Namakwa Climate Change VA (2012)[24] indicate that the area is predicted to become hotter and drier. The climate models consistently show an expected increase in temperature across the district in best, median and worst case scenarios. Although there is greater uncertainty regarding rainfall patterns, the models show reductions overall in annual rainfall in the worst and median case scenarios for areas with current high rainfall. The best case scenario shows a small probability of an increase in rainfall in some areas, but even in this case the effects on soil moisture are likely to be offset by increasing air temperatures. There are also projections of greater frequency and intensity of storm events and droughts[25]. Climatic trends are already negatively impacting on already marginal livelihood systems in the area. A further decrease in rainfall or greater amplitude of dry and wet spells, along with increasing temperatures, will negatively impact on already stressed groups – thus rendering them more vulnerable.

In a 2008 survey of climate impact in the region, the majority of the population indicated significant impacts from drought events, primarily in the agriculture, water and ecotourism sectors[26].

- Overgrazing and degradation in land held in communal tenure creates a poverty trap where farmers on these lands already suffer greater losses from climatic extremes such as cold spells, storms and droughts than neighbouring commercial farmers. As such, the already-significant risks

[24] Bourne, A., C. Donatti, S Holness, and G Midgley (2012). Climate Change Vulnerability Assessment for the Namakwa District Municipality.
[25] Bourne, A., C. Donatti, S Holness, and G Midgley (2012). Climate Change Vulnerability Assessment for the Namakwa District Municipality.
[26] Green Connection. (2008) A Survey of Current Climate Change Awareness amongst the Communities of the Succulent Karoo region.

of being a marginal farmer in this District are expected to be exacerbated by projected temperature increases, erratic rain events, and drought[27].

- Water scarcity will be one of the first and greatest areas of impact from climate change in the Province, and this will be particularly true in the District. The main water source is the Orange River in the north, and ground water sources are limited. Additionally, wetland degradation for livestock grazing and agriculture further threaten long-term water security.
- The District VA indicates that habitat impacts resulting from climate change can impact the income vulnerability of households involved in ecotourism.

While there are no consistent records of past extreme events, the Namakwa District's 2010 Disaster Risk Reduction (DRR) Strategy[28] (which also formed a basis for the VA) identifies coastal storms, such as the one experienced at Port Nolloth in 2009, along with floods, strong winds and droughts as some of the greatest threats to the municipality. There is also a high risk of veld fires in the summer rainfall areas of the District which will further impact rangeland and livestock health.

Vulnerability Assessment

In 2012 a Climate Change VA for the Namakwa District was undertaken by Conservation South Africa (CSA), with the support of the Namakwa District Municipality, for the same area[29]. The focus of the 2012 assessment was to identify priority areas for Ecosystem-based Adaptation (EbA) and develop an index of vulnerability for the Namakwa District. The 2012 assessment used socio-economic data from a disaster management survey conducted with all 52 settlements in the District to identify climate disaster prone areas and prioritise activities related to EbA.

To broaden the scope of the 2012 assessment beyond EbA, CSA began an intensive stakeholder engagement process in 2013. This began with nine workshops with local government – two at the district municipality level and seven at the local municipality level – based on the Let's Respond Toolkit[30]. These sessions were focused on integrating climate change risks and opportunities into municipal planning through strategic integration of the topic into the IDPs for each municipality.

Later in 2013 and in early 2014, in direct response to the requirements of the detailed design phase of the Community Adaptation SGF, CSA and South African National Biodiversity Institute (SANBI) began to engage directly with affected community groups, local Non-Government Organisations (NGOs) and Community Based Organisations (CBOs), relevant government departments and research and development institutions active in the Namakwa District. This culminated in a VA for the Namakwa District, which can be found as Annex II.2. This stakeholder engagement has included two sessions: one in Cape Town at the Annual General Meeting of the Northern Cape Regional Network, a network of NGOs and CBOs working in the Northern Cape including the Namakwa District; and one in Springbok and attended by 61 representatives of 38 locally active institutions. In addition to the two meetings held in late 2013 and early 2014, many more organisations, institutions, research / implementation partners and community groups were contacted over the telephone and via email.

The VA, with the additional inputs provided in 2013 and 2014, resulted in the identification of the following priority risks for the Namakwa District:

- **Reduced viability of agricultural livelihoods (including fisheries):** Most (95%) land in the Namakwa District is actively utilised for agriculture, mostly small livestock farming (sheep and goats). A large percentage of the population is engaged in farming and directly dependent on related activities for their livelihoods. Agriculture is likely to be affected by drought, heat stress in plants and animals, and a reduction in water availability and water quality for livestock and crops. Increases in evaporation and evapotranspiration will decrease fodder production and grazing production for livestock, potentially resulting in reduced conception, birthing, and weaning rates, poor livestock condition, livestock mortality, and, ultimately, reduced viability of current farming practices. This could result in unemployment and reduced household income, ultimately reducing food security and the sustainability of current livelihood practices.

[27] Namakwa District Municipality(2012). Approved Integrated Development Plan 2012-2016.
[28] Du Plessis, A. (2010). Namakwa District Municipality: Disaster Risk Reduction Executive Summary Report.
[29] Bourne A, Donatti C, Holness S, and Midgley G. 2012. Climate Change Vulnerability Assessment for the Namakwa District Municipality. Cape Town: Conservation South Africa.
[30] (Department of Environmental Affairs, Department of Cooperative Governance, and the South African Local Government Association). 2012. *Let's Respond: A toolkit to integrating climate change risk and opportunities into municipal planning.* Pretoria, South Africa.

- **Damage to infrastructure/human settlements:** There are 52 rural human settlements in the Namakwa District. Typically human settlements are clustered around a water source, but are isolated. Human settlements are likely to be affected by heat stress in people (particularly the very young, elderly, and ill, as well as farm and mine labourers) and water stress both in terms of drinking water quality and availability. Additionally, human settlements, access roads, and irrigation infrastructure are vulnerable to flash-flooding after periods of droughts. Coastal settlements and infrastructure (notably fishing and diamond dredging facilities) may be increasingly at risk from storm surge, while inundation of coastal aquifers threatens fresh water supplies.
- **Increased reliance on DRR services:** The low density of people and isolation of settlements in the Namakwa District places a strain on municipal DRR services. However, an increase in frequency and intensity of climate extremes, particularly drought, will necessitate an increase in the provision of these services, focused on the agriculture sector and human settlements. Community-led DRR interventions can safe-guard livelihoods and infrastructure, thus reducing the stress on municipal services and increasing resilience to the impacts of climate variability and change.
- **Degradation of ecological infrastructure[31]:** Functioning ecosystems in the Namakwa District currently deliver valuable ecosystem services to rural, vulnerable communities, such as grazing areas for livestock and the provision of clean water for drinking and household use. However, this provision of ecosystem services is threatened by increasing aridity, coupled with over-utilisation of natural resources because of reduced food security and loss of household income. Investing in ecological infrastructure will facilitate community-based management, maintenance and potentially restoration of ecosystems functions and services that support climate resilient livelihoods.

These priority risks, together with the priority risks that were identified for Letaba and Giyani, were used as the basis to identify the Community Adaptation SGF Investment Windows, i.e. Climate Smart-Agriculture, Climate-Resilient Livelihoods and Climate-Proof Settlements.

As part of the VA process stakeholders also identified a number of possible climate change adaptation responses. These are outlined in Box 2 below.

Box 2: Adaptation interventions suggested by stakeholders for the Namakwa District.

Reduced viability of agricultural livelihoods:
- Introduction/increased use of heat-tolerant livestock.
- Construction of shade structures for livestock.
- Use of drought-resilient crops.
- Use of micro/drip-irrigation systems.
- Support to currently practiced, alternative livelihoods such as temperature controlled abalone farming.

Damage to infrastructure/human settlements:
- Rainwater harvesting at the household level.
- Grey water recycling systems.
- Insulation of houses to reduce impacts of extreme temperatures.
- Planting of drought-resilient trees around human settlements.
- Small-scale coastal protection infrastructure, such as gabions infrastructure.

Increased reliance on DRR services:
- Support to community-based fire management strategies.
- Small-scale early warning systems, particularly for drought.

Degradation of Ecological Infrastructure:
- Clearing of alien vegetation, particularly along waterways, to improve surface water flow for agricultural and household use.
- Wetland rehabilitation.
- Improved land/livestock management.

[31] Ecological infrastructure refers to strategically planned and managed networks of natural lands, working landscapes and other open spaces that conserve ecosystem values and functions and provide associated benefits to society.

Investment Windows

The Community Adaptation SGF will invest in climate change adaptation interventions that fall within prioritised Investment Windows. These have been derived from the findings of the VAs undertaken in each of the project target areas, in combination with the downscaled climate analysis of the project target areas, as outlined above and in Figure 6. This process supported the identification of impacts and risks to sectors, based on stakeholder input and contextualisation of climate-driven changes.

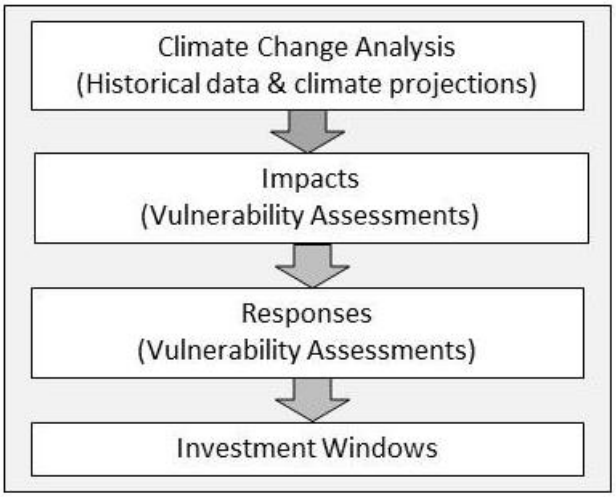

Figure 6: The identification of the Investment Windows was based on climate projections and findings of the Mopani District and Namakwa District Vulnerability Assessments.

The process outlined in the figure above led to the identification of three Investment Windows, i.e. Climate-Smart Agriculture, Climate-Resilient Livelihoods and Climate-Proof Settlements, as shown in Figure 7 below. The Community Adaptation SGF will invest in climate change adaptation interventions that fall into these prioritised Investment Windows. All small grants projects will deliver concrete, tangible benefits to local communities, and may deliver cross-cutting benefits in more than one Investment Window.

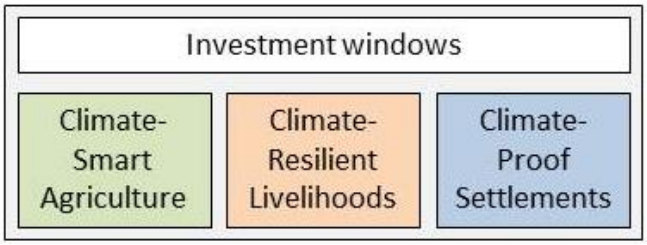

Figure 7: Community Adaptation SGF Investment Windows.

Further detail on the Investment Windows is outlined in Section II.A below.

Project Objectives:

This Community Adaptation SGF will increase climate resilience in production landscapes and socio-economic systems in communities in two pilot district municipalities in South Africa, by working directly with local stakeholders and anticipated beneficiaries through a small granting mechanism.

The overall goal of the project is to ensure that vulnerable, rural communities in the project target areas have reduced vulnerability and increased resilience to the anticipated impacts of climate variability and change. The objective is to incorporate climate adaptation response strategies into local practices so that assets, livelihoods and ecosystem services are protected from climate induced risks associated with expected droughts, seasonal shifts and storm-related disaster events.

In addition to delivering direct and tangible benefits through the implementation of the small grant projects themselves, the Community Adaptation SGF will pilot and develop an understanding of small grant mechanism development and implementation in the context of climate finance, with a view to scaling up and replicating this model as appropriate. This approach responds directly to calls from civil society to bring the principle of 'direct access' closer to vulnerable communities, thus empowering them to determine how climate finance will be used, and building institutional capacity for the implementation of adaptation efforts at the local level.

It is believed that one of the most important factors of success for the Community Adaptation SGF will be its processes of project identification, development, review and learning, and the processes that are put in place to build local capacity and support project implementation. These have been carefully addressed in the design of the project.

The Community Adaptation SGF itself will comprise three components as follows:

- Component 1: Small grants to vulnerable communities deliver tangible and sustainable benefits.
- Component 2: Local institutions empowered to identify and implement adaptation response measures.
- Component 3: Lessons learned facilitate future up-scaling and replication of small grant-financing approaches.

The Community Adaptation SGF will be led by SouthSouthNorth (SSN) Trust, who will act as the Executing Entity (EE), and Conservation South Africa (CSA), who will act as the Facilitating Agency in the Namakwa District. The Facilitating Agency for the Mopani District is still to be selected (see Section III.A for further details).

Project Components and Financing:

Project Components	Expected Concrete Outputs	Expected Outcomes	Amount (USD)
Component 1: Small grants to vulnerable communities deliver tangible and sustainable benefits (Small Grants)	*1.1 Adaptation assets strengthened through the implementation of at least 12 small grants (approximately USD 100,000 each) are disbursed to at least 12 local institutions in the Mopani and Namakwa District Municipalities* *The small grants will support grant recipients to implement adaptation responses in:* • *Climate-Smart Agriculture (such as the construction of livestock shelters, introduction and implementation of mulching techniques, introduction of agroforestry and planting of locally appropriate drought resistant crops)* • *Climate-Resilient Livelihoods (such as the development of trader stalls that protect people and products from the heat, installation of cooling facilities for food traders, provision of shade clothes for vegetable production at kindergartens and the introduction of savings groups)* • *Climate-Proof Settlements (such as improving housing structures, construction of small-scale coastal storm protection, improving the structure of bridges and restoring degraded wetlands)*	Small grants support concrete adaptation measures that strengthen livelihood strategies, adaptive capacity, infrastructure and assets in vulnerable communities in two district municipalities in South Africa.	1,542,000

Component 2: Local institutions empowered to identify and implement adaptation response measures (Institutional Capacity)	*2.1 At least 12 local institutions in the Mopani and Namakwa Districts are supported to develop small grant projects for local-level adaptation* *2.2 At least 12 local institutions in the Mopani and Namakwa Districts are supported to implement integrated climate adaptation responses*	Small Grant Recipients and associated institutions are empowered to identify response measures to climate induced-vulnerabilities, and implement relevant climate change adaptation projects.	325,000
Component 3: Lessons learned facilitate future scaling up and replication of small grant financing approaches (Lessons Learned)	*3.1 Training opportunities are provided for Small Grant Recipients* *3.2 Local networks for reducing climate change vulnerability and risk reduction are developed, expanded and strengthened* *3.3 Case studies and policy recommendations are developed for reflecting on, replicating and scaling up small grant financing approaches*	A methodology for enhancing direct access to climate finance is developed, based on lessons learned, providing recommendations for scaling up and replicating in South Africa and beyond.	189,000
Project Execution cost			195,320
Total Project Cost			2,251,320
Project Management Fee charged by the Implementing Entity			191,362
Amount of Financing Requested			2,442,682

Projected Calendar:

This will be a five year project, with 6 months for setting up the project, including establishing local level governance structures and building capacity for implementation, and 6 months for closing off, including reflection and participatory review.

Milestones	Expected Dates
Start of Project/Programme Implementation	April 2015
Mid-term Review (if planned)	April 2017
Project/Programme Closing	April 2019
Terminal Evaluation	January 2019

PART II: PROJECT JUSTIFICATION

A. Describe the project components, particularly focusing on the concrete adaptation activities of the project, and how these activities contribute to climate resilience.

Through Component 1, the Community Adaptation SGF will provide climate finance directly to targeted beneficiaries and in so doing will invest in locally relevant and integrated community-level responses to climate variability and change. The integration of scientific and local knowledge is an area of particular interest. Responses will be identified and implemented by the beneficiaries themselves, who will have been involved in the conceptualisation of the proposed projects and who are fully involved as project partners in the small grant project implementation and Monitoring and Evaluation (M&E) processes.

Among other things[32], all small grant projects will:

[32] See Component 2 description in Section II.A for a full list of project criteria.

- deliver tangible, measurable benefits that reduce the vulnerabilities of local communities to existing and anticipated impacts of climate change;
- directly involve beneficiaries in the identification and conceptualisation of projects;
- show how women are included in project management structures and as project beneficiaries; and
- make provision for Small Grant Recipients to participate in capacity building, learning and reflection activities that facilitate the sharing of knowledge on best practices from the local to the national level.

It is believed that one of the most important success factors for the Community Adaptation SGF will be its processes of project identification, development, review and learning along with the processes that are to be put in place to build local capacity and support project implementation. These will be supported through Components 2 and 3 of the project and are described below.

In addition to delivering direct and tangible benefits through the small grant projects themselves, the Community Adaptation SGF will pilot and develop an understanding of small grant mechanism development and implementation in the context of climate finance, with a view to scaling up and replicating this model as appropriate. This approach responds directly to calls from civil society in South Africa to bring the principle of 'direct access' closer to vulnerable communities, thus empowering them to determine how climate finance will be used, and to build the institutional capacity for the implementation of adaptation efforts at the local level

Component 1: Small grants to vulnerable communities deliver tangible and sustainable benefits (USD 1,542,000).

This component will support the implementation of adaptation responses by vulnerable communities in the Mopani and Namakwa District Municipalities. This will be achieved through a suite of interventions that ultimately provide climate finance for at least 12 small grants in the Mopani and Namakwa District Municipalities. These small grants will be in the order of USD 100,000 each. A total of USD 1,542,000 has been allocated for these small grants. The grants may be phased and will be disbursed in tranches to ensure a sound implementation process and effective integration of project-level M&E processes.

The Community Adaptation SGF will invest in climate change adaptation interventions that fall into the following prioritised Investment Windows:
- Climate-Smart Agriculture;
- Climate-Resilient Livelihoods; and
- Climate-Proof Infrastructure.

These Investment Windows are elaborated in Box 3 below.

As described above, the Investment Windows were identified in response to local-level climate change projections and the VAs that were undertaken in the two project target areas. All small grant projects will deliver concrete, tangible benefits to local communities, and may deliver cross-cutting benefits in more than one Investment Window.

Box 3: The Community Adaptation SGF Investment Windows.

Climate-Smart Agriculture[33]
Based on the climate change risks determined by the two VAs, as outlined above, Climate-Smart Agriculture has been identified as one of the three Investment Windows for the Community Adaptation SGF. Projects that fall within this Investment Window will address the direct or indirect impacts of climate change on agricultural production, and could target livestock and/or crop production. Climate-Smart Agriculture projects will focus on responses that feature shifts towards new resilient farming techniques, as well as technological improvements. This could include the use of drought-resilient crops in the face of projected drying, tree planting or the construction of shade structures and more drinking troughs for livestock in the face of increasing temperatures. The implementation of no-regrets farming techniques, practices that address climate projections yet that have

[33] Note that while the FAO definition of Climate-Smart Agriculture comprises sustainably increasing agricultural productivity and incomes, adaptation to climate change and climate change mitigation, Small grants projects that fall within this Investment Window will focus on climate change adaptation. If small grants projects also speak to sustainability and mitigation these will be co-benefits, yet not prerequisites.

general benefits whatever the extent of future climate change, is preferential. This could for example be the introduction of mulching to retain soil moisture in the face of warming and drying, which at the same time works to improve the general fertility and health of the soil.

Development of Climate-Smart Agriculture projects can entail the incorporation of cross-sectoral aspects such as ecological infrastructure, as healthy, functioning ecosystems that play an important role in preventing erosion, attenuating floods and ensuring that there is sufficient water and grazing. The issue of water-security can also be addressed in the agricultural projects, as ensuring sufficient yet sustainable water availability in the face of increasing temperatures and shifting rainfall patterns is key in order to create resilient farming systems. Climate-Smart Agriculture projects can also incorporate DRR components, through precautionary measures and plans that reduce the impacts of projected shifts in both slow (i.e. drought) and rapid (i.e. thunderstorms) onset extreme events on agriculture.

As for all the small grants projects, Climate-Smart Agriculture projects need to focus on ensuring tangible benefits for the most vulnerable communities.

Climate-Resilient Livelihoods
Based on the climate change risks determined by the VAs as outlined above, Climate-Resilient Livelihoods has been identified as one of the three Investment Windows for the Community Adaptation SGF. In this context "livelihoods" is defined as the capabilities, assets and activities required to make a living[34]. Assets comprise a wide array of aspects that people require for their livelihoods, including: human assets (skills, knowledge, health, ability to work, etc.); natural assets (land, water, wildlife, etc.); financial assets (financial resources that people use, i.e. savings, credit, pensions); physical assets (transport, energy, etc.); and social assets (networks, groups, access to institutions).

Climate-Resilient Livelihoods projects will work to increase the resilience of income generating activities and associated assets in the face of a changing climate. This could include aspects that affect people directly, such as heat stress experienced by traders without access to proper stalls, or aspects that affect the activity, for example increasing water requirements for brick making as increasing temperatures leading to drying of the mud used for brick making.

The Climate-Resilient Livelihoods Investment Window provides an opportunity to reflect on climate change impacts on locally specific livelihoods, and aims to foster innovative approaches for responding to these. Importantly, projects must be able to show how the interventions directly address aspects of an income generating activity or associated livelihoods asset that is set to be impacted by projected climate change.

As for all the small grants projects, Climate-Resilient Livelihoods projects need to benefit a wide group of people.

Climate-Proof Settlements
Based on the climate change risks that came out of the two Vulnerability Assessments, as outlined above, Climate-Proof Settlements has been identified as one of the three Investment Windows for the Community Adaptation SGF project. This Investment Window incorporates projects that address the climate change vulnerability of settlements, the people living in those settlements and the infrastructure on which they depend. This could include ensuring that infrastructure can deliver access to sufficient clean drinking water in the face of increased risk of storm surge and subsequent inundation of coastal aquifers. Additionally, it could include ensuring that community members are able to commute to school, to work or to the economic hub as normal if projections indicate an increase in the intensity of heavy rainfall events with which local infrastructure cannot cope.

Development of Climate-Proof Settlements also addresses the need for DRR, as climate change in some areas might mean an increase in the frequency and intensity of climate extremes. DRR projects, preferably community-led, that can safe-guard lives, livelihoods and infrastructure, will thus be included. Depending on the climate change projections for the area, such projects could prepare for extremes ranging from droughts to thunderstorms. Ecological infrastructure can in some cases play a role in buffering extremes, and as such be incorporated as part of climate-proof settlement projects. Such interventions need to be linked to projected climate change related impacts on settlements being reduced or prevented as a result of healthy and functioning ecosystems. This could include the restoration or rehabilitation of a wetland that can be shown to provide flood attenuation for a community at risk from flooding due to an increase in the intensity of heavy rainfall events.

An indicative list of project ideas that emerged from the participatory VAs has been developed to illustrate the scope of these interventions (see Box 4). This indicative list will be refined further during the project concept development processes, as described below. Small grant projects will be identified in partnership with local stakeholders/beneficiaries and will be designed to respond directly

[34] Chambers, R. and Conway, G.R. (1992) 'Sustainable Rural Livelihoods: Practical Concepts for the 21st Century', Discussion Paper 296. Brighton, UK: Institute of Development Studies.

to local conditions, needs and vulnerabilities, and to meet the agreed criteria of the Community Adaptation SGF. All small grant projects will need to demonstrate a clear climate change adaptation focus, and tangible additional adaptation benefits.

Box 4: Indicative projects that will be supported through the Community Adaptation SGF.

Examples of adaptation responses for Climate-Smart Agriculture projects:

- Construction of livestock shelters, in response to increasing temperatures and subsequent heat stress in sheep.
- Introduction and implementation of mulching techniques among a group of farmers, as a way to contain soil moisture in response to increasing temperatures and subsequent increase in evaporation and/or in response to decrease in average rainfall.
- Introduction of agroforestry in order to stabilise the soils and reduce nutrient and soil runoff in response to increase in the intensity of heavy rainfall events.
- Planting of locally appropriate drought resistant crops in response to increasing temperatures and decrease in average rainfall.

Examples of adaptation responses for Climate-Resilient Livelihoods projects:

- Development of market facilities for a group of traders, providing traders and customers with protection from the heat and thus from heat stress, fatigue and dehydration, in response to increasing temperatures.
- Installation of cooling facilities for food traders, preventing food from going off quicker due to increasing temperatures, and thus preventing economic loss by traders and the sales and consumption of foods that makes people sick.
- Provision of shade cloth to protect vegetable production at kindergartens that grow their own food for the children, in response to increasing temperatures.
- The introduction of savings groups aimed at creating a financial buffer for households at risk from for example impacts from increase in the intensity of extreme rainfall events.

Examples of adaptation responses for Climate-Proof Settlements projects:

- Improvements to housing structures that become very warm during warm days, in response to increase in temperatures.
- Small-scale coastal storm protection, in response to increase in the frequency and intensity of storm surges.
- Improving the structure of a bridge over which people have to cross on a regular basis to get to school or to work and which is regularly damaged or overflows due to flooding, in response to increase in the intensity of heavy rainfall events.
- The restoration of a degraded wetland upstream from a community which is regularly affected by flooding, in response to increase in the intensity of heavy rainfall events.

Component 2: Local institutions empowered to identify and implement adaptation response measures (USD 325,000).

The Community Adaptation SGF recognises, and is indeed designed to respond to, weak institutional capacities for project identification and implementation in the project target areas, and associated consequences for reducing climate induced risk and vulnerabilities. Under this component, it will focus on supporting local institutions to identify, develop and implement small grant projects in the context of climate change adaptation at all stages of the project cycle.

An innovation of the Community Adaptation SGF is to place Facilitating Agencies alongside Small Grant Recipients in the project target areas. The Facilitating Agencies will work closely with Small Grant Recipients and support sound small grant project identification, development and implementation processes including local-level project administration, reporting and financial management. These processes will be guided by a set of criteria that ensure that small grant projects clearly respond to experienced or anticipated climate induced stresses, and meet the objectives of the Community Adaptation SGF, the NIE and the Adaptation Fund (AF).

Small Grant Project Screening and Review

The project development and review mechanisms of the Community Adaptation SGF will be guided by criteria that ensure that small grant projects clearly respond to experienced or anticipated climate induced stresses, and meet the objectives of the Community Adaptation SGF, the NIE and the AF. As part of this, the screening processes will also ensure that all small grant projects meet the requirements for a project with no significant risks in terms of the AF Environmental and Social Policy (ESP), or a project with minor risks that can be mitigated.

This Community Adaptation SGF has been designed to pilot an enhanced direct access mechanism, and in order to be able to retain a focus on this, it has been agreed that small grant projects with significant AF ESP risks, or risks that cannot be mitigated, will be excluded. This position is further informed by the relatively small size of the grants, which would make detailed specialist investigations into the identification and mitigation of significant risks unaffordable.

It should be noted that the Community Adaptation SGF will not fund:

- Small grant projects that do not align with all of the prescribed criteria.
- Small grant projects that do not result in tangible, measurable adaptation benefits for vulnerable communities – this includes any project that is only awareness- and/or education-based, only relevant to planning or research, without feeding into an implemented activity.
- Small grant projects that require a Basic Assessment or full Environmental Impact Assessment (EIA) as per the national EIA regulations (see Section II.E), due to administrative costs and potential delays, unless provincial authorisations are in place (see Environmental and Social Risk Screening section below).
- Small grant projects that do not show additionality.
- Small grant projects that pose significant or unmitigatable risks in terms of the AF ESP.

Institutions (Small Grant Recipients) and small grant projects will be carefully screened against a set of criteria that were developed as part of the process to conceptualise the Community Adaptation SGF.

The screening process will have three steps, as follows:

- Screening of the Small Grant Recipients against a set of predetermined criteria;
- Screening of the small grant projects, to ensure they align with the objectives of the Community Adaptation SGF; and
- Screening of the small grant projects against the criteria of the AF ESP to ensure that they are no significant project risks, or that any minor risks that can be mitigated.

Small grant projects that do not meet the requirement for a project with no significant risks in terms of the AF ESP, or a project with minor risks that can be mitigated, will be excluded.

The criteria were designed to ensure consistency with the aspirations of project target communities, alignment with the NIE Investment Framework and compliance with the standards and criteria of the AF, including the ESP. They were designed in consultation with project stakeholders as part of the Community Adaptation SGF detailed design phase.

A participatory and inclusive approach is essential to sustainability. It creates a sense of ownership and buy-in, involves all sectors of the community, enables integration with on-going activities, provides access to local knowledge and ideas, facilitates consensus and increases the credibility of the project. Although participatory processes are not uncommon in South Africa, there is sometimes a tendency for project management to become expert-driven and top-down in its approach. The Community Adaptation SGF will actively promote a participatory, gender-sensitive approach. To foster the participation of women in project activities, gender concerns have been factored into project criteria, indicators and targets. These will ensure that there is equitable representation of women as project beneficiaries, in training and capacity-building programmes, and in project decision-making structures at all levels.

Criteria for Small Grant Recipients:

- Small Grant Recipients must be South African institutions with proven relevant implementation experience.
- Preference will be given to Small Grant Recipients that are legal entities and have the capacity to receive, manage and audit project funds.
- Preference will be given to small grant projects led by civil society organisations, and civil society organisations must be represented on management structures of all small grant projects.
- Organisations will need to show how women are included in their project management structures.
- Small Grant Recipients must have a sound track record of good governance, delivery of grant commitments and financial management.
- Preference will be given to grant recipients with a clean audit record.

- Small Grant Recipients must have previous positive experience receiving a combination of funds in the order of USD 25,000 (R 250,000) per year over a period of at least two years.
- Small grant recipients are encouraged to develop implementation partnerships that augment or share their current capacity.
- Preference will be given to Small Grant Recipients that have established long-standing relationships with communities in the Namakwa or Mopani District Municipality.
- Small Grant Recipients must have proof of land or asset ownership, and/or land tenure or permission to carry out proposed activity, as relevant.
- Small Grant Recipients must have a clear mandate from project community beneficiaries to work in the project target areas on the identified project activities.
- Small Grant Recipients must demonstrate willingness to participate in learning and knowledge development and dissemination processes.
- Small Grant Recipients must not be receiving funds from other sources for the proposed small grant project activities.
- Small Grant Recipients may only receive one small grant from the Community Adaptation SGF.

Note: Organisations may wish to collaborate in order to meet organisational eligibility requirements. Organisations will be required to furnish documentation to verify recipient eligibility criteria during the application process.

Criteria for small grant projects:

- The Community Adaptation SGF will fund small grant projects that address a clear climate change related threat and have a clear and demonstrable link to tangible, measurable and visible adaptation benefits for vulnerable communities.
- Small grant projects must clearly demonstrate that they respond to a particular climate change risk that is relevant for the project area, as identified in the project VAs (see Annex II).
- Small grant projects must support adaptive interventions that clearly respond to current or anticipated local vulnerabilities that deliver concrete, tangible and measurable climate change adaptation benefits.
- Small grant projects must support concrete actions and deliver tangible results that increase resilience to climate variability and change.
- Small grant projects must be able to show no significant risks in terms of the AF ESP, or minor risks that can be mitigated.
- Small grant projects must align with the Community Adaptation SGF Investment Windows, as described above in Box 3.
- Small grant projects must be located within the broader development context (provide economic, social, and/or environmental co-benefits) of the area.
- Small grant projects must be supported by anticipated beneficiaries and local community stakeholders.
- Where relevant, small grant projects are required to demonstrate sustainable land tenure arrangements.
- Small grant projects must support vulnerable, local communities and especially women.
- Small grant projects will beneficiate community groups rather than single individuals i.e. at least 50 direct community beneficiaries per project.
- Small grant projects must include learning outcomes and inform ways to scale up and replicate approaches in other communities.
- Small grant projects must clearly demonstrate how success will be measured and must have clear indicators.
- Small grant projects must be replicable and/or scalable.
- Small grant projects must be sustainable after the Community Adaptation SGF funding ends.
- Small grant projects must be cost-effective.
- Small grant projects must be located in rural/semi-rural areas.
- Small grant projects must be implemented in the Namakwa District Municipality, or Greater Giyani or Greater Letaba in the Mopani District Municipality.

Environmental and social risk screening

All small grant projects will be screened against the AF ESP, and potential Small Grant Recipients will be required to complete Table 1. Any small grant project that does not meet the requirements for a

project with no significant risks in terms of the AF ESP, or minor risks that can be mitigated, will be excluded.

Particular attention will be given to ensuring that small grant projects do not impact adversely on any priority biodiversity areas or ecosystem support areas, and that there are no negative impacts on local communities, including vulnerable groups and indigenous people.

As mentioned above, small grant projects that require a Basic Assessment or full EIA as per the national EIA regulations (see Section II.E) will not be supported, due to administrative costs and potential delays. Activities that are listed in the EIA regulations will only be approved where provincial authorisations can be obtained as part of South Africa's Working for Wetlands Programme. These provincial authorisations apply to riparian zone activities (such as rehabilitation or restoration of wetlands, rehabilitation and restoration of river banks including erosion control and the construction of low river crossings) and littoral zone activities (such as small-scale coastal storm protection structures). Such provincial authorisations will need to be provided in writing before any grants that entail these proposed activities are awarded.

Table 1: Checklist of environmental and social principles.

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
Compliance with the Law		
Access and Equity		
Marginalised and Vulnerable Groups		
Human Rights		
Gender Equity and Women's Empowerment		
Core Labour Rights		
Indigenous Peoples		
Involuntary Resettlement		
Protection of Natural Habitats		
Conservation of Biological Diversity		
Climate Change		
Pollution Prevention and Resource Efficiency		
Public Health		
Physical and Cultural Heritage		
Lands and Soil Conservation		

Environmental and Social Risk Monitoring

Implementation monitoring and reporting processes will be designed to have explicit focus on the monitoring of the identified minor risks, as well as any unintended environmental and social risks. These processes are broadly outlined in Stage 4 (Implementation, monitoring and reporting) in Small Grant Making Process, below. These will apply to the individual small grant projects, as outlined in Figure 8, as well as to the programme as a whole via the six-monthly reports that are compiled by the EE and the Environmental and Social Safeguard Expert, for submission to the Project Steering Committee (PSC) and NIE.

Annual Performance Reports and the Mid-term and Terminal Evaluations (see Section III.D) will also have a specific focus on compliance with the AF ESP and national Environmental Impact Assessment standards and regulations (see Section II.E).

The Small Grant Making Process

The process to support prospective Small Grant Recipients to identify project concepts, and to develop these ideas into applications that could be approved and ultimately contracted by the Community Adaptation SGF, has five stages (see Figure 8). These are summarized in Table 2 and described below. The roles and responsibilities that have been assigned to the various project partners throughout the small grant making process are set out in the Institutional Arrangements section (see Section III.A). Draft project concept and detailed project proposal application forms have been developed by the EE, and will be finalized in a consultative process leading up to the Inception Workshop.

It is acknowledged that there is a great need to develop local capacity in order to empower local community members and stakeholders who are anticipated Small Grant Recipients to apply for Community Adaptation SGF assistance. In support of this, capacity building and learning opportunities will be created throughout the lifetime of the project. These will be informed by the outcomes of capacity building needs analyses that will be conducted by the Facilitating Agencies, with the support of the EE, on an on-going basis.

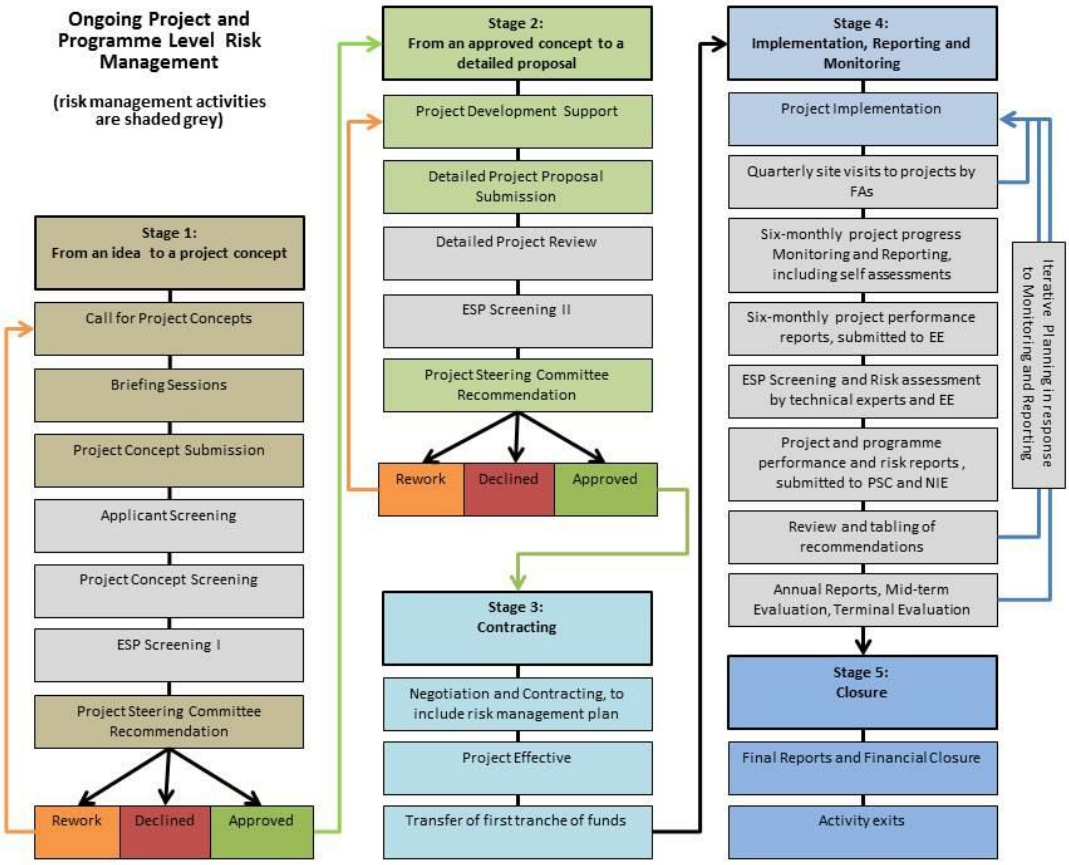

Figure 8: The five Community Adaptation SGF project stages, illustrating where small grant projects and overall programmatic activities will be screened and monitored for potential social and environmental risks in accordance with the AF ESP.

Table 2: Indicative steps associated with the five stages of the Community Adaptation SGF Small Grant Making Process. The responsible agent(s) is indicated in brackets after each indicative step.

Stage	Indicative Steps
Stage 1: From an idea to a project concept	• Issue call for project concepts (EE, Facilitating Agencies) • Convene briefing sessions (Facilitating Agencies) • Submit project concepts (prospective Small Grant Recipients) • Review and screen project concepts against three sets of criteria (Facilitating Agencies, Local Reference Groups) • Submit to the EE (Facilitating Agencies) • Make recommendations regarding next stages (Facilitating Agencies) • Table recommendations at PSC meeting (EE) • Notify Facilitating Agencies of outcomes (EE) • Notify prospective Small Grant Recipients of outcomes (Facilitating Agencies) (project concept approved; project concept requires additional work; project concept not approved)
Stage 2: From an approved project concept to a detailed project proposal	• Convene detailed project proposal development sessions with prospective Small Grant Recipients (Facilitating Agencies, Experts) • Work with prospective Small Grant Recipients to improve detailed project proposal (Facilitating Agencies, Experts) • Complete detailed project proposal (prospective Small Grant Recipients) • Submit completed detailed project proposals to Facilitating Agencies to check for completeness (prospective Small Grant Recipients) • Submit to the EE with endorsement letters (Facilitating Agencies on behalf of the Local Reference Groups) • Acknowledge receipt (EE) • Review completed detailed project proposals – technical and due diligence (Experts, EE) • Screen detailed project proposal against AF ESP (Facilitating Agencies, EE, NIE) • Table recommendations at PSC meeting (EE) • Notify Facilitating Agencies of outcomes (EE) • Notify prospective Small Grant Recipients of outcomes (Facilitating Agencies) (detailed project proposal approved; detailed project proposal requires additional work; detailed project proposal not approved
Stage 3: Contracting	• Preparation of draft terms and conditions (EE) • Development of a risk management plan (Facilitating Agencies, Small Grant Recipients) • Negotiation and finalization of draft legal documents (EE, Facilitating Agencies, Small Grant Recipients Signature of legal documents • Award small grant
Stage 4: Implementation, Monitoring and Reporting	• Small grant project becomes effective • Transfer of first installment to Small Grant Recipient according to contract disbursement schedule (EE) • Quarterly site visits to each project (Facilitating Agencies) • Six-monthly project progress monitoring and reporting, including self-assessment, submitted to Facilitating Agencies (Small Grant Recipient, with support from Facilitating Agencies) • Six-monthly project performance reports submitted to EE (Facilitating Agencies) • ESP screening and risk assessment: Identification of environmental and/ or social risks and development of proposed recommendations for how these are to be addressed in the project risk management plan (Environmental and Social Safeguard Expert, EE) • Six-monthly project and programme performance risk reports submitted to PSC and NIE for review (EE) • Review and tabling of recommendations for implementation, in response to monitoring reporting outcomes (EE, PSC, NIE) • Iterative planning and activity design based on monitoring, reporting and risk assessment (Facilitating Agencies and Small Grant Recipients) • Annual visits to small grant project areas by EE (EE) • Periodic training and capacity building events (Facilitating Agencies, consultants) • Ongoing participation in knowledge and leaning activities (Small Grant Recipient) • Participation in Mid-term review – led by external independent consultants, includes Local Reference Groups and PSC (EE, Facilitating Agencies, Small Grant Recipients) • Participation in Terminal review – led by external independent consultants, includes

	Local Reference Groups and PSC (EE, Facilitating Agencies, Small Grant Recipients)
Stage 5: Closure	• Submit final financial and performance reports • Submit small grant project sustainability plan • Participation in close out event

Stage 1: From an idea to a project concept
In this first stage, prospective Small Grant Recipients will be required to submit short project concepts outlining their proposed adaptation activities to the Facilitating Agencies.

Central to the approach will be processes to empower communities to identify best practice adaptation responses themselves, and in so doing to locate these in local socio-economic and institutional contexts that will see that these are integrated in on-going livelihood and development practices. Related to this will be the intention to identify responses that are synergistic and multi-sectoral so that, for example, agriculture and ecological infrastructure benefits, or built environment and health benefits, are derived simultaneously.

In support of this stage, the Facilitating Agencies will issue a call for project concepts. This call will use appropriate local communication channels such as local radio stations and community newspapers. The call will be supported by briefing sessions that will be convened in each of the project target areas. These sessions will provide an opportunity for potential Small Grant Recipients, including members of local communities, to meet the Facilitating Agencies, be exposed to the VAs and response strategies for their regions, learn more about the small granting opportunity and to obtain some initial support to develop appropriate local level responses within these frameworks and input around their project ideas. These sessions will form a unique opportunity to integrate scientific and local knowledge, and to develop a base of proposed responses from which small grant projects can be identified and developed.

The capacity building and project development process has been designed to support local level adaptation responses that are identified by local community members themselves. Small Grant Recipients will be local institutions who are from or who represent these local communities and several screening criteria have been specifically designed to ensure local level empowerment and beneficiation.

Project concepts will be screened by the Facilitating Agencies, with the support of Local Reference Groups, against the three sets of review criteria, as described above in the Small Grant Project Screening and Review section.

These criteria will be made known to applicants before they apply. This will empower stakeholders and give the process the transparency and local grounding that will be important for project success and sustainability.

During the Community Adaptation SGF inception phase, the NIE will engage directly with the EE and Facilitating Agencies on operating procedures that will apply to the management of the SGF, and that will be necessary to ensure compliance with SANBI and AF policies and procedures. Particular focus will be placed on the AF ESP, and a dedicated capacity building session will help to ensure that both the EE and Facilitating Agencies are able to competently screen small grant project ideas, concepts and proposals for environmental and social risks, and to detect these in future project monitoring, evaluation and reporting processes.

The recommendations of this screening process will be submitted to the EE, who will table them at a PSC meeting for a final decision. Project concepts that meet the specified criteria and are approved by the PSC will be entered into Stage 2. This conditional approval will allow the small grant projects to enter Stage 2, and to qualify for capacity building and project development support. This conditional approval will not entail the disbursement of funds to Small Grant Recipients. Where such a need arises, and as determined by the Facilitating Agencies and EE, direct travel costs associated with potential Small Grant Recipients attending capacity building events may be covered.

Project development assistance will be offered to potential Small Grant Recipients whose project concepts are believed to have merit, but do not quite meet the Community Adaptation SGF criteria.

Such potential Small Grant Recipients will be afforded another opportunity to submit their revised project concepts, possibly at the time of the next call for project concepts.

The call for proposals will be issued on a six-monthly basis until such time as all project funds are allocated and all Small Grant Recipients contracted. It is envisaged that two to three calls will be needed.

Stage 2: From an approved project concept to a detailed project proposal
For all approved project concepts, the Facilitating Agencies will support prospective Small Grant Recipients to further develop and refine the project concepts into detailed project proposals that meet the criteria and requirements of the Community Adaptation SGF. As part of this process, the Facilitating Agencies will invite input from local experts who will work alongside prospective Small Grant Recipients to refine their detailed project proposals. This will include the incorporation of relevant material such as the VAs for each area and a review of the environmental and social safeguards to make sure that detailed project proposals meet the requirements for a project with no significant risks in terms of the AF ESP, or a project with minor risks that can be mitigated. Specialist safeguard expertise has been provided for in the budget and will be available if necessary.

Prospective Small Grant Recipients will submit detailed project proposals to the EE via the Facilitating Agencies with a letter of endorsement from the Local Reference Groups. The EE will note the submission of the documentation, review it for completeness, and acknowledge receipt.

Detailed project proposals will then be reviewed by three reviewers, one of which will be the EE. The other two will be selected on the basis of their technical expertise in the project content area. Reviewers will evaluate detailed project proposals against the agreed project and institutional criteria.

The Facilitating Agency will also undertake a comprehensive screening of the detailed project proposals against the AF ESP for a second time, to ensure that no additional issues that could pose risks have emerged during the detailed design process. If any such minor risks have emerged, the potential Small Grant Recipients will need to include a mitigation plan in the detailed project proposals. The EE will review this assessment, and the NIE will provide oversight over this aspect of the process to ensure overall compliance with the AF ESP.

The EE will then compile the reviewers' comments into an integrated review, and make recommendations to the PSC as to whether to approve, not to approve or call for additional work on the detailed project proposal. All reviews – possibly with the reviewer names removed – will be made available to proponents[35].

The PSC will then decide whether to approve the detailed project proposal, reject it, or refer it back to the prospective Small Grant Recipients for further modifications. The record of the PSC meeting will capture the PSC's recommendations and the reasoning behind the decision. In the cases of conditional approval, the meeting record would detail the conditions that need to be met for approval.

The EE will notify prospective Small Grant Recipients and the Facilitating Agencies of the recommendations of the PSC. Applications that are approved will enter the contracting stage. Projects that are referred back to proponents for further modification will have an opportunity to resubmit during the next call for proposals.

Stage 3: Contracting
Once approved by the PSC, the EE will prepare and enter into contracts with Small Grant Recipients.

The legal agreements between the EE and the Small Grant Recipients will be negotiated and finalized based on the nature of the activity and of the anticipated funding flows. This process will include internal processing as well as compliance and due diligence screening. The agreements will contain all relevant details regarding the terms and conditions of the Community Adaptation SGF financing and may include terms and conditions applicable to the relationship between the EE, Facilitating Agencies and the Small Grant Recipient.

[35] This review process is based on a previous review process that was successfully implemented for the Critical Ecosystem Partnership Fund's investment in the Cape Floristic Region and Succulent Karoo hotspots between 2004 and 2009.

Contracts will specify the annual project work plan and associated budgets, deliverables and disbursement schedules. They will also specify monitoring, evaluation and reporting requirements. Baselines will need to be established within the first three months of small grant project inception. When required, the Facilitating Agencies will assist with this process.

This stage will conclude with the signing of legal agreements between the EE and the Small Grant Recipient and the payment of the first installment into the Small Grant Recipient's bank account.

Stage 4: Implementation, monitoring and reporting
Small Grant Recipients will be expected to implement their small grant projects according to the schedules and deliverables that are set out in their contracts. The Facilitating Agencies will support Small Grant Recipients in this process by visiting each project at least once each quarter, and supporting reporting and monitoring processes. The Facilitating Agencies will be responsible for advising the EE on Small Grant Recipient project progress, making recommendations to the EE for the disbursement of funds and in the event of any requests for deviations from the agreed project plan.

Particular attention will be given to the monitoring and mitigation of any minor risks identified through Stages 1-3, and of any unanticipated environmental and social risks that may arise during implementation through the:

- Facilitating Agency quarterly site visits to all project sites, in which the capacity of Small Grant Recipients will be developed to allow the detection and mitigation of environmental and social risks;
- Six-monthly project progress reports submitted by Small Grant Recipients to the Facilitating Agencies, including self-assessments;
- Six-monthly project performance reports submitted by the Facilitating Agencies to the EE, that summarise project progress and risk management related activities;
- Six-monthly ESP screening and risk assessment by an Environmental and Social Safeguard Expert (budgeted for in Component 1), based on the reports received from the Facilitating Agencies and the annual site visits of the EE. Through this process, environmental and/ or social risks will be identified and a set of recommendations for how these should be addressed in the project's risk management plan will be developed;
- Six-monthly project and programme performance and risk reports submitted by the EE to the PSC and NIE, in which the risks and recommendations that arise from the ESP screening and risk assessment process are presented;
- PSC and NIE feedback to the EE in response to monitoring reporting outcomes, including recommendations for corrective action (EE, PSC, NIE). The Facilitating Agencies will be responsible for working with Small Grant Recipients to ensure that these recommendations are integrated into the relevant project risk management plan, and into future implementation activities; and,
- Monitoring of the iterative management actions that arise from the recommendations of the PSC and NIE (EE, PSC, NIE).

Where risks are detected, the PSC may propose the redirection of project funds to risk management activities, or the withholding of the next tranche of payment until satisfactory risk management actions are determined and agreed. In this regard it is noted that every effort will be made to support Small Grant Recipients to positively respond to and manage unanticipated risks.

The EE will undertake the necessary internal procedures to validate and complete the contracted payments. Any requests to deviate from the disbursement schedule agreed in Small Grant Recipient contracts will need to be approved by the PSC and provided in writing.

In addition to the quarterly site visits and learning opportunities, Small Grant Recipients will be engaged in the Community Adaptation SGF Mid-term and Terminal Evaluations conducted by external reviewers. The Facilitating Agencies will support processes for Small Grant Recipients to be meaningfully engaged by the external M&E consultants during these evaluations.

Throughout the Community Adaptation SGF, opportunities will be created for Small Grant Recipients to meet and share lessons and experiences with each other, and with other local and national stakeholders. Should the opportunity arise, Small Grant Recipients may also be requested to share their experience with the international community. In support of this, annual Small Grant Recipients meetings will be organised in each project target area. At least two of these will bring Small Grant Recipients from the two project target areas together. Stakeholders from neighbouring and other districts and municipalities will be invited to these fora, with a view to extending the project benefits beyond the project target sites, to stimulate the scaling up of the Community Adaptation SGF.

Stage 5: Closure
At project closure, all Small Grant Recipients will be expected to submit final financial and performance reports which will need to include a project sustainability plan.

As part of the Terminal review, a close out event will also be convened for the project team and Small Grant Recipients to reflect on the outcomes of the Community Adaptation SGF.

Table 3: Indicative work programme for Component 2.

Output	Indicative Work Programme
2.1 At least 12 local institutions in the Mopani and Namakwa Districts are supported to develop small grant projects for local-level adaptation	Issue call for project concepts
	Convene briefing sessions in each district
	Conduct capacity building workshops to support project concept development
	Screen project concepts
	Make recommendations to the EE
	Convene project development work sessions with prospective Small Grant Recipients and support detailed project proposal development
	Obtain inputs from relevant experts to support project development
	Review detailed project proposals with input from experts, some of whom are drawn from government departments
	Provide feedback
2.2 At least 12 local institutions in the Mopani and Namakwa Districts are supported to implement integrated climate adaptation responses	Provide on-going mentoring support (Facilitating Agencies)
	Visit all Small Grant Recipients quarterly (Facilitating Agencies)
	Support Small Grant Recipients to complete quarterly financial and 6-monthly progress reports and submit to the EE in appropriate formats.
	Provide feedback and on-going support to Small Grant Recipients

Component 3: Lessons learned facilitate future scaling up and replication of small grant-financing approaches (USD 189,000).

This component responds to the need to provide relevant training to Small Grant Recipients, and to reflect on implementation experience throughout the project cycle to maximize learning, implement adaptive management and capture recommendations for scaling up the Community Adaptation SGF to other sites in South Africa and beyond.

At the outset of the Community Adaptation SGF, and once Small Grant Recipients are identified, training needs analyses will be conducted in each project target area, and at least ten appropriate training opportunities will be provided for Small Grant Recipients. Such training is likely to include financial management, reporting and gender mainstreaming. Where feasible, training will be designed to target Small Grant Recipients from both project target areas.

It is possible that training opportunities will be offered at the same time as the planned annual learning events to make use of the opportunity of having all the Small Grant Recipients together.

The Community Adaptation SGF will support innovative learning processes, including independent learning processes that support Small Grant Recipients to reflect on implementation successes and challenges, and develop insights. All Small Grant Recipients will be expected to participate in and contribute to the Community Adaptation SGF's knowledge management and capacity building processes.
These processes will include:

- Regular interactions with Small Grant Recipients to support reflection and adaptive management.

- Annual fora where Small Grant Recipients and beneficiaries are supported to come together in each of the project target areas to share experiences, discuss climate change adaptation challenges and possible integrated adaptation strategies. Training events may be organised alongside these fora to capitalise on the opportunity of all Small Grant Recipients being in the same place at the same time.
- Two fora over the lifetime of the project where all Small Grant Recipients from both areas come together. Stakeholders from neighbouring and other districts and municipalities will be invited to these fora, with a view to extending the project benefits beyond the project target sites, to stimulate the scaling up of the Community Adaptation SGF.
- The creation of a social media platform for reflection and learning within and between districts.

In addition to several other points of engagement, municipal and other government officials will be invited to the Community Adaptation SGF's learning events to be exposed to the experiences of the Small Grant Recipients. This will give inputs and support processes to link Community Adaptation SGF outcomes with Municipal IDPs and Spatial Development Frameworks (SDFs). To date, municipal officials in both districts have expressed a strong interest in the Community Adaptation SGF and in learning more about how local climate change adaptation responses can be integrated into their programmes of work. Municipal capacity building will also be supported through the nation DEA's programme of work to build climate change adaptation capacity through the implementation of the Let's Respond Toolkit (see Annex II.2).

Through the NIE and the National Department of Environmental Affairs (DEA), the outcomes of the Community Adaptation SGF will also be shared with South Africa's National Climate Change Committee (NCCC) and the Intergovernmental Committee for Climate Change (IGCCC).

Efforts will also be made to support Small Grant Recipients and beneficiaries to personally share lessons with the international community – either via Skype or directly – to foster a greater understanding of local benefits, experiences and challenges.

Challenges and insights, including case studies that articulate how project beneficiaries are responding to climate change with the direct support from the AF, will be captured in relevant formats and targeted at particular stakeholders at community, national and international levels. These will be published and showcased through local established medial channels, such as community newspapers and radio, to optimize potential benefits/replication at the local level. These will aim to build community-level understanding of the potential impact of climate variability and change, and to support community members then to develop relevant adaptation responses at the local level

These insights will support South Africa's national learning about optimal mechanisms to finance local climate adaptation efforts in a more direct way than has been possible to date. Where relevant, policy recommendations will be developed to inform the on-going development of South Africa's climate finance instruments, with a view to creating a long-term small grant facility for supporting climate change adaptation in vulnerable communities. Alignment with South Africa's domestic Green Fund will be explored.

In order to facilitate the proposed process learning and reflection approach successfully, it will be important to document the Community Adaptation SGF process to ensure lessons learned inform the compilation of a methodology that identifies effective strategies and policy recommendations for scaling up and replication.

The development of case studies and policy recommendations for reflecting on, replicating and scaling up small grant financing approaches (Output 3.3), will be undertaken by independent parties so as to provide an objective and impartial view of project progress. Further, and noting the limited budget that is available for this and the desirability to have long-term independent qualitative learning processes that track project implementation, the EE and Project SC will endeavour to raise additional funding to complement the planned evaluations and the learning activities. In this regard, the NIE, EE and Facilitating Agencies will engage tertiary institutions in this regard and explore the feasibility of this being the subject of post graduate study opportunity. The University of Limpopo, who may also serve on the Local Reference Group for Mopani, is ideally placed to support the Mopani District, and the ACDI at the University of Cape Town has already expressed interest in partnering with the Community Adaptation SGF partners and the NIE.

Table 4: Indicative work programme for Component 3.

Output	Indicative Work Programme
3.1 Training opportunities provided for Small Grant Recipients	Undertake training needs assessments for each district, based on the needs of the Small Grant Recipients, and commission training
	Develop training materials and undertake training. Basic climate change adaptation, gender and financial management training, are likely subject areas.
3.2 Local networks for reducing climate change vulnerability and risk reduction developed, expanded and strengthened	Convene an annual forum for Small Grant Recipients to share experiences
	Convene two fora over the project lifetime where Mopani and Namakwa Small Grant Recipients, as well as stakeholders from neighbouring and other districts and municipalities, come together to share experiences.
	Create a social media platform for Small Grant Recipients to share lessons and experiences and provide each other with support
	Conduct independent learning processes to reflect on implementation and develop insights
3.3 Case studies and policy recommendations developed for reflecting on, replicating and scaling up small grant financing approaches	Capture learnings and produce case studies on local-level best practice and challenges
	Disseminate information on the adaptation actions supported through local and national media channels
	Develop and present project outcomes and relevant policy recommendations at local, national fora

B. Describe how the project provides economic, social and environmental benefits, with particular reference to the most vulnerable communities, and vulnerable groups within communities, including gender considerations. Describe how the project will avoid or mitigate negative impacts, in compliance with the Environmental and Social Policy of the Adaptation Fund.

Introduction

The two identified district municipalities are among the most vulnerable municipalities to climate variability and change in South Africa. The expected impacts will place additional stress on already vulnerable groups. Therefore, there is a need to deliver local-level benefits to vulnerable communities through the development and implementation of climate change adaptation projects. However, as confirmed by the VAs undertaken in each area, capacity to develop, implement and mainstream climate change adaptation projects, with resultant benefits, is low.

The Community Adaptation SGF will therefore capacitate at least 12 Small Grant Recipients[36] to develop project concepts and detailed project proposals, receive funding and implement small grant projects to generate adaptation benefits at the local level. These recipients will comprise local institutions/collaborations with: i) civil society organisations represented on the management structures of all Small Grant Recipients; ii) civil society organisations leading at least 8 such Small Grant Recipients; iii) women representation on the management structures of at least 10 of the Small Grant Recipients; and iv) at least 8 Small Grant Recipients having limited/no previous experience in the implementation of climate change adaptation projects. The institutional capacity developed within Small Grant Recipients will enable the flow of benefits to vulnerable communities not only through the Community Adaptation SGF, but potentially through other funding sources as well. This will result in a potential multiplier effect of economic, social and environmental benefits at the local level, within and beyond the 4 year implementation period. Furthermore, additional benefits that result from the capacity development provided through the Community Adaptation SGF will include: i) social cohesion and community building; ii) linkages between, and mainstreaming of climate change adaptation into existing and planned government and donor-funded development initiatives; iii) co-ordination of climate change adaptation funding and responses; iv) effective sharing of relevant

[36] A total of USD 1,542,000 has been set aside for small grants, and up to 16 grants may be supported, depending on the value of the grants.

information through the established learning/sharing networks; and v) a sustained climate change adaptation Community of Practice.

At the local level, the proposed innovative mechanism for direct access to climate change adaptation finance will provide economic, social and environmental benefits for vulnerable communities in the two project target areas. There will be at least 50 direct beneficiaries per each of the at least 12 projects, therefore a minimum of 600 direct, individual beneficiaries. The benefits will accrue indirectly to household members at least, resulting in a multiplier effect of 3.6 in Mopani and 4.2 in Namakwa (average number of members per household in 2007 in each district). Both municipalities have a high number of female headed households (Mopani 39.8% and Namakwa 36.6%), highlighting the need to beneficiate women through the project.

The anticipated economic, social and environmental benefits of the Community Adaptation SGF are described below, grouped into the Investment Windows. A single project may deliver benefits to a vulnerable community member or group in more than one window. The number of benefiting women and men indicated is the total for both Mopani and Namakwa Districts (i.e. not disaggregated by project target area). The benefits at this stage are anticipated, and can only be confirmed and quantified once the at least 12 projects under the Community Adaptation SGF have been selected through the processes described in Section II.A.

Economic benefits

Climate-Smart Agriculture Investment Window: Small grant projects in this window are likely to result in at least 150 women and at least 150 men with direct improved income security. This will be as a result of a range of agricultural interventions that improve agricultural yield (crop/livestock) by 30% from current farming areas. This target is based on lessons learned from other AF projects. Specific targets – in terms of increase in yield and associated economic benefits – will be established for each small grant project in the Climate-Smart Agriculture Investment Window. Indicative small grant projects that will increase agricultural yield and result in improved income security include:

- Planting of locally appropriate drought resistant crops in response to increasing temperatures and decrease in average rainfall.
- Construction of livestock shelters, in response to increasing temperatures and subsequent heat stress in sheep.
- Introduction and implementation of mulching techniques among a group of farmers, as a way to contain soil moisture in response to increasing temperatures and subsequent increase in evaporation and/or in response to decrease in average rainfall.

Climate-Resilient Livelihoods Investment Window: Small grant projects in this window are likely to result in at least 75 women and at least 75 men with improved income security. In Mopani, informal trading is an important source of revenue for many vulnerable community members. Small grant projects that increase the climate resilience of produce for sale by informal traders and of consumers will therefore be of great benefit. Specific targets regarding increases in revenue will be set per small grant project at the detailed project proposal phase. Indicative small grant projects that will improve income from relevant livelihoods include:

- Development of market facilities for groups of traders, providing traders and customers with protection from the heat and thus from heat stress, fatigue and dehydration, in response to increasing temperatures.
- Installation of cooling facilities for food traders, preventing food from spoiling due to increasing temperatures, and thus preventing economic loss by traders and the sale and consumption of food that makes people sick.
- Provision of shade cloth to protect vegetable production at kindergartens that grow their own food for the children, in response to increasing temperatures.
- The introduction of savings groups aimed at creating a financial buffer for households at risk from, for example, impacts from increase in the intensity of extreme rainfall events.

Climate-Proof Settlements Investment Window: Small grant projects in this window are likely to result in economic benefits for at least 25 women and at least 25 men across the two project target areas. The anticipated increase in the intensity of climate-related disasters is likely to result in damage to household infrastructure. In remote, rural areas, the cost of repairing such damage often falls on local community members. Strengthening settlement infrastructure and assets and investing in ecological

infrastructure projects, which *inter alia* limit downstream flooding from restored/maintained areas, can therefore reduce the amount of money required for repairs or replacement of assets, thereby resulting in economic benefits. Specific economic targets will be set per small grant project at the detailed project proposal phase. Indicative small grant projects that will improve income from relevant livelihoods include:

- Improved drainage systems, strengthening of houses, including the installation of lightening conductors where appropriate, to build resilience to an increase in the frequency and intensity of climate extremes, including heavy rainfall events.
- Alternative bridges to low-lying river crossings at points (where people have to cross on a regular basis to get to school or to work) that are vulnerable to flash flooding during and after heavy rainfall events.
- The restoration of a degraded wetland upstream from a community which is regularly affected by flooding, in response to increase in the intensity of heavy rainfall events.
- Planting of trees or erecting of structures to provide shade, reducing the stress of extreme temperatures with associated health risks which potentially limit income-generating activities.

Social benefits

Climate-Smart Agriculture Investment Window: Small grant projects in this window are likely to result in social benefits for at least 150 women and at least 150 men, who will have improved resilience to slow onset/sudden climate induced disasters. Improved food security from climate-smart farming techniques will result in nutritional and health benefits in direct as well as indirect beneficiaries. By shifting planting dates appropriately and diversifying crops, including using a range of crops those that are drought tolerant and those that are able to tolerate water-logging, agricultural areas will provide nutritional sustenance in spite of an increase in climate variability and change. Similarly, by building the resilience of livestock production and thereby safeguarding income, vulnerable farmers will increase food security, with associated social benefits. The list of indicative small grant projects that will realize social benefits under this window is similar to that shown in the Economic benefits section above.

Climate-Resilient Livelihoods Investment Window: Small grant projects in this window are likely to result in social benefits for at least 75 women and at least 75 men. Similar to the Climate-Smart Agriculture Investment Window, building income security of informal traders will have social benefits through improved food security (as a result of the availability of resources to purchase food). In addition, projects will result in health benefits of informal traders, who are at risk from increasing temperatures and associated health risks (see results of the Mopani VA in Section II.A and Annex II.1). The list of indicative small grant projects that will realize social benefits under this window is similar to that shown in the Economic benefits section above.

Climate-Proof Settlements Investment Window: Small grant projects in this window are likely to result in social benefits for at least 100 women and at least 100 men. Of these, it is anticipated that 25 men and 25 women will have improved water security, and 75 men and 75 women will have increased resilience to slow onset/sudden climate induced disasters. Improved water security has associated health benefits, including avoided dehydration. Strengthened houses and appropriate bridges over rivers prone to flash-flooding can reduce loss of life as a result of extreme climate events. Indicative small grant projects that will improve income from relevant livelihoods include:

- Installation of rain water facilities/equipment to build resilience to variability in annual rainfall.
- Improvements to housing structures that become very warm during warm days, in response to increase in temperatures.
- Small-scale coastal storm protection, in response to increase in the frequency and intensity of storm surges.
- Improving the structure of a bridge over which people have to cross on a regular basis to get to school or to work and which is regularly damaged or overflows due to flooding, in response to increase in the intensity of heavy rainfall events.

Environmental benefits

Climate-Smart Agriculture Investment Window: Small grant projects in this window are likely to result in environmental benefits, including conservation of topsoil, more efficient use of water, and better linkages with surrounding ecosystem services. Climate-smart agricultural techniques and the planting

of trees reduce exposure of soil surfaces to raindrop impact of high intensity winds, thereby preventing the removal of valuable topsoil from agricultural areas. This reduces the extent of farm land required, thereby conserving unconverted lands. In addition to the mulching techniques mentioned in the Economic benefits section above, indicative small grant projects with economic benefits include:

- Introduction of agroforestry in order to stabilise the soils and reduce nutrient and soil runoff in response to increase in the intensity of heavy rainfall events.
- Ecological infrastructure projects aimed at maintaining the flow of water for agricultural purposes.
- Ecological infrastructure and other rehabilitation and restoration projects aimed at storm and flood attenuation, with associated benefits for downstream farming activities.

Climate-Resilient Livelihoods Investment Window: Small grant projects in this window may reduce waste and pollution and reduce the pressure on natural resources. The 75 women and 75 men benefiting from relevant projects are likely to be less reliant on harvesting of natural resources, thereby preventing over-harvesting. Ecological infrastructure projects, located to complement this reduction in pressure will further enhance the environmental benefits.

Climate-Proof Settlements Investment Window: Small grant projects in this window will include those focused on the restoration/maintenance of ecological infrastructure including riparian areas and wetland, intended to reduce downstream flooding. These small grant projects will have co-benefits to the natural environment. These include maintenance of biodiversity, conservation of soils and vegetative cover, and prevention of erosion. Indicative small grant projects with anticipated environmental benefits under this window include:

- The restoration of a degraded wetland upstream from a community which is regularly affected by flooding, in response to increase in the intensity of heavy rainfall events.

These projects are anticipated to deliver the following tangible adaptation assets:

- livestock shelters;
- areas under improved soil management;
- areas under improved agroforestry;
- drought resistant crops;
- communal market facilities;
- cooling facilities for food traders;
- shelters for vegetable production;
- savings groups;
- houses with improved insulation;
- area with improved coastal storm protection; and
- improved river crossings; and
- areas of rehabilitated wetlands and riparian systems.

Targets for these tangible adaptation assets will be determined as small grant projects are approved, and finalised on submission of first NIE report to the AF at the end of Year 1. See Section III.E for further details.

Risks/negative impacts

No negative impacts are anticipated as a result of the implementation of the small grant projects under the Community Adaptation SGF. All small grant projects will be screened against the criteria of the AF ESP, and projects that do not meet the requirements of a project with no significant risks in terms of the AF ESP, or a project with minor risks that can be mitigated, will be excluded from the selection process. See Section II.A (Small Grant Project Screening and Review) and Annex VI for further details.

C. Describe or provide an analysis of the cost-effectiveness of the proposed project.

It is believed that, in the context of adaptation finance, small grants are a cost-effective way to deliver direct benefits at the local level.

The Community Adaptation SGF proposes an innovative mechanism for directly beneficiating vulnerable communities and empowering them to identify and implement adaptation responses that buffer them against experienced and anticipated climate-induced stresses. Experience with small grant making in South Africa (e.g. Global Environment Facility Small Grants Programme (GEF-SGP), Critical Ecosystem Partnership Fund (CEPF), Small Grants Facility for Conservation and Development in the Succulent Karoo (SKEPPIES)) has shown that small grant making can be enormously successful in delivering tangible and relevant benefits to local stakeholders and beneficiaries.

This enhanced direct access approach is a direct response to South African stakeholders who called for a mechanism that empowered local communities to conceive and drive local adaptation responses directly. A single, large intervention would not permit this level of local ownership or design.

The Community Adaptation SGF will focus on pilot sites in the Mopani and Namakwa District Municipalities to demonstrate that direct access to climate finance, via a small grants facility, can impact positively on rural communities, and especially women. To date, local communities in the project target areas have had very limited access to climate finance and at the local level responses to extreme events and its associated impacts on settlements and livelihoods have been largely reactive.

The Community Adaptation SGF is designed to reduce the climate induced risk and vulnerabilities in the target communities by empowering community members to identify local level adaptation responses themselves, and directly access climate finance to address these. This approach will enable climate finance to flow directly to activities that will be implemented by vulnerable groups themselves, and will provide an important complementary adaptation response to higher level systemic responses (that are also needed).

It is recognized that the administrative costs of the Community Adaptation SGF will be proportionality higher than costs associated with a facility that allocates larger grants. Project support activities cost the same, despite whether or not they are for large or small projects. This may be compounded when the Small Grant Recipients and beneficiaries are from local communities, have limited experience implementing climate change adaptation projects and, therefore, need greater assistance.

By way of example, South Africa's domestic Green Fund has a total budget of R 1.1 billion (±USD 110 million) of which R 600 million (±USD 60 million) has been allocated to fund 22 projects. 10% of the total allocated budget is earmarked for project management activities such as site visits, M&E, etc. The value of this 10% is R60 million (±USD 6 million); divided by 22 this gives an amount of ±USD 272,727 per project for this function. In the Community Adaptation SGF, an estimated USD 32,520 (USD 520,319, comprised of the Component 2 and EE fee budget, divided by 16) is allocated to project support activities. While we recognise that this is 25% of the component budget with the EE fee excluded, and just over 30% of the total project budget, the net values are significantly lower than those associated with the Green Fund. This is in spite of the anticipated level of support per small grant project that is expected to be higher due to the entry level of many of the anticipated Small Grant Recipients and beneficiaries.

Experience has shown that, although administratively costly, small grants are often more effective at delivering tangible benefits that respond to direct needs of beneficiary communities, and can thus be sustained. Direct community involvement via community-based adaptation increases the chance of sustainability as community members have a sense of ownership of the projects and thus an incentive for sustainability.

Three different scenarios were considered for the Community Adaptation SGF project budget, namely: 75% for small grants (Option 1); 70% for small grants (Option 2); or 60% for small grants (Option 3). If Option 2 or 3 were chosen, then there would be a larger proportion of the total programme budget allocated to the administrative costs. However, the preferred scenario is Option 1, where the largest possible amount can flow directly to civil society organizations via small grants to deliver tangible and sustainable benefits for vulnerable communities.

Explanation of the selected approach – Economy, Efficiency and Effectiveness

Three key concepts can be used to measure the value for money throughout the project cycle, namely: economy, efficiency and effectiveness.

Economy relates to how cost-effectively financial, human or material resources are acquired and used in an intervention. Recently, the AF conducted a comparative analysis of a number of small grants programmes in order to investigate the administrative costs of operating programmes with multiple levels of execution. For the programmes investigated, it was found that on average 25-30% of the total programme budget was spent on administrative costs. It is not clear how this figure has been derived, and what elements of project management support are regarded as administrative functions vs. project support functions.

For the Community Adaptation SGF, only 9.5% will be spent on direct administrative costs. 75% of the component budget will be directly contracted to Small Grant Recipients; 15.8 % of the component budget will be spent directly on supporting capacity building and the formulation of learning networks among Small Grant Recipients, and 9% will be spent directly supporting Small Grant Recipients to identify, design, implement and manage their projects.

Importantly, the Community Adaptation SGF will be implemented with the support of an EE that has small grant management systems in place and with the support of facilitating agencies that already have active work programmes and staff complements in the project target sites, and excellent relationships with local communities. This will enable the Community Adaptation SGF to be implemented through these existing structures, and will save costs in project set up.

Efficiency relates to how quickly, accurately, and sustainably outputs can lead to desired outcomes. Quality and approach are important in order to maximize value for money in this regard. During the detailed design phase of the Community Adaptation SGF, funds were strategically spent on local scale climate change analyses (see Annex I.2) for the two project target areas. Analyses were based on observed data and climate change projections and these were incorporated in the development of VAs for the two districts. Since engagement with local stakeholders aided in the development of the VAs, it was ensured that the climate change adaptation responses that will be funded by the Community Adaptation SGF are based on a sound understanding of local economic, social and environmental dynamics. This scientific rigor and “on-the-ground” approach has ensured the high quality necessary for cost-effectiveness of the project.

Although tiered governance (i.e. multiple levels of execution and implementation) and M&E is complicated and generally costly, the EE has designed a nested M&E framework at all levels of reporting. For example, Facilitating Agencies could report on financial status during regular site visits and these will therefore fit into the EE’s M&E framework. Similarly, regular financial reporting conducted by the EE will feed in to their broader reporting procedures.

Another factor that makes this project efficient and cost-effective is that potential Small Grant Recipients and small grant projects are screened and prioritized against specific selection criteria. These selection criteria will be used from the project concept (Stage 1) up until the detailed project proposal (Stage 2). Further, the Community Adaptation SGF will invest in climate change adaptation interventions that fall into prioritised Investment Windows (see Section II.A). These filters will ensure that investments are targeted appropriately.

Effectiveness relates to how successfully an intervention achieves its intended outcomes and subsequent impacts are realized. The Community Adaptation SGF has allocated ca. 75% of the total component budget to the small grant projects, with a further 25% being used for direct Small Grant Recipients and beneficiary support. This ensures that a large proportion of the budget goes directly to civil society organisations and therefore vulnerable communities. Since there are multiple levels of implementation and execution (i.e. the inclusion of Local Reference Groups, Facilitating Agencies, EE, technical expert support and the NIE), there is ‘role clarity’ which allows for effectiveness in implementing access to adaptation finance at the local level. From previous experience, both the SKEPPIES and GEF-SGP provided a high level of support and mentorship (via full time staff members), and this resulted in a high level of sustainability of the various projects. This approach is cost-effective since a high level of support equates to a higher possibility of future sustainability. The

standard success rate for small businesses post project completion is ca. 20% and in SKEPPIES, for example, 23 out of the 54 small businesses were sustainable, equating to a high success rate of ca. 42%. The Community Adaptation SGF will use a similar model to the SKEPPIES and GEF-SGP projects. The Community Adaptation SGF will provide a high level of support, which may be expensive, but is cost-effective in terms of the benefits realized.

Community-based intervention can be interpreted in four different ways, namely: community as a setting, target, resource and/or agent[37]. For the purpose of the present project, the community-based intervention is not merely a setting or target but rather a resource and agent. In this case, community ownership and participation is essential for sustained success (i.e. community as a resource) and respecting and reinforcing the natural adaptive, supportive, and developmental capacities of communities (i.e. community as an agent) is a mandate of the Community Adaptation SGF. If the main goal is to get funds into the hands of local communities and therefore empower vulnerable communities to respond to climate change challenges through a bottom-up, direct-access approach, then the Community Adaptation SGF is the best mechanism to do so. An alternative which is less desirable could be that communities use their own capacities, but they do not have the funds and are often untrained. Or government (i.e. municipalities) could provide support but it is likely that money will be spent on other priorities and climate change adaptation projects could be put on the shelf indefinitely. As a result of the Community Adaptation SGF there will be at least 600 direct beneficiaries; however, due to the multiplier effect it is anticipated that an order of magnitude higher than this would be indirect beneficiaries.

D. Describe how the project is consistent with national or sub-national sustainable development strategies, including, where appropriate, national or sub-national development plans, poverty reduction strategies, national communications, or national adaptation programs of action, or other relevant instruments, where they exist.

The Community Adaptation SGF is strongly aligned to a number of national policies, plans and priorities for sustainable development and adapting to climate change.

In 2011, the South African government approved its National Climate Change Response Policy (NCCRP) which sets out a policy framework to address the management and impacts of climate change and make a fair contribution to global emission reductions. Over the next few years this policy will be used to formulate plans for implementation across different sectors such as energy, water and agriculture.

However, implementation of policies is often a challenge. Whilst government continues to develop plans like the LTAS, the proposed Community Adaptation SGF will make funds accessible to communities who are ready and willing to take immediate actions to expedite the country's adaptation programme by promoting grassroots actions that focus on poverty reduction, food security and sustainable livelihoods.

The action is specifically intended to contribute to the delivery of the NCCRP by:

- Delivering an effective programme to build climate resilience projects at household and community level which could provide a model for wider adoption by state or non-state actors;
- Inputting into the adaptation planning process, including the planned third phase of the LTAS – CSA is part of the LTAS Technical Working Group, and will share learning that emerges from the implementation of the Community Adaptation SGF.
- Inputting into other sectoral plans (e.g. on agriculture and water) by providing valuable evidence-based information (i.e. needs and solutions for adaptation) from grassroots communities themselves.

[37] McLeroy, K. R., Norton, B. L., Kegler, M. C., Burdine, J. N., & Sumaya, C. V. (2003). Community-based interventions. *American Journal of Public Health*,*93*(4), 529-533.

CSA is a member of the NCCC, a government led multi-stakeholder forum for national policy-making where the on-going learning from this action can be used to strengthen climate resilience policy. CSA is also represented on the adaptation network steering committee where information on climate adaptation implementation and policy development is shared. Lessons from this small granting process can be shared with the adaptation network at capacity building workshops held each year. This action will also contribute to the country's Medium Term Strategic Framework, Strategic Priority 9, specifically to the following interventions: supporting local and sustainable food production; sustainable water use; as well as Outcome 10 of the DEA delivery agreements around enhancing sustainability of natural resources and water resource quantity.

The small grants facility's objectives are also aligned with the National Development Plan (NDP), vision 2030, working towards the goals of supporting an integrated and inclusive rural economy. This goal states that by 2030 rural communities should have greater opportunities to participate fully in economic, social and political life and this should be underpinned by good quality services such as basic services like water. It also states that successful job creation and agricultural production will all contribute to this inclusive economy.

SANBI was accredited as South Africa's NIE to the AF in September 2011. The NIE Secretariat is housed within SANBI's Climate Change Adaptation Division. The operations of the NIE Secretariat are governed by SANBI's policies and procedures. The NIE is supervised by the NIE Steering Committee, which is chaired by the Chief Executive Officer (CEO) of SANBI. Other members of the Steering Committee include representatives from DEA, Treasury, National Planning Commission (NPC) of the Presidency and the civil-society lead Adaptation Network. Through efforts to build a coordinated adaptation response that delivers tangible outcomes, the NIE will work with project proponents to build integrated projects that support learning and demonstration objectives. Projects that are supported must align with the AF results framework and will need to meet eligibility criteria that include: i) outcomes that have concrete and tangible results; ii) outcomes that have co-benefits and focus on vulnerable communities; iii) linkages with national and local policies, plans, priorities concerning climate change and related climate and other initiatives; iv) partnerships between government, communities and individuals; v) interventions that are cost-effective, sustainable and replicable; and vi) outputs that contribute to knowledge management and learning. The Community Adaptation SGF is designed according to these eligibility criteria.

At the local level the approaches will also be supporting the implementation of priority areas under vulnerability assessments for the Mopani and Namakwa regions. In Mopani local and district government is already looking to include aspects of the Community Adaptation SGF into the IDP. In Namakwa the process of developing an IDP and longer term adaptation plan that mainstreams climate adaptation into local policy is underway, and the approaches supported by the small grants will form part of the implementation of these plans. Key aspects highlighted in the VA are to be addressed in the Namakwa plans.

E. Describe how the project meets relevant national technical standards, where applicable, such as standards for environmental assessment, building codes, etc., and complies with the Environmental and Social Policy of the Adaptation Fund.

All projects that are implemented through the South African NIE are required to follow and comply with national technical standards and relevant polices and legislation.

The Community Adaptation SGF was carefully selected for submission to the AF through a national consultation process that saw the NIE consult stakeholders to develop an investment strategy for the NIE, call for proposals and engage a high level steering committee to select proposals for further development. This process has ensured that the Community Adaptation SGF has been designed with a clear focus on agreed results.

Going forward, the implementation will be governed by the NIE Steering Committee in consultation with local beneficiaries and stakeholders. This process will ensure that the Community Adaptation

SGF always reflects local circumstances and aspirations, and draws upon national actors and capabilities.

The Community Adaptation SGF will be implemented in line with the following national legislation and standards, which may have relevance for the implementation:

- Extended Public Works Programme standards for restoration of wetlands and riparian zones;
- National Building Regulations including the new Green Building Code;
- Disaster Management Act and the National Disaster Management Framework;
- Water Services Act: Norms & Standards for Quality Water Services; and
- Environmental Impact Assessment standards and regulation legislation i.e. Government Notice No. 805 (Listing Notices 1, 2 and 3) in terms of National Environmental Management Act No. 107 of 1998. Small grant projects that trigger a Basic Assessment or full EIA will generally not be funded through the Community Adaptation SGF, due to administrative costs and potential delays.

The Community Adaptation SGF complies with all environmental and social principles of the AF, most notably those related to: i) compliance with the law; ii) marginalized and vulnerable groups; iii) gender equity and women's empowerment; and iv) land and soil conservation. The implementation of the project will be overseen by the NIE Steering Committee, which will ensure that the principles of the AF ESP, as well as the relevant national technical standards, are adhered to during the lifetime of the project.

Any safeguards that are developed specifically for the AF would also be met. SANBI has experience implementing GEF projects that required compliance with World Bank safeguards, and these were always found to be consistent with and enabled by South African standards.

F. Describe if there is duplication of project with other funding sources, if any.

The project will not support activities that are already supported with other funding sources. Furthermore, the project will complement, build on and learn from a number of on-going projects, detailed below.

As part of the detailed design phase of the Community Adaptation SGF, extensive stakeholder mapping and consultation has taken place, including interaction with provincial and local government, universities, research institutions and relevant CBOs and NGOs (Table 7 in Section II.H provides an overview of meetings that have taken place). This has led to the creation of a stakeholder database for both project target areas (see Table 8), as well as an understanding of the scope of work of the relevant stakeholders, as related to the Community Adaptation SGF.

Table 5 below provides an outline of current climate change adaptation related projects taking place in Mopani. The government departments and institutions currently engaged in climate change adaptation related projects in Mopani include the Limpopo Department of Agriculture, Limpopo Department of Economic Development, Environment and Tourism (LEDET) and the Risk and Vulnerability Science Centre at the University of Limpopo. The inclusion of representatives from these departments and institutions on the Local Reference Group of the Community Adaptation SGF (see Section III.A) will work to ensure that as small grant projects are developed and selected, synergies with other relevant projects and programmes are sought and duplication of efforts is avoided.

In terms of work by local NGOs or CBOs, climate change adaptation work in Mopani was, with the exception of the work conducted by Association for Water and Rural Development (AWARD) and GenderCCSA, found to be very limited. The overview of local CBO and NGO work developed to date will be strengthened during implementation of the Community Adaptation SGF by the appointment of a Facilitating Agency with strong ties to local networks, thereby ensuring that synergies are sought with the work of NGOs and CBOs and duplication of effort avoided.

Table 5: Climate change related projects in Mopani District.

Institution or organisation	Project Descriptions	Potential Synergies
Limpopo Department of Agriculture, *with Food and Agriculture Organisation (FAO), University of Pretoria and Food, Agriculture and Natural Resources Policy Analysis Network (FANPRAN)*	**Supporting smallholder farmers in southern Africa to better manage climate** (Giyani, Phalaborwa and Selwane) – Aims to develop and promote smallholder farmer innovative techniques, methods and approaches to managing risks to crop production and post-harvest handling associated with drought, floods and cyclones.	The Community Adaptation SGF will draw on the learning that comes out of these research projects, enabled through the inclusion of a Limpopo Department of Agriculture representative on the Local Reference Group.
Limpopo Department of Agriculture, *with University of Limpopo, University of Venda, University of the Witwatersrand and Georg-August Universirty, Goettingen*	**Limpopo Living Landscapes project** (Masia, Ndhengeza and Selwane) – Aims to improve the resilience and adaptability of smallholder crop farming system to climate variability and change.	
Limpopo Department of Agriculture *with Linkoping Univ.*	**Drought early warning detection project** (Greater Letaba/ Mokwakwaila and Lambani) – Aims to test how such an early warning system for drought could be created, based on a pilot study in the Limpopo river basin, shared by Botswana, South Africa, Zimbabwe and Mozambique, in order to increase community resilience.	
Limpopo Department of Economic Development, Environment and Tourism (LEDET)	Based on the priorities of **the Limpopo Green Economy Plan** LEDET works with local and district municipalities through municipal climate change champions focal points. They work to promote sustainable practices and integrate climate change into Integrated Development Plans through initiatives such as the Green Municipality Competition.	The Community Adaptation SGF will capitalise on the fact that climate change already being promoted as a municipal priority by LEDET, and that local municipal officials already have some understanding of climate change related challenges. In addition, the inclusion of LEDET representatives in the Local Reference Group will allow for further synergies with the Community Adaptation SGF.
The Risk and Vulnerability Science Centre, University of Limpopo*, with various partners*	**A number of relevant student research projects currently underway,** including: Drought vulnerability of maize and natural veld in the Letaba catchment; Water use efficiency of drought tolerant varieties of maize, cowpea, and triticale; Vulnerability assessment of Polokwane municipality.	The Community Adaptation SGF will draw on the learning and knowledge that is created through these projects, enabled through the inclusion of a Risk and Vulnerability Science Centre representative on the Local Reference Group.
GenderCCSA*, with Oxfam GB and Earthlife Africa*	**Sustainable use of natural resources to improve climate change resilience in South Africa** (Giyani and Tzaneen) - Grassroots women living in poverty are able to manage and use natural resources to improve resilience to climate change and contribute to sustainable livelihoods.	The Community Adaptation SGF will capitalise on the capacity development that takes place through the GenderCCSA project.
AWARD*, with USAID Southern Africa*	**Resilience in the Limpopo/Olifants Basin (RESILIM) project** seeks to reduce vulnerability to environmental/climate change through building improved transboundary water and biodiversity governance and management of the Olifants Basin through the adoption of science-based strategies that enhance the resilience of its people and ecosystems through systemic and social learning approaches.	The Community Adaptation SGF will share lessons learned with the AWARD project, will build on the capacity developed, and will not duplicate activities or target areas.

For the Namakwa District, stakeholder mapping and consultations worked to extend CSA's current overview and relationships. The process also confirmed that they already had a good overview of the government departments, institutions and CBOs and NGOs currently involved in climate change adaptation related projects. Table 6 below provides an outline of current climate change adaptation related projects taking place in Namakwa. The government departments and institutions currently engaged in climate change adaptation related projects in Namakwa include then the Northern Cape Department of Environment and Nature Conservation, Nama Khoi Local Municipality, and the Agricultural Research Council. The inclusion of representatives from these departments and institutions on the Local Reference Group will work to ensure that as small grant projects are developed and selected, synergies with other relevant projects and programmes are sought, while at the same time duplication of efforts is avoided. In terms of work by local NGOs or CBOs, there is more climate change adaptation related work than what was found in Mopani. Organisations currently involved in climate change adaptation projects in Namakwa include the Environmental Monitoring Group (EMG), Indigo Development & Change, Nurture Restore Innovate, CSA and Coastal Links Northern Cape. The networks and relationships that CSA already has with organisations in the District, and their on-going efforts keep a good overview of other projects being implemented during the implementation of the Community Adaptation SGF, will work to ensuring that synergies are sought with the work of NGOs and CBOs and duplication of effort avoided.

Table 6: Climate change related projects in Namakwa District.

Institution(s) or organisation(s)	Project Descriptions	Potential Synergies
Northern Cape Department of Environment and Nature Conservation	**Development of a Northern Cape Climate Change Response Strategy** – The department is working on a climate change response strategy for the Province that will summarise expected climate change impacts for the Province, identify priorities for mitigation and adaptation, and highlight potential response projects.	The Community Adaptation SGF will not fund activities that, like the development of the response strategy, are purely planning without implementation, yet individual projects could be funded that capitalise on the research that has taken place during the development of the strategy, and address identified priorities or implement relevant climate change adaptation projects at the community level.
Agricultural Research Council	**A number of relevant student research projects currently underway,** including: climate impacts on legume productivity, rainfall impacts on ephemeral flushes, impact of EbA management activities in wetlands, and how livestock farmers use indigenous knowledge to adapt to climate change.	The Community Adaptation SGF will draw on the learning and knowledge that is created through these projects, and projects that build on and respond to the knowledge generated could be funded.
Nama Khoi Local Municipality	**Environmental Health and Climate Change Awareness Campaign**	The Community Adaptation SGF will not fund activities that are purely education and awareness-raising without practical implementation. Such activities may inform communities and stimulate climate change adaptation project design and applications for funding.
Environmental Monitoring Group, *together with Coastal Links Northern Cape*	**West Coast Artisanal Fishers**: Working together with small-scale fishers to better understand their changing environment, so as to come in a better position to sustainably manage their resources and maintain their livelihoods.	The Community Adaptation SGF will not fund activities that duplicate those already underway, yet it could capitalise on the research that has taken place by funding a project that builds on the knowledge created through the project.
Indigo development & change	**Empowering small-scale farmers in the Suid Bokkeveld to further develop their adaptive capacity**, enabling them to better absorb shocks and mitigate	

	stresses produced by climate change.	
Indigo development & change, *with WITS University and the* Council for Scientific and Industrial Research (CSIR)	**Climate change and livestock management in the Succulent Karoo:** A participatory action research approach to natural resources management.	
Nurture Restore Innovate	**Development of a restoration protocol for degraded rangelands:** A research project focused on the restoration and management of rangeland ecosystem services such as forage and water retention, for resilience to long-term climate change.	The Community Adaptation SGF will draw on the learning and knowledge that is created through this project, and projects that build on and respond to the knowledge generated could be funded.
Conservation South Africa	**Climate Resilience Small and Medium Enterprise Development:** capacity building and mentorship with 30 small and medium enterprises in the Namakwa District on how climate change may affect their businesses and what responses they could develop. Some climate change adaptation tools and technologies have been transferred to relevant businesses to support their climate change adaptation process.	The Community Adaptation SGF will not fund activities that duplicate those already underway. The Community Adaptation SGF will also not fund activities that are purely capacity building and awareness raising nor those that benefit only individuals. Yet it could capitalise on the research that has taken place by funding a project that builds on the knowledge created through the project and benefits wider communities.
Conservation South Africa	**Integrating climate change in local municipal planning and policy:** Capacity building and policy development project focused on the integration of up to date climate change information into local municipal integrated development plans. The process includes the identification of priorities for climate change adaptation as well as project design and budgeting.	The Community Adaptation SGF will not fund activities that duplicate those already underway. The Community Adaptation SGF will also not fund activities that duplicate mandated government service delivery functions. Some of the climate change adaptation projects developed through this process that are currently unfunded, benefit wider communities, respond to identified climate change priorities, and are additional to core government functions, may be funded.

The Community Adaptation SGF will not duplicate the efforts, but will instead capitalize on the learning that has taken place in other small granting mechanisms, such as SKEPPIES and the GEF-SGP. Through the running of SKEPPIES since 2004, which entailed the provision of accessible small-scale funding to local development, conservation and climate change response projects, CSA has considerable relevant experience in community-level grant making (see Box 5 in Section II.I for more details on the main learnings from SKEPPIES).

An important lesson learned from the GEF-SGP is the value of hands-on mentorship, as the implementation of the GEF-SGP has shown how the provision of on-going project support for grant recipients has been very effective in terms of ensuring sustainability and cost-effectiveness. The Community Adaptation SGF builds on this learning and takes the project support one step further through the provision of extensive support from locally based Facilitating Agencies.

The Community Adaptation SGF will also inform national processes on small grant funding. The NIE Steering Committee, on which South Africa's National Treasury Department is represented, has expressed its full support for exploring the small grant mechanism, noting during the process that there is a 'gap in the market'. The NIE Steering Committee will be monitoring progress of this project with a view to supporting successful processes beyond the AF investment, and linking these to South Africa's Green Fund (which has a current budget of R 1.1 billion (approx. USD 110 million)) and small granting mechanism.

G. If applicable, describe the learning and knowledge management component to capture and disseminate lessons learned.

A suite of activities will be supported through the Community Adaptation SGF implementation period to support the generation of knowledge and the development of recommendations in support of scaling up and replicating the approach. These are discussed in Components 2 and 3 in Section II.A, and some are elaborated on below.

- Annual fora for Small Grant Recipients and beneficiaries, and fora for stakeholders from neighbouring and other districts and municipalities in Years 3 and 4: These will be an opportunity for the project implementers to get together, exchange ideas, learn from each other and network. The fora will also be used to introduce new information, conduct needs assessments, and review small grant project activities. The approach has great value for sharing the experiences of successful small grant projects and supporting and guiding new projects, providing a support network for projects facing challenges, and sharing successes.
- One-on-one project support and mentorship: Each Small Grant Recipient will be visited quarterly by staff from the local Facilitating Agency.
- A social media platform: SSN will set up a social media platform for the project, where Small Grant Recipient can interact regularly to share experiences and gain support. Small Grant Recipients will be encouraged to participate in network events and list-serves to become active and forge partnerships with broader adaptation network partners.
- Media engagement: In both districts, Small Grant Recipients and Facilitating Agencies will share lessons and case studies from the Community Adaptation SGF through a variety of media including: articles, movies, video clips, newspapers, radio interviews etc.
- Case studies: Case studies/stories will be developed and shared with the South African Adaptation Network and in relevant national climate change fora, such as the NCCC and IGCCC, to capture lessons at the national scale[38]. The Adaptation Network is supported by stakeholders from government, academia, private sector and civil society and has a focus on supporting integrated effective adaptation processes in the country and to share methodological lessons learned within the region.
- Policy briefs: Briefs with recommendations for policy development will help inform local and national policy development.
- International meetings: UNFCCC meetings will be attended by various EE members and will be shared at side events. Grantees will also be invited to present their experiences at these side events[39].
- University networks: SSN, CSA and the NIE will work with their university networks to encourage student study/internship opportunities with a particular project to enhance implementation support, case-study development, and broader learning around adaptation implementation. Where possible, student projects will be designed to support to the specific needs of each project.

H. Describe the consultative process, including the list of stakeholders consulted, undertaken during project preparation, with particular reference to vulnerable groups, including gender considerations, in compliance with the Environmental and Social Policy of the Adaptation Fund.

The suggestion to establish a small grants facility for climate change adaptation in South Africa was first mentioned during one on one discussions between the NIE and various NGOs, during the NIE's early consultation process. The suggestion was reinforced at the NIE's inaugural stakeholder consultation workshop, which was held in October 2012. The workshop was attended by 78 people, recruited via an extended invitation (i.e. through relevant networks with encouragement for further dissemination), representing a broad cross-section of civil society, government and the private sector.

The workshop report captures the issue as follows:

[38] The progress of the NIE is a standing item on the agenda of the IGCCC and NCCC.
[39] These is no budget provision for attendance at UNFCCC and other International or National meetings and attendance at such events would need to be co-financed. Co-financing may be accessible through initiatives such a CDKN.

Stakeholder Workshop Report Page 7: "Communities should be supported to access funds directly. South Africa should investigate creating/ a mechanism, like a small grants facility, whereby grassroots communities can directly access project funds. Such a facility should provide long-term project support."

The suggestion to establish a Community Adaptation SGF was based on the request from local communities who recognised the innovative direct access model that was being promoted by the AF, and wanted to take this concept even further by providing even more direct assistance to vulnerable communities themselves. It was believed that a Community Adaptation SGF would empower local communities to identify and implement responses to their climate change vulnerabilities more directly, and in so doing, empower them to actively engage with locally relevant responses that could be sustained.

The notion of a Community Adaptation SGF was subsequently captured in the investment framework of the NIE, as follows: *NIE Investment Framework Page 2: "In our efforts to build a coordinated adaptation response that delivers tangible outcomes, the NIE will work with project proponents to build between one and three integrated projects that support these learning and demonstration objectives. The NIE will be investigating the possibility of one of these projects being a small grants facility whereby vulnerable communities can directly access project funds."*

The Investment Framework was shared and approved by participants of the inaugural workshop, and signed off the high-level NIE Steering Committee, which includes representatives of South Africa's National Treasury. These representatives have agreed that there is no local facility for small granting and have expressed their interest in testing such a mechanism, with a view to possibly sustaining it with domestic finance if successful.

The stakeholder consultation process for the development of the full Community Adaptation SGF project proposal has been two-pronged, with locally appropriate processes being developed for the two project target areas, Mopani and Namakwa.

In Mopani the stakeholder consultations have been centered around two interlinked yet distinct processes, the participatory vulnerability assessment and the stakeholder mapping and consultations. For the former, the participatory VA, six workshops with a total of 111 participants were organised with the support of Mopani District Municipality. As outlined in Table 7 below these workshops were held in the period between the beginning of April and the end of May 2014, and included municipal officials from various relevant departments as well as Community Development Workers (CDWs). The spread of participants was aimed at developing a good understanding of sectoral vulnerabilities to climate change, and of the climate change vulnerability of local livelihoods through the representation from a range of local communities from across the two local municipalities of focus, Letaba and Giyani. The participatory workshops have ensured that the Investment Windows for the Community Adaptation SGF, which are based on the findings of the vulnerability assessments, are grounded in the inputs from municipal officials as well as CDWs, people from local communities who are engaged in development issues in their communities. A special effort was also made to ensure gender balance at the workshops, and there were generally at least 50% female participants. As part of the process of the vulnerability assessment workshops participants also identified possible adaptation responses, and these are summarized in Box 1 in the project background and context section. In a parallel, these workshops have developed the capacity of government officials and CDWs, creating awareness of climate change and better understanding of vulnerabilities and possible climate change impacts.

For the stakeholder mapping and consultations the aim was to get an overview of the relevant government departments, institutions, universities, CBOs and NGOs, and to make stakeholders aware of the Community Adaptation SGF proposal and get their input. A large number of telephone calls were made to stakeholders, as well as individual meetings with a number of them and meetings and workshops with the district and local municipalities (as outlined in Table 7 below). The whole process culminated in a Community Adaptation SGF project Coordination and Planning meeting, with over 60 local participants. Again, efforts were made to ensure gender representation, resulting in about 40% being female participants. At the meeting stakeholders were presented with the findings of the vulnerability assessment, as well as with aspects related to governance of the Community Adaptation SGF and the small grant project identification, approval and contracting process. Participants at the meeting were given an opportunity to input, and also engaged in group work to

advise on various aspects of the Community Adaptation SGF processes, based on their local understanding and knowledge.

The stakeholder mapping and consultation process has been particularly important in Mopani where, without a Facilitating Agency contracted in the detailed design phase of the Community Adaptation SGF, relationships have had to be developed. The extent of interactions and consultations has, however, led to the establishment of a strong relationship with both the District Municipality and the Local Municipalities. This has resulted in a recognition of and sense of local ownership of the Community Adaptation SGF. According to a municipal official, the municipality usually only finds out about non-government projects once there are challenges during implementation, and consequently the municipality are called upon to provide support. Hence the municipalities expressed a great deal of appreciation for being involved the process from the detailed design phase of the project.

Table 7: Stakeholder meetings during the project preparation process.

Date	Participants and Purpose	Location	Attendance Register
22 October 2013	GenderCCSA, The Land Access Movement of South Africa (LAMOSA), CSA and SANBI representatives: field visit to meet with grassroots organisation	Ramotshinyadi HIV and Youth Guide Centre, Limpopo	n/a
18-21 November 2013	GenderCCSA and SANBI representative: field visit to get to know local stakeholders and the map the local capacity for the reception of grants	Across Mopani District	n/a
14 February 2014	Mopani District Municipality, SANBI and the DEA: meeting to introduce the project to the District	Tzaneen	See Annex IV.2
07 March 2014	SANBI, the DEA and the executive committee of MDM, chaired by the Municipal Manager: to get high level support from Municipal structures (see Annex III.2 for subsequent support letter from Municipal Manager)	Tzaneen	See Annex IV.3
25 March 2014	SANBI and Limpopo Department of Agriculture: stakeholder mapping meeting	Polokwane	n/a
27 March 2014	SANBI and Working for Water: stakeholder mapping meeting	Tzaneen	n/a
27 March 2014	SANBI and Working for Wetlands: stakeholder mapping meeting	Makhado	
28 March 2014	SANBI and University of Limpopo, Risk and Vulnerability Science Centre: stakeholder mapping meeting	Polokwane	n/a
28 March 2014	SANBI and LEDET: stakeholder mapping meeting	Polokwane	n/a
28 March 2014	SANBI and Mvula Trust: stakeholder mapping meeting	Polokwane	n/a
31 March 2014	SANBI and Association of Limpopo Early Childhood Development Resource & Training (ALERT) NGOs: stakeholder mapping meeting	Tzaneen	n/a
01 April 2014	SANBI and University of Venda: stakeholder mapping meeting	Thohoyandou	n/a
03 April 2014	SANBI, DEA, LEDET, MDM and local municipality representatives: Community Adaptation SGF proposal development process workshop	Giyani	See Annex IV.4
04 April 2014	SANBI and Khanimamba Training and Resource Centre: stakeholder mapping meeting	Giyani	n/a
07 April 2014	SANBI and Goland Kulani early learning centre: stakeholder mapping meeting	Tzaneen	n/a
10 April 2014	SANBI and water practitioners from Giyani and Letaba: Participatory Vulnerability Assessment workshop	Giyani	See Annex IV.5
11 April 2014	SANBI and Disaster Managers from Giyani	Tzaneen	See Annex IV.6

	and Letaba: Participatory Vulnerability Assessment workshop		
14 April 2014	SANBI and extension officers from Giyani and Letaba: Participatory Vulnerability Assessment workshop	Giyani	See Annex IV.7
20 May 2014	SANBI and Cooperative for Assistance and Relief Everywhere (CARE): stakeholder mapping meeting	Tzaneen	n/a
20 May 2014	SANBI and University of Venda Income Generation Centre (UIGC): stakeholder mapping meeting	Giyani	n/a
22 May 2014	SANBI and community development workers from Letaba: Participatory Vulnerability Assessment workshop	Mokwakwaila	See Annex IV.8
23 May 2014	SANBI and Choice Trust: stakeholder mapping meeting	Tzaneen	n/a
23 May 2014	SANBI and Batlhabine Communal Property Association (CPA): stakeholder mapping meeting	Tzaneen	n/a
26 May 2014	SANBI and community development workers from Giyani: Participatory Vulnerability Assessment workshop	Giyani	See Annex IV.9
28 May 2014	SANBI and health practitioners from Giyani and Letaba: Participatory Vulnerability Assessment workshop	Giyani	See Annex IV.10
13 June 2014	Mopani multi- stakeholder workshop: Community Adaptation SGF proposal Coordination and Planning meeting	Tzaneen	See Annex IV.11

In Namakwa the consultative process for the Community Adaptation SGF has been somewhat different, as CSA has been engaging with stakeholders in the community as well as district municipality since 2001, with a focus on climate change awareness specifically from 2009. Climate adaptation workshops have been run with local stakeholders: including District and Local officials involved in DRR planning from 2010, where a focus on the importance of ecosystem services as part of DRR was emphasised. As part of the development of the DRR plans, the district developed a vulnerability assessment between 2011 and 2012, with support from CSA. This vulnerability assessment included socio-economic, ecological, institutional and climate vulnerability.

Consultation with the district and other local stakeholder is on-going. CSA is supporting the municipality in their integrated development plan process for the short term and the development of an adaptation plan for the medium to long-term, which includes highlighting climate change adaptation projects that can be implemented within the district. This process is critical to highlighting areas where small grants support is needed in order to support adaptation going forward and allows for interaction with local stakeholders on an on-going basis.

CSA has also worked with small-scale communal livestock farmers since 2006, and is currently working with >80 communal farmers to implement sustainable agriculture practices that also help them adapt to a changing climate. CSA does regular trainings with the farmers and provides mentorship support to them. As part of the sustainable practices implemented, the Agriculture Research Council and Working for Wetlands have been working with farmers to also restore wetlands in the area and CSA has continued to engage with these partners in the scoping and implementation of this Community Adaptation SGF.

In order to deepen the consultation process and further ensure a sound participatory process, CSA and the NIE conducted a stakeholder mapping in order to broaden its stakeholder networks. This resulted in an extensive list of Namakwa stakeholders, as can be observed in Table 8 below. A specific effort was made to include small and grassroots associations and organisations. The stakeholder mapping included telephone calls to all the organisations that CSA did not already have an established relationship with, to get an understanding of what they do and to explore whether the Community Adaptation SGF could be relevant to their work.

The stakeholder mapping was followed by two workshop engagements. On 27 November 2013 an initial engagement session was held in Cape Town at the Annual General Meeting of the Northern Cape Regional Network, a network of NGOs and CBOs active across the Northern Cape, including the Namakwa District Municipality. This was followed by a large stakeholder workshop in Springbok on 13 February 2014 (equivalent to that which was held in Mopani on 13 June 2014), to which all of the stakeholders identified during the mapping exercise were invited. The aims of the large stakeholder workshop included: i) introducing the stakeholders to the project; ii) ensuring broad representation and stakeholder consultation in the detailed design phase of the project; iii) identifying the most important sectors and/or areas that will be affected by climate change in the Namakwa District (which informed the Community Adaptation SGF Investment Windows); and iv) brainstorming some 'good adaptation' ideas for Namakwa (see Box 2 in Section II.A). The workshop was attended by 61 representatives of 38 locally active institutions and organisations. See Annex IV.1 for the attendance register.

Following the consultation processes in Mopani and Namakwa, a Discussion Document outlining the foundation for the Community Adaptation SGF project was drafted and shared with all the stakeholders for input. The document outlines: i) the Investment Windows that had been identified based on stakeholder input and climate vulnerabilities; ii) oversight, governance and coordination of the Community Adaptation SGF; iii) roles and responsibilities; and iv) selection criteria for Small Grant Recipients and adaptation projects. Stakeholder comments were received and included in the final Discussion Document, which can be found in Annex V. The document presented in Annex V has been updated, based on stakeholder feedback, to inform Section II.A. The stakeholders identified in Mopani and Namakwa are outlined in Table 8 below.

Table 8: Overview of stakeholders identified in Mopani and Namakwa.

	Mopani organisations/ institutions	Namakwa organisations/ institutions
NGOs, CBOs, Associations & Cooperatives	AWARD	Bergsig ondersteuning groep
	Batlhabine CPA	Biodiversity and Red Meat Association
	Boitumelo Community Development Initiative	Cape Leopard Trust
	Boitumelo Community Development Initiative	Catholic Development Orange River (KDOR)
	CARE SA	Centre for Environmental Rights
	Choice Trust	Coastal Links Northern Cape
	Exilite (Agricultural Group)	Concordia Farmers' Association
	Friends of the Haenertsburg Grasslands	Eco Sebenza
	GenderCCSA	Endangered Wildlife Trust
	Goland Kulani early learning centre	Environmental Monitoring Group
	Independent Development Trust	Food Sovereignty Campaign (FSC)
	Itireleng	The Green Connection
	Keep The Dream 196	Harmony Home for the Aged
	Khanimamba Training & Resource centre	House of Joy
	Kruger 2 Canyons	Indigo Development and Change
	LAMOSA	Kamiesberg Heritage Foundation
	Limpopo Organic Farmers & Excillie Co-operative (LIOFA)	Lawyers for Human Rights
	Modjadji V Care Group	The Legal Resource Centre
	Mohlanatsi Intergrated Rural Development Programme	Luvuyo Drop in Centre
	Mopani Farmers Union	Mme Re Katlise
	Mvula Trust	Mure Steinkopf Ausa
	Nkuzi	Nababeep Advice and Development Office
	Ramotshinyadi HIV and Youth Guide Centre	Nababeep Development Foundation
	Thusanang	Nababeep Rehabilitation

	Trees for Africa	Nama e Skills Centre
	Tsogang water and sanitation	Namakwa Ontwikkeling (NAMKO)
		NamaPride
		NamPetroleum
		Nurture Restore Innovate
		Regional Emerging Farmers Association
		Red Meat Producers Association
		Richtersveld Advice Office
		Rural Development Support Programme
		Sekisonki Women's Group
		SKEPPIES
		Social Change Assistance Trust
		Soebatsfontein Advice Office
		Spoegrivier Advice Centre
		Spoegrivier small stock farmers support
		Sprankie hoop
		Steinkopf Advice Office
		Steinkopf Farmers' Association
		Surplus People Project
		Trust for Community Outreach and Education
		Tshintsha Amakhaya
		Women on Farms Project
		You and Your Money
		Youth Second Chance and Adventure Group
Networks, Coalitions & Forums		Arid Zone Ecology Forum
		Northern Cape NGO Coalition
		Northern Cape Regional Network
Universities, Government Institutions, Government Departments & Municipalities Programmes	Firewise	Agricultural Research Council
	Greater Giyani Municipality	Council for Scientific and Industrial Research
	Greater Letaba Municipality	Greater Cederberg Fire Management
	Limpopo Department of Agriculture	Nama Khoi Local Municipality
	Limpopo Department of Economic Development, Environment and Tourism	Namakwa Disaster Management Centre
	Mopani District Municipality Disaster Management Centre	Namakwa District Municipality
	Mopani District Municipality	Namakwa/South African National Parks
	South African National Parks	Northern Cape Department of Economic Development and Tourism
	University of Limpopo, Risk and Vulnerability Science Centre	Northern Cape Department of Environment and Nature Conservation
	University of Venda Income Generation Centre	Working for Water
	Working for Water	Working for Wetlands
	Working for Wetlands	

I. Provide justification for funding requested, focusing on the full cost of adaptation reasoning.

Climate related risks are generally greater for disadvantaged and poor communities, due to limited adaptive capacity and associated sensitivity to impacts. Climate change thus poses an unevenly distributed threat, and requires climate finance to find its way to the most vulnerable communities. Yet those that have the greatest need for funding, the most vulnerable communities, tend to lack the capacity required to access funding. The capacity gap relates to being able to formulate a technical climate change adaptation argument and to other project development, implementation, reporting and financial management requirements. After what is increasingly recognised as an inadequate top-down approach to general development for disadvantaged and poor communities, the need for a bottom-up approach that empowers communities to develop their own responses is apparent. The Community Adaptation SGF addresses this need by establishing a mechanism that provides the capacity development support required for community representatives to identify, develop and implement their own climate change adaptation responses.

Baseline:

South Africa's climate response is guided by the NDP and the NCCRP, and is supported by sectoral legislation and the IDPs on a municipal level. Implementation of the NDP emphasises socio-economic development and addressing pressing challenges that the country is facing, including those exacerbated by climate variability and change. However, the response to extreme climate events to date has been fragmented and reactive, focusing mainly on disaster relief and DRR.

At the national level, South Africa's LTAS Flagship Research Programme responds to the NCCRP by undertaking climate change adaptation research and scenario planning for South Africa and the Southern African sub-region. At a provincial level, both Limpopo and the Northern Cape Provinces have climate change strategies. However, at a municipal level, there is very limited understanding on how to mainstream climate change adaptation responses and implement appropriate actions.

In Mopani, although budget has been set aside to develop a climate change strategy for the District, this strategy is yet to be developed. Sectoral departments have undertaken development projects, but largely have not integrated climate change into their work (e.g. through IDPs/SDFs). The undertaking of the VA and facilitation of related workshops in the District highlighted that municipal officials, as well as non-government stakeholders in general, have a limited understanding of climate change adaptation, the development of programmes to respond to climate-related challenges, and the implementation of appropriate responses.

In Namakwa, CSA has a track record of working with government (municipal) and non-government stakeholders to develop and implement climate change projects. Taking advantage of this previous experience, lessons learned from the SKEPPIES project (see Section II.F and Box 5 below), for example, have been incorporated into the design of the Community Adaptation SGF. However, despite CSA's previous and on-going work which has included engagement at the municipal level on raising awareness on climate change adaptation, there has been limited mainstreaming of climate change adaptation into the IDP/SDFs. This equates to limited conversion of awareness into action and limited implementation of appropriate responses at the local level. A climate change strategy for the District is yet to be developed and there is no climate change committee or forum through which adaptation interventions can be co-ordinated. As in Mopani, there are no learning networks that support the sharing of climate change adaptation experiences at the local level.

Because of the limited institutional capacity within the receiving environment in both target Districts, there are limited opportunities for local, vulnerable communities to access climate finance. This equates to few examples of successful, locally developed and implemented responses to the relevant impacts of climate variability and change, including general warming, more extreme temperatures, more intense heavy rainfall events, shifting rainfall patterns and associated droughts.

Box 5: Building on the experience from SKEPPIES.

The SKEPPIES Initiative, a programme funded by CitiFoundation, provides mentorship, training and support to projects and small enterprises with combined development and conservation benefits in the Succulent Karoo. Although no longer functioning as a small grants facility, SKEPPIES, supported by the Development Bank of Southern Africa (DBSA) and SANBI, started off by providing accessible small-scale funding to local development, conservation and climate change response projects. Through SKEPPIES, CSA has considerable relevant experience in community-level grant making. The main lessons learned from the implementation of SKEPPIES and the responding designs of the Community Adaptation SGF include:

- **The need for on-site project support**: provided by regular onsite support via systematic project site visits and continuous support.
- **The need to support the development of particular skills, including financial management and reporting skills:** provided through a capacity development component for grant recipients, from the point of project development and throughout implementation.
- **The need to have a good understanding of the local environment:** provided through the role of the Facilitating Agencies.
- **The importance of including local government departments and institution in governance processes:** addressed through the inclusion of local government departments and institutions on the Local Reference Group.
- **The need to separate project development and decision making:** addressed through the establishment of a National Community Adaptation SGF Project Steering Committee whose responsibility it is to make the final decision on the small grant projects that will be awarded funding

With-project scenario (adaptation alternative):

To address the limited opportunities for local, vulnerable communities to access climate finance in the two project target areas, the Community Adaptation SGF requires USD 2,442,682 to: i) pilot a mechanism that provides climate finance directly to targeted beneficiaries to build resilience to the impacts of climate variability and change; ii) provide the required support to the targeted beneficiaries in order to enable the development and implementation of climate change adaptation responses; and iii) share experiences to develop an understanding of small grant development and implementation in the context of climate finance, with a view to sustaining, scaling up and replicating this model as appropriate.

Small grants will be provided for at least 12 projects, based on proposals suggested by local institutions in consultation with vulnerable communities. The small grant projects will therefore respond directly to the needs of local communities. This will build climate resilience where it is urgently needed by instilling a sense of ownership in the interventions, and enhance the sustainability of the responses and the AF investment. Projects will fall into one of three Investment Windows[40] i.e. i) Climate-Smart Agriculture; ii) Climate-Resilient Livelihoods; or iii) Climate-Proof Infrastructure. These windows were developed by combining local-level climate projections and the results of on-the-ground VAs undertaken in each of the two project target areas, and therefore respond to relevant climate risks and local level needs. The Investment Windows are detailed in Section II.A, together with a list of potential projects per window, as suggested by stakeholders from the relevant project target areas. Local and scientific knowledge will be combined to ensure that each project delivers concrete, tangible adaptation benefits to vulnerable community members, including women (as per the targets detailed in Section III.E). These responses to specific risks posed by climate variability and change will be implemented by local institutions, with the required support provided by the Community Adaptation SGF. This approach responds directly to calls from civil society in South Africa to bring the principle of 'direct access' closer to vulnerable communities, thus empowering them to determine how climate finance will be used, and to build the institutional capacity for the implementation of adaptation efforts at the local level. The approach is additional to current, limited efforts in the project target areas to build the resilience of communities vulnerable to the impacts of climate variability and change.

To address the capacity constraints at the local level, the Community Adaptation SGF will support Facilitating Agencies in each project target area. These Facilitating Agencies are to work closely with grant recipients to support them to identify, develop and implement small grant projects in the context of climate change adaptation at all stages of the project cycle. This will include local level project administration, reporting and financial management. The provision of this high level of effort is based

[40] Projects may fall into more than one Investment Window, but a priority window will have to be identified by local institutions applying for a small grant from the Community Adaptation SGF.

on the lessons learned from other projects, including SKEPPIES (see Box 5) and the GEF-SGP. The details of the support provided to grant recipients are explained in five stages in Section II.A. Development of small grant projects will be guided by a set of criteria that will ensure projects clearly respond to experienced or anticipated impacts of climate variability and change, and meet the objectives of the Community Adaptation SGF, the NIE and the AF. This type and level of support designed to build adaptive capacity is not currently offered directly to local institutions, and is therefore additional to current government and donor-led efforts to build local capacity.

Small Grant Recipients and beneficiaries will be supported to participate in capacity building, learning and reflection activities that facilitate the sharing of knowledge on best practices from the local to the national level. Experiences will be documented and shared to develop an understanding of small grant development and implementation in the context of climate finance, with a view to sustaining, scaling up and replicating this model as appropriate. This will be achieved through innovative learning and sharing processes, including: i) annual fora where Small Grant Recipients and beneficiaries are supported to come together in each of the project target areas to share experiences, discuss climate change adaptation challenges and possible integrated adaptation strategies; ii) fora where Small Grant Recipients from both project target areas come together (stakeholders from neighbouring and other districts and municipalities will be invited to these fora, with a view to extending the project benefits beyond the project target sites, to stimulate the scaling up of the Community Adaptation SGF); and iii) a social media platform for reflection and learning within and between districts. Municipal and other government officials will be invited to the project's learning events to be exposed to the experiences of the grant recipients, to give inputs and to support processes to mainstream project outcomes into IDPs/SDFs. This will contribute to scaling up of climate change adaptation responses at the local level. Furthermore, case studies and policy recommendations, including potential alignment with South Africa's domestic Green Fund, will be captured in relevant formats and targeted at particular stakeholders at community, national and international levels. The sharing, capture and documentation of experiences and benefits of a direct access approach to climate finance, with a view to creating a long-term small grant facility for supporting climate change adaptation in vulnerable communities, is additional to current efforts in the project target areas, and indeed at a national scale.

J. Describe how the sustainability of the project outcomes has been taken into account when designing the project.

The Community Adaptation SGF has been designed from the outset with sustainability in mind, both at the project level and at the level of creating a Climate Finance Instrument that can support local level adaptation in the project target areas and beyond once the AF investment concludes.

At the level of the small grant projects, the programme of work that is supported will be aligned with district, provincial and national efforts to enable the implementation of appropriate adaptation responses. As such, the Facilitating Agencies will create linkages between the small grant projects and on-going district-level spatial and adaptation planning processes, both in terms of ensuring alignment between the existing enabling environment and the projects, and with a view to influencing the enabling and policy environment so that it is more supportive of the best practice approached that emerge through the Community Adaptation SGF.

In Mopani, stakeholder interactions and consultations during the detailed design phase have led to the establishment of a very strong relationship with both the District Municipality and the Local Municipalities. Interactions with local and district government already at the detailed design phase have created a sense of local ownership, to the point where the Community Adaptation SGF is to be listed in the local government's IDPs. Continued engagement with the Mopani Local and District Governments throughout the implementation of the Community Adaptation SGF, and further inviting them to the grant recipients' learning exchange events, will ensure a continued sense of ownership of the projects funded through the Community Adaptation SGF. Bringing the grant recipients together with Local and District Government officials, and further inviting relevant provincial government officials to these forums, will also provide a platform through which Small Grant Recipients and government officials can build relationships that extend beyond the 4 year implementation period of the Community Adaptation SGF. Providing platforms for lessons-sharing will also catalyse learning,

sharing and networking, investing in the development of a culture that supports adaptation. This will support learning beyond the 4 year implementation period.

In Namakwa, CSA has a long standing relationship with the District Municipality, and is currently supporting the municipality in their IDP process for the short term and in the development of an adaptation plan for the medium- to long-term. This includes highlighting climate change adaptation projects that can be implemented within the district. This process is critical to highlighting areas where small grant support is needed in order to support adaptation going forward, and allows for interaction with local stakeholders on an on-going basis. The projects funded through the Community Adaptation SGF therefore have the potential to be well aligned with municipal climate change adaptation priorities, and to have the buy-in and support of the district. As in Mopani, inviting the district and local governments, and further inviting relevant provincial government officials, to the learning exchange events of the grant recipients will provide a platform through which grant recipients and government officials can build relationships that could go beyond the time frames of the Community Adaptation SGF funded projects.

Intrinsic to the project design, is the intention that the Community Adaptation SGF itself will capacitate and empowers communities to manage their own resources effectively after the lifetimes of the project. At the end of the project, institutions who have received small grants will be better equipped to access additional resources, and able to utilise skills developed through the project's training and implementation processes in formulating and implementing further responses to climate change. The participatory approach will also ensure that communities themselves identify risks and priorities, supporting legitimacy and sustainability of project outcomes.

The Community Adaptation SGF investments are seen as an opportunity to pilot an approach that can be scaled up across South Africa and beyond. There is national interest in developing a small grant finance mechanism in support of the Green Economy generally, and adaption more specifically, that can be sustained in the long-term with domestic and international climate finance resources. This has been expressed regularly during NIE consultation processes at the NIE Steering Committee meetings. As mentioned previously, it is envisaged that the approach proposed here will provide robust lessons and insights for such future funding mechanisms. Even prior to the inception of the Community Adaptation SGF in the two target district municipalities, there is already interest shown from local government representatives of other district municipalities, who would welcome an expansion of the Community Adaptation SGF to their regions. Alfred Nzo District Municipality, in the Eastern Cape Province, is one such example. CSA is currently working in Alfred Nzo, thus providing an opportunity to facilitate the scaling up of the Community Adaptation SGF. Once the benefits to local, vulnerable communities in the two project target areas are shared nationally, it is likely that other district municipalities will also welcome the expansion of the Community Adaptation SGF. This will facilitate the up-scaling of project benefits to other areas with communities vulnerable to the impacts of climate variability and change.

K. Provide an overview of the environmental and social impacts and risks identified as being relevant to the project.

In accordance with the AF ESP, the Community Adaptation SGF has been designed to be compliant with a set of environmental and social principles. These principles were emphasised during all stakeholder consultations that resulted in the development of the set of Investment Windows for the (at least) 12 projects. Whilst the small grant projects will only be decided on during the project development and appraisal processes of the Community Adaptation SGF, the principles of the AF ESP will from part of the criteria used to asses detailed project proposals. This screening process is outlined in Section II.A (Small Grant Project Screening and Review) and in Annex VI. Any small grant projects that do not meet the requirement for a project with no significant risks in terms of the AF ESP, or a project with minor risks that can be mitigated, will be excluded.

Particular attention will be given to ensuring that small grant projects do not impact adversely on any priority biodiversity areas or ecosystem support areas, and that there are no negative impacts on local communities, including vulnerable groups and indigenous people.

As mentioned above, small grant projects that require a Basic Assessment or full Environmental Impact Assessment (EIA) as per the national EIA regulations (see Section II.E) will not be supported, due to administrative costs and potential delays. Activities that are listed in the EIA regulations will only be approved where provincial authorisations can be obtained as part of South Africa's Working for Wetlands Programme. These provincial authorisations apply to riparian zone activities (such as rehabilitation or restoration of wetlands, rehabilitation and restoration of river banks including erosion control and the construction of low river crossings) and littoral zone activities (such as small-scale coastal storm protection structures). Such provincial authorisations will need to be provided in writing before any grants that entail these proposed activities are awarded.

The Community Adaptation SGF and the (at least) 12 projects will therefore be in **Category B** i.e. projects with possible but limited anticipated adverse environmental or social impacts. An Environmental and Social Risk Management Plan has been prepared (see Annex VI). The results of a pre-screening of the Community Adaptation SGF and potential projects are presented in Table 9 below. During implementation particular attention will be given to the monitoring and mitigation of any identified minor risks, and of any unanticipated environmental and social risks through the:

- Facilitating Agency quarterly site visits to all project sites, in which the capacity of Small Grant Recipients will be developed to allow the detection and mitigation of environmental and social risks;
- Six-monthly project progress reports submitted by Small Grant Recipients to the Facilitating Agencies, including self-assessments;
- Six-monthly project performance reports submitted by the Facilitating Agencies to the EE, that summarise project progress and risk management related activities;
- Six-monthly ESP screening and risk assessment by an Environmental and Social Safeguard Expert (budgeted for in Component 1), based on the reports received from the Facilitating Agencies and the annual site visits of the EE. Through this process, environmental and/ or social risks will be identified and a set of recommendations for how these should be addressed in the project's risk management plan will be developed;
- Six-monthly project and programme performance and risk reports submitted by the EE to the PSC and NIE, in which the risks and recommendations that arise from the ESP screening and risk assessment process are presented;
- PSC and NIE feedback to the EE in response to monitoring reporting outcomes, including recommendations for corrective action (EE, PSC, NIE). The Facilitating Agencies will be responsible for working with Small Grant Recipients to ensure that these recommendations are integrated into the relevant project risk management plan, and into future implementation activities; and,
- Monitoring of the iterative management actions that arise from the recommendations of the PSC and NIE (EE, PSC, NIE).

Table 9: Predicted environmental and social impacts.

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
Compliance with the Law	X – All projects under the Community Adaptation SGF will be compliant with South African and international laws.	
Access and Equity	X – The direct access modality of the Community Adaptation SGF is designed to capacitate grant recipients and vulnerable communities through a "bottom-up" approach. This will enable fair and equitable access to project benefits to all participants, including marginalised and vulnerable groups, who meet the project eligibility criteria,	
Marginalised and Vulnerable Groups	X – All projects under the Community Adaptation SGF will benefit marginalised and vulnerable groups living in the two project target areas, including women, children, the elderly, indigenous people, people living with disabilities and people living with HIV/AIDS.	
Human Rights	X – All projects under the Community Adaptation SGF will respect and promote human rights, including, *inter alia*,	

	equality, freedom of expression and association, housing, education and access to information, as stipulated by the Constitution of South Africa, 1996.	
Gender Equity and Women's Empowerment	X – Gender-sensitive indicators (see Section III.E) have been included in the design of the Community Adaptation SGF to ensure that gender equity and women's empowerment are emphasised. This includes representation of women within the management structures of grant recipients, and representation of women within the beneficiaries of the individual projects. This will ensure that, during implementation, both men and women: i) are able to participate fully and equitably; ii) receive comparable social and economic benefits (see Section II.B); and iii) do not suffer disproportionate adverse effects (no such effects are anticipated).	
Core Labour Rights	X – All projects under the Community Adaptation SGF will meet the applicable core labour standards identified by the International Labour Organization, as well as national standards outlined in the Department of Labour's Strategic Plan 2014-2019. This places emphasis on job creation for local people, with a focus on women. At a minimum, the stipulated proportion of jobs will be awarded to people with disabilities.	
Indigenous Peoples	X – None of the projects under the Community Adaptation SGF will contravene the rights and responsibilities set forth in the United Nations Declaration on the Rights of Indigenous Peoples. All projects will seek to enhance benefits to local and traditional communities.	
Involuntary Resettlement	X – No involuntary resettlement will occur as a result of any of the projects under the Community Adaptation SGF.	
Protection of Natural Habitats	X – The Community Adaptation SGF will consider funding projects in Protected Areas. However, projects that result in negative environmental impacts (as indicated by the national EIA legislation – see Section II.E) will not be funded) see criteria in Section II.A). Furthermore, and beyond the relevant national legislation, Facilitating Agencies will encourage potential Small Grant Recipients to include interventions that protect and conserve the natural environment in the design of projects.	
Conservation of Biological Diversity	X – None of the projects under the Community Adaptation SGF will impact negatively on the conservation of biological diversity. Projects that result in significant negative environmental impacts will not be considered for funding, therefore no significant impacts on natural habitats or biological diversity are anticipated. Rather, through the anticipated ecological infrastructure and related projects, biological diversity will be conserved	
Climate Change	X – All projects under the Community Adaptation SGF will build resilience to climate change, and will not result in an increase in greenhouse gas emissions or in other drivers of climate change.	
Pollution Prevention and Resource Efficiency	X – None of the projects under the Community Adaptation SGF will produce excessive waste, or release pollutants, and all projects will seek to minimise material resource use and be energy efficient where appropriate.	
Public Health	X – None of the projects under the Community Adaptation SGF will impact negatively on public health. In Mopani, challenges to public health were seen as one of the most important risks posed by climate change. Health-related projects will therefore be considered under the Climate-Resilient Livelihoods Investment Window, and any relevant projects under the Community Adaptation SGF will build the climate resilience of project beneficiaries' health.	
Physical and Cultural Heritage	X – All Detailed Project Proposals received from potential grant recipients will identify sites of physical and cultural heritage. Projects that propose the alteration, damage or	

	removal of such sites will not be considered under the Community Adaptation SGF.	
Lands and Soil Conservation	X – Projects under the Community Adaptation SGF, particularly the Climate-Smart Agriculture and Climate-Resilient Livelihoods Investment Windows, will seek to conserve land and soil. This will include through *inter alia* the upgrading and/or maintenance of ecological infrastructure in the two project target areas.	

PART III: IMPLEMENTATION ARRANGEMENTS

A. Describe the arrangements for project implementation.

National Implementing Entity
SANBI will be the **National Implementing Entity** for the Community Adaptation SGF. SANBI will support project implementation by assisting in monitoring project budgets and expenditures and supporting the recruitment and contracting of project personnel and consultant services, including subcontracting. SANBI will also monitor project implementation and the achievement of the project outcomes/outputs and ensure the efficient use of donor funds.

Executing Entity
The Community Adaptation SGF will be administered through SouthSouthNorth (SSN) Trust, the project's **Executing Entity**. The SSN Trust was identified following a thorough review of potentially suitable existing entities in South Africa and a subsequent process that called for expressions of interest. See Box 6 for further details.

SSN Trust will be responsible for receiving and disbursing funds, for contracting the project's Facilitating Agencies and other service providers, and for contracting arrangements with all Small Grant Recipients. They will also be responsible for overall project monitoring, evaluation and reporting and will work directly with the NIE to ensure that AF reporting requirements are met.

SSN Trust will appoint and designate a **Project Manager** (PM) for the duration of the project. The PM's primary responsibility will be to ensure that the project produces the results specified in the project document to the required standard of quality and within the specified constraints of time and cost.

Box 6: Process for identification of the project's Executing Entity.

When the original Concept Note for the Community Adaptation SGF project was submitted to the AF, it was noted that additional work was still needed to identify the executing entity for the project. Three options were explored:

- The use of an existing structure.
- SANBI playing the role of both Implementing Entity and Executing Entity.
- The identification of an appropriate institution through a process that called for Expressions of Interest.

In support of this process, in 2013, a desk top study was conducted by Sharlin Hemraj of the National Treasury Department. The study examined the Landcare, the Expanded Public Works Programme, Global Environment Facility, the Drylands Fund and the Green Fund against a set of criteria that covered aspects such as governance and institutional arrangements, project application and approval processes and reporting requirements. The study concluded that none of the existing mechanisms were suited to functioning as the Executing Entity for the Community Adaptation SGF (See the Technical Note, Annex VII.1).

It was noted that the only government institution that appeared to have the necessary experience to play this role was SANBI, and it was recommended that SANBI approach the AF to enquire as to whether or not this would be possible. It was noted that this would be a temporary arrangement that would give South Africa the time to look at the finance mechanisms and decide on the best future long-term configuration for the small grant funding instrument. This suggestion was put to the AF Secretariat who responded that this would not be appropriate.

The NIE Steering Committee then agreed that the NIE will go to market and call for proposals from parties who were interested in playing the role as Executing Entity. In March 2014, SANBI issued a call for expressions of interest from organisations who were "interested in partnering with it as Executing Entity for South Africa's Small

Grant Facility pilot project for Climate Change Adaptation". Four applications were received and a sub-committee of the NIE Steering Committee met to review the applications against an agreed set of criteria, and to make a recommendation to the NIE Steering Committee. (See the Call for Expressions of Interest and NIE SC Task Team recommendation, Annex VII.2).

Criteria for measuring functionality

- Qualifications, competencies and relevant experience of the service provider (skills profile of the organisation and project team, including relevant expertise and project management experience with small grant processes and in Climate Change Adaptation and climate finance both locally and internationally).
- Current involvement in Climate Change Adaptation research, policy and/ or implementation, including ability to co-finance the programme of work and likely potential to leverage future benefits.
- Approach and methodology including innovation (how the project team will set up and manage the project, how it proposes to interface with stakeholders and beneficiaries, how learning will be captured and shared, and how project outputs will be used to leverage future benefits).

The NIE SC unanimously supported the resulting recommendation of the task team that SouthSouthNorth Trust be selected as the Executing Entity for the Community Adaptation SGF.

Facilitating Agencies

The project's **Facilitating Agencies** will provide site-based support in each of the project target areas. They will appoint Project Coordination Staff including a **local coordinator** in each region. These local coordinators will support Small Grant Recipients to execute the project activities, including project identification, design and implementation, day-to-day operations of the project, and operational and financial management and reporting.

The Facilitating Agencies will invite two officials from each of the District Municipalities to work alongside them in the project development process so as to build local capacity in this area, and to ensure optimal alignment between the project development process and related municipal activities such as Local Economic Development and Integrated Development Planning.

CSA will act as Facilitating Agency for Namakwa. They have a long history working in this area, and have an excellent track record in community engagement and grant making, including project identification, development, training and management support. They also have an established long-standing relationship with the District Municipality. The Facilitating Agency for Mopani will be identified through a transparent procurement process that will commence once it is certain that the project will proceed.

As described in Section II.A, during the Community Adaptation SGF inception phase, the NIE will engage directly with the EE and Facilitating Agencies on operating procedures that will apply to the management of the SGF, and that will be necessary to ensure compliance with SANBI and AF policies and procedures. Particular focus will be placed on the AF ESP, and a dedicated capacity building session will help to ensure that both the EE and Facilitating Agencies are able to competently screen small grant project ideas, concepts and proposals for environmental and social risks, and to detect these in future project monitoring, evaluation and reporting processes.

Box 7: Note for reviewers: Identification of a Facilitating Agency for Mopani – challenges and the way forward.

Reviewers will remember that, at the time of submission of the draft project concept to the AF Board, GenderCCSA had been identified as Facilitating Agency for Mopani. During the initial stages of the Vulnerability Assessment that was conducted for the Mopani area, it became apparent that GenderCCSA may not be the most appropriate institution to play this role, and that, in order to support a process that is fair and transparent, suitable organisations should be invited to tender for this assignment. It follows that it has been agreed that the Facilitating Agency for Mopani will be identified through a transparent procurement process that will commence once it is certain that the project will proceed.

Service providers

Service providers will be contracted to provide specialist support as required over the duration of the project. These services will include technical input to proposal development and review, specialist training, writing of case studies and independent project evaluations.

Oversight, Governance and Coordination
The proposed governance and implementation arrangements for the project are illustrated in Figure 9 and the envisaged roles and responsibilities that will be assigned to each of these structures is described below.

Strategic and operational oversight, and in particular oversight over compliance with the AF ESP, will be ensured by the NIE.

The NIE is governed by the NIE Steering Committee, which includes SANBI as the accredited National Implementing Entity for South Africa, DEA as the Designated Authority, National Treasury, the NPC and the Adaptation Network. The Steering Committee is chaired by SANBI with DEA as Deputy Chair.

The NIE Steering Committee has the following functions:

- Providing overall project governance.
- Supporting SANBI to ensure overall compliance with the spirit, policies and procedures of the AF.
- Monitoring AF ESP risks, and oversight of corrective action that may need to be taken.
- Supporting the NIE to build a coordinated adaptation response that delivers tangible outcomes.
- Guiding the development of and endorse the NIE investment strategy, ensuring optimal linkages with the policy environment and that projects are driven by country needs
- Setting up and oversee the project review process, including guiding the development of terms of reference for reviewers, setting up the review panel, and considering the recommendations of reviewers.
- Endorsing projects for submission to the AF, ensuring appropriate linkages with AF criteria and facilitating appropriate consultation with and, where necessary, endorsement from relevant spheres of government. From time to time this may involve promoting agreement on the roles of relevant institutions in implementing AF projects and facilitate the resolution of disputes among project partners.
- Promoting cooperation between relevant South African Institutions and funding agencies to enhance synergy and avoid duplication between adaptation efforts, to leverage additional resources where appropriate, and to support information management and flows between and feedback between the NIE and the NCCC and IGCCC and contribute towards climate finance and climate change adaptation policy development.

One of the main objectives of the NIE is to draw lessons and experiences from the NIE project development and implementation processes. This will support climate change adaptation planning, decision making and monitoring and evaluation with a view to enhancing the benefits of adaptation responses both nationally and internationally. This process will be supported by both DEA and SANBI.

Project Management Team
The day to day management of the project will be supported by a **Project Management Team** that will comprise SSN Trust and the two Facilitating Agencies. As and when required, the Project Management Team may co-opt others such as the NIE or other members of the NIE Steering Committee to join the Project Management Team. Project Management Team meetings will be coordinated by the EE's Community Adaptation SGF Project Manager, and will happen at least monthly.

Project Steering Committee
A **PSC** will be set up to provide overall governance and project oversight and to consider recommendations regarding the approval of the small grants that are the subject of this project.

The PSC will comprise representatives from:

- The National Department of Environmental Affairs;
- The Adaptation Network, which is a network whose membership includes a broad spectrum of NGOs, academia, government and business organisations with a shared interest in adaptation strategies for the negative impacts of climate change. The Adaptation Network represents Civil Society on the NIE Steering Committee and is well placed to do the same on the Community Adaptation SGF PSC;
- The Mopani and Namakwa District Municipalities;

- The NIE; and
- Technical climate change adaptation experts who are drawn from National Academic Institutions and target area government departments.

The EE will convene and act as Secretariat for this committee, and both the EE and the Facilitating Agencies will take guidance from the PSC processes. The PSC will meet quarterly.

Local Reference Groups

Local Reference Groups will be set up at project inception. They will support the Facilitating Agencies to ensure that projects are locally contextualised, consider local and indigenous knowledge, integrated and coordinated into on-going local programmes of work, technically robust and sustainable. In some cases they may also be able to attest to the credibility of the prospective Small Grant Recipients.

It is envisaged that members of these groups will include the officials from the democratically elected Mopani and Namakwa local government District Municipalities, relevant Local Municipalities and relevant provincial departments, including the Limpopo Department of Agriculture, LEDET and the Northern Cape Department of Environment and Nature Conservation.The members will also include relevant national sector departments and experts from tertiary institutions and research institutions, including the University of Limpopo, the Risk and Vulnerability Science Centre at the University of Limpopo and the Agricultural Research Council. Amongst others, prospective Small Grant Recipients will not be able to be members of these groups.

These Local Reference Groups will play an important role in concept screening during the first stage of the project development process, in detailed application development and in project implementation, learning, monitoring and reporting processes.

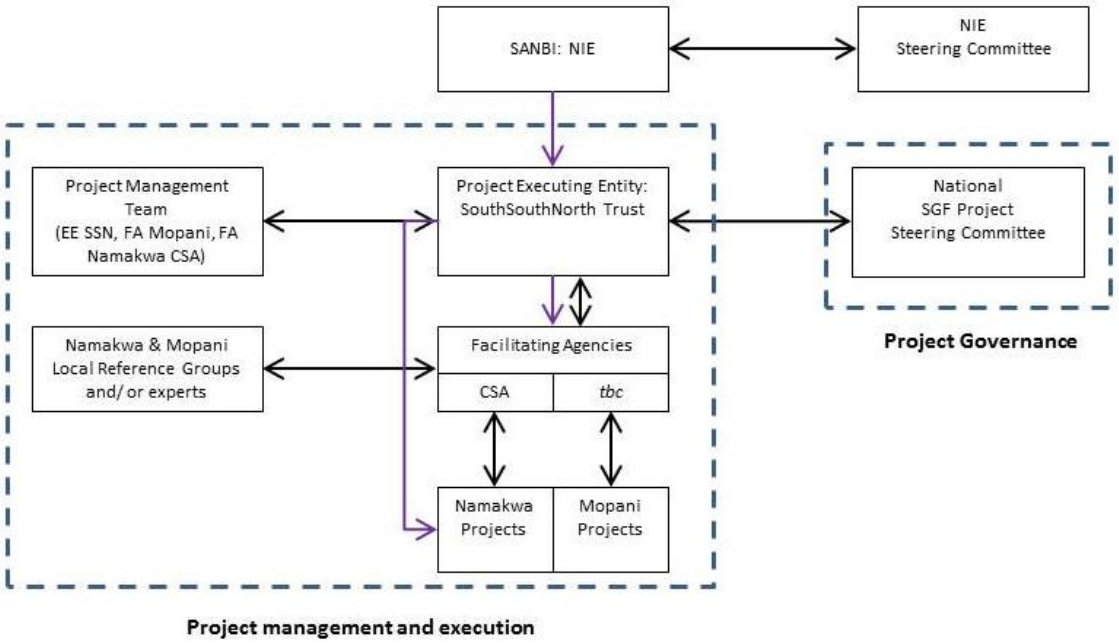

Figure 9: Institutional Arrangements for the Community Adaptation SGF project. The black arrows indicate the relationships between the different project partners and committees. The purple arrows indicate the flow of funds. Abbreviations: Executing Entity (EE); SouthSouthNorth (SSN) Trust; Facilitating Agency (FA); and Conservation South Africa (CSA).

Contract management

A number of measures are in place to manage the financial and project risks. The SSN Trust's Contracts Office will ensure that the NIE's fiduciary standards are upheld, and will undertake the contractual and administrative functions that are required in relation to overall procurement whilst tracking payments and expenditure for the duration of the Community Adaptation SGF. The South

African Trust Property Control Act regulates the SSN Trust. SSN Trust's designated Managing Trustees are external South African professionals practicing in the legal and accounting fields. The Managing Trustees have delegated defined authority to the Trust's Chief Executive Officer and the Trust's Contracts Office to administer day-to-day procedural issues in order to ensure efficient operation. The SSN Trust is subject to an annual audit.

The SSN Trust's Protocol sets out the Trusts Fiduciary standards and governs the operating procedures of the Trust itself and, by implication, the operations of the SSN Trust's Contracts Office. In relation to fiduciary roles and responsibilities, the Protocol outlines the following five primary functions of the Contacts Office, namely:

- To control the spending of funds in line with the agreed programme budget(s).
- Contract and manage the relationships with service providers' and other third party organizations based on the defined terms of reference set out in contract.
- Pay service providers and grant recipients according to agreed milestones.
- Report accordingly to agreed requirements attached to the funds under management.

All personal data and information regarding contracts is maintained in a secure database system managed by the SSN Trust. Copies of contracts, terms of reference, personal details, due diligence information is uploaded into the system for recording keeping purposes. All copies may be electronic however the SSN Trust is required to hold hard copies of all contracts signed with prospective grant recipients.

With specific reference to the due diligence procedures for prospective grant recipients under the Community Adaptation SGF project; two mechanisms will be used to manage finance and project management risks. These two mechanisms are the Community Adaptation SGF Finance Assessment and the Community Adaptation SGF Finance Questionnaire.

The **Community Adaptation SGF Finance Assessment**: Once a project concept has been approved, prospective grant recipients would be required to submit a Financial Assessment attached to their full project application to the EE. This Financial Assessment would consist of a questionnaire completed by the prospective grant recipients with the assistance of the Facilitating Agency (if required). The Financial Assessment would look to determine if there are any conditions that need to be placed upon the prospective grant recipient once an approval of an application is received. Additionally, the Financial Assessment will be used as a management tool by the EE to execute its grant management cycles and procedures according to the risk profile/rank presented by the specific grant recipient.

The **Community Adaptation SGF Finance Questionnaire**: In addition prospective grant recipients will be required to submit a Finance Questionnaire which will be the primary information source for the required due diligence procedures. Within the Finance Questionnaire, prospective grant recipients will be required to provide specific details regarding their designated contact point for the purposes of the grant, general background information, specific details regarding their internal controls, information regarding their accounting system, mechanisms for managing funds and any details of procedures for independent audit. This Financial Questionnaire requires the prospective grant recipients to submit supporting documents for certain sections and requires the authorized personnel to confirm the accuracy of the information provided by signature.

With regards to paying grant recipients and service providers from the accounts under management, the Trust's Contract Office will follow standard operating procedures whereby:

- The Trustees pre-authorise payments to grant recipients and service providers based on a schedule of milestones and expected payments prepared by the Trust's Contract Office.
- The EE's project manager and the Facilitating Agency's personnel work in close collaboration to monitor the performance of the grant recipients.
- The Trust's Contract Office General Manager will require written confirmation via email from the EE's project manager that a grantee has met the standards for a milestone before payment is made. This is known as "sign off" and is required for all payments.
- Every effort will be made to pay contractors within 14 days of receipt of sign off on a payment. Bank charges charged by the grant recipients' banking institution will be for the grant recipients' account.

Furthermore, in relation to management of accounts, it should be noted that the SSN Trust:

- Requires dual signatures of authorized personnel all bank accounts.
- The recommendation to pay service providers is made by the EE's project manager to the Trust's General Manager.
- The Financial Manager processes the payment on instruction from the General Manager.

B. Describe the measures for financial and project risk management.

Financial and project risks and associated management measures will be assessed as an on-going process throughout the project. The primary financial, project and institutional risks, their significance and associated response measures are described in Table 10 below. The appropriate response measures are further detailed below the table.

Table 10: Financial, project and institutional risks.

Risk			Response measure
Financial	Fluctuations in exchange rate (USD: ZAR) which could affect the funding available for implementation and lead to budgetary constraints.	Medium	The Financial and Procurement Manager will closely monitor the USD: ZAR exchange rate and communicate any implications to the Project Manager so that project management can be adaptive. The EE will collaborate closely with the NIE should exchange rates fluctuate to the extent that budget reallocations are required. In this event, budget reallocations shall be made in such a way that the achievements of project outcomes are compromised as little as possible.
	Ineffective management of project funds affects project implementation.	Low	The SSN Trust Contracts Office has a number of measures in place to deal with financial risks. See Section III.A. In summary, the Financial and Procurement Manager will work together with the Project Manager to ensure appropriate management of project funds. In addition, NIE oversight and account audits will ensure that there is effective use of project funds.
	Delays in the disbursement of funds, procurement and institutional inefficiencies (e.g. lengthy approval processes) result in delayed recruitment of project staff and hence project implementation.	Low	The NIE, EE and Facilitating Agencies will work closely to ensure optimum conditions for timely disbursement of funds contracting, monitoring and financial reporting. Key project staff will be in place prior to the project inception meeting.
	Delayed implementation and completion of small grant projects due to unanticipated events	Low	A critical path analysis and monitoring through the pre- and post-contract phases will support timely implementation and completion of small grant projects, to the extent that is possible.

Project	Lack of incentives for local communities and Small Grant Recipients to apply for small grants, initially, and failure to create ownership of the projects at the community level once the small grants are awarded.	Low	The involvement of the Facilitating Agencies with the local communities, through the participatory VA process conducted during the detailed design phase, and through the capacity building which will take place during implementation, has and will highlight the benefits of climate resilience to local communities and Small Grant Recipients. To date local communities and local institutions (i.e. potential Small Grant Recipients) have expressed great support for and interest in applying for small grants under the Community Adaptation SGF. The extensive stakeholder engagement undertaken to date has initiated a sense of ownership in the projects, which respond to community requests, from the outset. A number of grant recipient and project criteria have been included to ensure ownership of the small grant projects at the community level. These include: i) preference given to grant recipients that have established long-standing relationships with communities in the Namakwa or Mopani District Municipality; ii) grant recipients requiring a clear mandate from project beneficiaries to work in the project target areas on the identified project activities; and iii) projects being supported by anticipated beneficiaries and local stakeholders. The Facilitating Agencies, with assistance from technical experts as required, will support local communities and Small Grant Recipients during the small grant project development and implementation phases to ensure that interventions are managed and sustained.
	Small grant projects under the identified Investment Windows fail to build climate resilience in vulnerable, local communities.	Low	Intensive participatory measures have ensured that both social (captured by engagement with stakeholders when developing the VA's) and environmental (captured by scientific research via LTAS climate analyses) considerations have been taken into account in identifying Investment Windows. The small grant projects under the Investment Windows therefore will respond to the most urgent climate risks, whilst at the same time addressing community priorities, thereby building climate resilience.
Institutional	Poor coordination with other climate change projects in the focal areas limits the potential to learn from and build on the experiences of related projects.	Medium	The stakeholder mapping that took place during the detailed design phase in both project target areas, and the existing networks of the locally-based Facilitating Agencies, will ensure that small grants projects that are funded by the Community Adaptation SGF learn from and build on the experience of local projects. This will also serve to avoid overlap between similar endeavors, and ensure that projects deliver complementary and mutually reinforcing outcomes.
	Limited capacity of grant recipients to coordinate and deliver project outputs.	Low	The grant recipients will all have experience in coordinating, implementing and delivering outputs. This will be ensured through the inclusion of the following grant recipient criteria: i) grant recipients must be South African institutions with proven relevant implementation experience; and ii) grant recipients must have a sound track record of good governance, delivery of grant commitments and financial management. Further, specific capacity building interventions are built into the project that will support Small Grant Recipients to coordinate deliver the anticipated project outputs.
	Project governance structures fail to perform efficiently and effectively.	Low	Structured governance and implementation arrangements will ensure that roles and responsibilities by the EE, Facilitating Agencies, Local Reference Groups and NIE are clear and will be carried out efficiently and effectively.

C. Describe the measures for environmental and social risk management, in line with the Environmental and Social Policy of the Adaptation Fund.

Based on a pre-screening against the stipulated principles in the AF ESP, the Community Adaptation SGF and the (at least) 12 projects will be in **Category B** i.e. projects with possible but limited anticipated adverse environmental or social impacts. However, rather than adverse impacts, the project is anticipated to have numerous economic, social and environmental benefits (see Section II.B for a summary of such benefits). The AF ESP checklist and comment per principle is presented in Section II.K. This checklist will form part of the criteria used to assess project concepts and detailed project proposals, as per the process described in Section II.A and in Annex VI. Therefore, all projects will be screened for environmental and social impacts by the Facilitating Agency and Local Reference Group at the project concept stage, and by the Facilitating Agency (through support to the grant recipients developing detailed project proposals) and three reviewers (one of which will be the EE) at the detailed project proposal stage. The PSC will sign-off on all recommendations at project concept and detailed project proposal stage, and will ensure that no projects with significant adverse environmental and social impacts are funded through the Community Adaptation SGF.

Monitoring of the Community Adaptation SGF as a whole, and of any minor and/or unanticipated environmental and social risks that arise during implementation of the small grant projects, will be undertaken in accordance with the procedures described in the Environmental and Social Risk Monitoring section of Component 1 in Section II.A, as well as in Annex VI.

D. Describe the monitoring and evaluation arrangements and provide a budgeted M&E plan.

The project will be monitored through the Monitoring and Evaluation (M&E) activities described below. The M&E budget is provided in Table 11.

Project Start-up

A Project Inception Workshop will be held within the first month of project start with those with assigned roles in the project organisation structure. The main purpose of the inception workshop will be to inform relevant stakeholders about the project so that they:

- Fully understand and take ownership of the project. This will include detailing the roles, support services and complementary responsibilities of NIE staff vis-à-vis the project team. Discuss the roles, functions, and responsibilities within the project's decision-making structures, including reporting and communication lines, AF ESP requirements and conflict resolution mechanisms. The Terms of Reference (ToR) for project staff will also be discussed.
- Based on the project results framework finalise the first annual work plan. Review and agree on the indicators, targets and their means of verification, and recheck assumptions and risks.
- Provide a detailed overview of reporting and M&E requirements. The M&E work plan and budget will be agreed and scheduled.
- Discuss financial reporting procedures and obligations, and arrangements for the annual audit.
- Agree on the ToR for the PSC and plan and schedule the PSC meetings. Roles and responsibilities of all project organisation structures will be clarified and meetings planned. The first PSC meeting will be held within the first 6 months following the inception workshop.

An Inception Workshop report will be prepared and shared with participants to formalize various agreements and plans decided during the meeting.

Small Grant Project Monitoring and Reporting

Each approved Small Grant Recipient will define a set of measurable indicators against which they will report progress, and will establish baselines for these indicators. In addition to quantitative reporting, it is envisaged that qualitative reporting will form an important component of Community Adaptation SGF reporting processes. Particular attention will be given to the AF ESP and the detection, reporting on and management of of any minor and/or unanticipated environmental and social risks that arise during implementation. These processes will be supported by the Facilitating Agencies and used to capture learning and insights that will inform overall project learning.

Quarterly and Six-monthly – Small Grant Recipients
Facilitating Agencies will undertake site visits to each of the projects once every quarter. These site visits will support project implementation and management as well as financial and performance reporting processes. Particular attention will be given to the AF ESP and the detection, reporting on and management of of any minor and/or unanticipated environmental and social risks that arise during implementation. During these visits, the Facilitating Agencies will support all grant recipients to submit their quarterly financial reports and 6 monthly progress reports. All reports will be reviewed by the Facilitating Agencies, who will compile summary reports in a format prescribed by the EE. The EE will receive all information, review it and include relevant components for reporting to the NIE and PSC.

Quarterly and Six-monthly – overall project
Progress will be monitored quarterly via quarterly financial reports and six-monthly performance reports that are submitted to and collated by the EE and submitted to the NIE. These will include six-monthly ESP screening and risk assessments undertaken by an Environmental and Social Safeguards Expert. These performance reports will align with the agreed annual project work plan and will include qualitative, quantitative and financial information. Small Grant Recipients will also report on financial progress quarterly, and this information will be compiled by the Facilitating Agencies for inclusion in the EE reports.

The EE will develop quarterly and six-reporting templates that will be used for all project reporting.

On-line reporting
The project will investigate building onto an online reporting system for small grants to facilitate this process.

Annually
Annual Project Implementation Reports will be prepared by the EE and submitted to the NIE in order to monitor progress made since project start and in particular for the previous reporting period.

The Annual Project Implementation Reports shall include, but not limited to, reporting on the following:
- Progress made toward project objective and project outcomes – each with indicators, baseline data and end-of-project targets (cumulative).
- Project outputs delivered per project outcome (annual).
- Lessons learned/good practice.
- Expenditure reports.
- Risks and adaptive management, including a summary of AF ESP compliance.

A report template for the Annual Project Implementation Report will be prepared by the NIE in consultation with the AF Secretariat.

The EE will also be responsible for conducting annual audits of the Community Adaptation SGF. This is budgeted for as part of the EE fee.

Periodic learning throughout the project
The project has been designed to support learning platforms at various levels throughout the project implementation period. These will be used to track project progress and to adapt interactively as required. They will also form an important platform for formulating policy recommendations for sustaining, replicating and scaling up positive project outcomes.

Periodic Monitoring through site visits
The NIE will conduct visits to project sites based on the agreed schedule in the project's Inception Report/Annual Work Plan to assess first hand project progress.

Mid-term of project cycle
The Community Adaptation SGF will undergo an independent Mid-Term Evaluation at the mid-point of project implementation. The Mid-Term Evaluation will be commissioned by the EE and will determine progress being made toward the achievement of outcomes and will identify course correction if needed. It will focus on the effectiveness, efficiency and timeliness of project implementation, will highlight issues requiring decisions and actions and will present initial lessons learned about project

design, implementation and management. Particular attention will be given to the AF ESP and the reporting on and management of any minor and/or unanticipated environmental and social risks that may have occurred. Findings of this review will be incorporated as recommendations for enhanced implementation during the final half of the project's term. The organization, ToR and timing of the Mid-Term Evaluation will be decided after consultation between the parties to the project. The ToR for this Mid-term Evaluation will be prepared by the NIE based on guidance from the AF.

End of Project

An independent Terminal Evaluation that is commissioned by the EE will take place three months prior to project closure and will be undertaken in accordance with NIE guidance. The Terminal Evaluation will focus on the delivery of the project's results as initially planned (and as corrected after the Mid-term Evaluation, if any such correction took place). The Terminal Evaluation will look at impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental benefits/goals. Particular attention will be given to the AF ESP and the reporting on and management of any minor and/or unanticipated environmental and social risks that may have occurred. The ToR for this evaluation will be prepared by the NIE based on guidance from the AF.

The Terminal Evaluation will also provide recommendations for follow-up activities and requires a management response.

During the last three months, the project team will prepare the Project Terminal Report. This comprehensive report will summarize the results achieved (objectives, outcomes, outputs), lessons learned, problems met and areas where results may not have been achieved. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the project's results.

Monitoring and Evaluation work plan and budget

The indicative M&E workplan and budget are set out in the table below. It should be noted that the costs that are included in this table are part and parcel of the Total Budget and workplan, and not additional to it.

Table 11: M&E activities, responsibilities, budget and time frame.

Type of M&E activity	Responsible Parties	Budget USD *Excluding project team staff time*	Time frame
Inception Workshop and Report	• EE PM • NIE	Indicative cost: USD 2,000	Within first months of project start up
Facilitating Agency and EE site visits Six-monthly reports	• Facilitating Agency, EE	USD 57,142 (operating costs) USD 40,000 (Facilitating Agency staff time)	Quarterly
Periodic status/ progress reports Annual project implementation report Project Terminal Report	• EE PM and EE Contracts Office • NIE	USD 76,190 (EE staff time)	Quarterly, Annually and at least three months before the end of the project
Mid-term Evaluation	• EE PM and EE Contracts Office • NIE • External Consultants (i.e. evaluation team)	Indicative cost: USD 28,571	At the mid-point of project implementation.

Type of M&E activity	Responsible Parties	**Budget USD** *Excluding project team staff time*	Time frame
Terminal Evaluation	• EE PM and EE Contracts Office, • NIE • External Consultants (i.e. evaluation team)	Indicative cost : USD 28,571	At least three months before the end of project implementation
Audits	• EE PM and EE Contracts Office • NIE	USD 19,048	Yearly
NIE and NIE SC visits to field sites	• NIE • Government representatives	Paid for with NIE fees	Yearly
M&E and Knowledge Exchange Forums	• EE PM and EE Contracts Office. • FAs and Small Grant Recipients • NIE	USD 34,285	Ongoing and at annual events that will take place over the life of the project
TOTAL indicative COST ***Excluding NIE costs***		**USD 285,807**	

*Note: Costs included in this table are part and parcel of the Total Budget and Workplan, and not additional to it.

E. Include a results framework for the project, including milestones, targets and indicators.

	Indicator	Baseline	Target	Means of verification
Objective: Increase climate resilience in production landscapes and socio-economic systems in vulnerable communities in two pilot District Municipalities in South Africa, by working directly with local stakeholders and anticipated beneficiaries through a small granting mechanism.	1. Number of vulnerable community members in project target areas with reduced risk to extreme weather events.	1. **0 women** and **0 men**.	1. **300 women** and **300 men**.	Pre- and end-of-project gender-sensitive assessment of representative sample of project beneficiaries.
	2. Number of Small Grant Recipients with increased capacity to implement climate change adaptation projects.	2. **0 small** grant recipients.	2. At least **12** small grant recipients.	Pre- and end-of-project assessment of small grant recipients.
	3. Number of policy briefs presented to South African National Treasury and domestic Green Fund reflecting on experiences of the Community Adaptation SGF and informing appropriate actions with a view to creating a climate adaptation finance mechanism that supports local level responses.	3. **0** policy briefs.	3. **1** policy brief.	Review of policy brief.
Outcome 1: Small grants support concrete adaptation measures that strengthen livelihood strategies, adaptive capacity and ecosystem resilience in vulnerable communities in two district municipalities in South Africa.	Number of vulnerable community members with reduced risk to climate-driven impacts as a result of project interventions.	**0 women** and **0 men**.	**300 women** and **300 men**.	Pre- and end-of-project gender-sensitive assessment of representative sample of project beneficiaries.

Output 1.1: Adaptation assets strengthened through the implementation of at least 12 small grants (approximately USD 100,000 each) disbursed to at least 12 local institutions in the Mopani and Namakwa District Municipalities.	1. Number of agricultural adaptation assets: • number of livestock shelters; • area (ha) under improved soil management; • area (ha) under improved agroforestry; and • area (ha) of improved drought resistant crops.	• **0** livestock shelters; • **0 ha** under improved soil management; • **0 ha** under improved agroforestry; and • **0 ha** of improved drought resistant crops.	To be determined as small grant projects are approved, and finalised on submission of first NIE report to the AF at the end of Year 1.	Review of small grant project reports, field inspections.
	2. Number of livelihood adaptation assets: • number of communal market facilities; • number of cooling facilities for food traders; • number of shelters for vegetable production; and • number of savings groups.	• **0** communal market facilities; • **0** cooling facilities for food traders; • **0** shelters for vegetable production; and • **0** savings groups.	To be determined as small grant projects are approved, and finalised on submission of first NIE report to the AF at the end of Year 1.	Review of small grant project reports, field inspections.
	3. Number of settlement adaptation assets: • number of houses with improved insulation; • area (ha) with improved coastal storm protection; • number of improved river crossings; and • area (ha) of rehabilitated wetlands and riparian systems.	• **0** houses with improved insulation; • **0 ha** with improved coastal storm protection; • **0** improved river crossings; and • **0 ha** of rehabilitated wetlands and riparian systems.	To be determined as small grant projects are approved, and finalised on submission of first NIE report to the AF at the end of Year 1.	Review of small grant project reports, field inspections.
Outcome 2: Small Grant Recipients and associated institutions are empowered to identify response measures to climate-induced vulnerabilities, and implement relevant climate change adaptation projects.	Number of Small Grant Recipients with increased capacity to implement adaptation projects that address risks to extreme weather events.	**0** small grant recipients.	At least **12** small grant recipients.	Pre- and end-of-project assessment of small grant recipients.
Output 2.1: At least 12 local institutions in the Mopani and Namakwa Districts are	1. Number of Small Grant Recipients with women within the management structures.	1. **0** small grant recipients.	1. At least **10** small grant recipients.	Review of small grant project reports.

supported to develop small grant projects for local-level adaptation	2. Number of small grant recipients new to climate change adaptation.	2. **0** small grant recipients.	2. At least **8** small grant recipients.	Review of detailed project proposals from small grant recipients (highlighting management structures and previous climate change adaptation experience).
	3. Number of small grant recipients lead by civil society.	3. **0** small grant recipients.	3. At least **8** small grant recipients.	Review of small grant project reports.
	4. Number of small grant recipients with civil society within the management structures.	4. **0** small grant recipients.	4. At least **12** small grant recipients.	Review of small grant project reports.
Output 2.2: At least 12 local institutions in the Mopani and Namakwa Districts are supported to implement integrated climate adaptation responses.	Number of project site visits by Facilitating Agents.	**0** site visits.	**192** site visits.	Review of site visit reports.
Outcome 3: A methodology for enhancing direct access to climate finance is developed, based on lessons learned, providing recommendations for scaling up and replicating in South Africa and beyond.	Number of methodologies for enhanced direct access to climate finance.	**0** methodologies.	**1** methodology.	Review of relevant documents, including policy briefs, case studies and training session summary reports.
Output 3.1: Training opportunities are provided for Small Grant Recipients	Number of training sessions to build local community capacity in *inter alia* climate change adaptation and financial management skills.	**0** training sessions.	**10** training sessions.	Review of training materials and training session summary reports.
Output 3.2: Local networks for reducing climate change vulnerability and risk reduction are developed, expanded and strengthened	Number of fora for grant recipients to share experiences at inter- and intra-Municipal levels.	**0** fora.	At least **4** fora.	Review of proceedings/ summary reports from fora.
Output 3.3: Case studies and policy recommendations are developed for reflecting on, replicating and scaling up small grant financing approaches	1. Number of fora where project outcomes and relevant policy recommendations are presented.	1. **0** fora.	1. At least **6** fora (**4** local, **1** national and **1** international fora).	Review of proceedings/ summary reports from fora.
	1. Number of case studies capturing beneficiary and grantee experiences	2. **0** case studies.	2. At least **8** case studies.	Review of case studies.

F. Demonstrate how the project aligns with the Results Framework of the Adaptation Fund

Project Objective	Project Objective Indicator	Fund Outcome	Fund Outcome Indicator	Grant Amount (USD)
Increase climate resilience in production landscapes and socio-economic systems in vulnerable communities in two pilot District Municipalities in South Africa, by working directly with local stakeholders and anticipated beneficiaries through a small granting mechanism.	Number of vulnerable community members in project target areas with reduced risk to extreme weather events.	Outcome 2: Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses.	2.2. Number of people with reduced risk to extreme weather events.	2,442,681
	Number of grant recipients with increased capacity to implement adaptation projects that address risks to extreme weather events.			
	Number of policy briefs presented to South African National Treasury and domestic Green Fund reflecting on experiences of the Community Adaptation SGF and informing appropriate actions with a view to creating a climate adaptation finance mechanism that supports local level responses.	Outcome 7: Improved policies and regulations that promote and enforce resilience measures.	7. Climate change priorities are integrated into national development strategy.	
Project Outcomes	**Project Outcome Indicators**	**Fund Output**	**Fund Output Indicators**	**Grant Amount (USD)**
Small grants support concrete adaptation measures that strengthen livelihood strategies, adaptive capacity and ecosystem resilience in vulnerable communities in two District Municipalities in South Africa.	Number of vulnerable community members with reduced risk to climate-driven impacts as a result of project interventions.	Output 6: Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability.	6.1.1. No. and type of adaptation assets (physical as well as knowledge) created in support of individual- or community-livelihood strategies.	1,542,000
Small Grant Recipients and associated institutions are empowered to identify response measures to climate inducted vulnerabilities, and implement relevant climate change adaptation projects.	Number of grant recipients with increased capacity to implement climate change adaptation projects.	Output 2.1: Strengthened capacity of national and regional centres and networks to respond rapidly to extreme weather events.	2.1.1. No. of staff trained to respond to, and mitigate impacts of, climate-related events.	325,000
A methodology for enhancing	Number of methodologies for	Output 7: Improved integration of	7.1. No., type, and sector of	189,000

direct access to climate finance is developed, based on lessons learned, providing recommendations for scaling up and replicating in South Africa and beyond.	enhanced direct access to climate finance.	climate-resilience strategies into country development plans. (Inclusion of a small grant financial instrument as a climate-resilient strategy at country level)	policies introduced or adjusted to address climate change risks.	

Alignment with Adaptation Fund Core Impact Indicators:

Adaptation Fund Core Impact Indicators				
Date of Report				
Project Title	Taking adaptation to the ground: A Small Grants Facility for enabling local level responses to climate change			
Country	South Africa			
Implementing Agency	South African National Biodiversity Institute			
Project Duration	4 years			
	Baseline	**Target at project approval**	**Adjusted target first year of implementation**	**Actual at completion**
"Number of Beneficiaries" (absolute number)				
Direct beneficiaries supported by the project	0	600		
Female direct beneficiaries	0	300		
Youth direct beneficiaries	0	200		
Indirect beneficiaries supported by the project[41]	0	1,740		
Female indirect beneficiaries	0	910		
Youth indirect beneficiaries	0	273		

[41] Based on, for each of the project target districts, the average number of members per household in 2007 in the two districts; the male: female ration in 2007; and the average number of youth (15-24) in 2007.

G. Include a detailed budget with budget notes, a budget on the Implementing Entity management fee use, and an explanation and a breakdown of the execution costs.

Project Components, Outputs and Activities	USD	Budget notes
Component 1: Small grants to vulnerable communities deliver tangible and sustainable benefits	**1,542,000**	
1.1 Adaptation assets strengthened through the implementation of at least 12 small grants (approximately USD 100,000 each) are disbursed to at least 12 local institutions in the Mopani and Namakwa District Municipalities		
Review experts, including safeguard expertise	42,000	Draw down expertise of experts as needed, include sectoral and safeguard experts. Where possible, this input will be provided by government sector departments with no costs to the project. External M&E is part of the EE budget. This expertise will be available over the duration of the project.
Contract Small Grant Recipients to implement at least 12 small grants of approx. USD 100,000 each. Up to 16 grants may be awarded.	1,500,000	12 small grants of approx. USD 100,000 each. Up to 16 grants may be awarded.
Component 2: Local institutions empowered to identify and implement adaptation response measures	**325,000**	
2.1 At least 12 local institutions in the Mopani and Namakwa Districts are supported to develop small grant projects for local-level adaptation		
Issue call for proposals	4,762	Costs of advertising
Convene briefing sessions in each district	3,810	Operating costs for briefing sessions
Conduct capacity building workshops to support project development	9,046	Operating costs for capacity building sessions. Staff time covered elsewhere.
Namakwa Facilitating Agency (CSA) staff time: Screen concepts, make recommendations to EE, Convene project development work sessions with Small Grant Recipients, support project development, support local review processes, visit and support Small Grant Recipients, on-going mentoring support.	80,112	Part of 50% time of Namakwa Programme Manager, 40% M&E assistant, 8 days Regional Director (for year 1, adjusted to 30% of programme manager for year 2 - 4, and 3 days for Regional Director).
Mopani Facilitating Agency staff time: Screen concepts, make recommendations to EE, Convene project development work sessions with Small Grant Recipients, support project development, support local review processes, visit and support Small Grant Recipients, on-going mentoring support.	80,000	Mopani Facilitating Agency staff - breakdown TBC
Obtain inputs from relevant experts to support Facilitating Agencies project development	20,477	Includes at least 5 days CSA policy director per year; may include CCA expertise for the Facilitating Agency for Mopani if the identified institution does not have this competency. CSA may support both Districts in relevant expertise areas.

2.2 At least 12 local institutions in the Mopani and Namakwa Districts are supported to implement integrated climate adaptation responses		
Provide on-going mentoring support (Facilitating Agencies)	0	Budgeted above as part of Facilitating Agency staff time
Visit all Small Grant Recipients quarterly (Facilitating Agencies)	38,095	Travel costs (mileage) - based on quarterly visits to each project by the Facilitating Agency staff
Visit all Small Grant Recipients quarterly (Facilitating Agencies)	19,048	Subsistence, accommodation. For quarterly project site visits. Budgeted at USD 95 per project per quarter; USD 38 accommodation and 2x USD 29 daily per diem)
Support Small Grant Recipients to complete quarterly financial and 6-monthly progress reports and submit to the EE in appropriate formats.	0	Budgeted above as part of Facilitating Agency staff time
Provide feedback and on-going support to Small Grant Recipients	0	Budgeted above as part of Facilitating Agency staff time
Office equipment	4,888	Office equipment (laptop etc.)
Office running costs (telecoms, licensing, rental)	45,714	Telecoms, licensing, rental – USD 476 per District office per month
Admin fee Facilitating Agencies (contribution towards admin, financial and related support)	19,048	Contribution towards admin, financial and related support for each of the Facilitating Agency offices
Component 3: Lessons learned facilitate future scaling up and replication of small grant-financing approaches	**189,000**	
3.1 Training opportunities provided for Small Grant Recipients		
Undertake training needs assessments for each district, based on the needs of the Small Grant Recipients, and commission training	9,523	Facilitating Agencies possibly with support of external consultants, for each district, on-going
Develop training materials and undertake training. Basic CCA, Gender and CC training, financial management are likely subject areas	57,143	EE and Facilitating Agency staff and consultants for training events and material production. Five training sessions in each area over course of the project costing approximately USD 5,714 each.
3.2 Local networks for reducing climate change vulnerability and risk reduction developed, expanded and strengthened		
Convene an annual forum for Small Grant Recipients to share experiences	11,429	One forum in each area in years 1 and 2
Convene two fora over the project lifetime where Mopani and Namakwa Small Grant Recipients, as well as stakeholders from neighbouring and other districts and municipalities, come together.	22,857	Two joint fora that bring all Small Grant Recipients from both areas, as well as stakeholders from neighbouring and other districts and municipalities, together in each of years 3 and 4
Create a social media platform for Small Grant Recipients to share lessons and experiences and provide each other with support	9,905	Set up and maintenance of social media platform, part time of staff member from the EE or one of the Facilitating Agencies. A project website/ Facebook page with informal blogs and a mechanism to upload project outputs is envisaged. Aligned with on-going CDKN programme of work where possible.

Conduct independent learning processes to reflect on implementation and develop insights	26,667	Independent consultants, processes to be undertaken in conjunction with annual learning fora so as to benefit from the opportunity of Small Grant Recipients being together
3.3 Case studies and policy recommendations developed for reflecting on, replicating and scaling up small grant financing approaches		
Capture learnings and produce case studies on local-level best practice and challenges	28,571	EE or Facilitating Agency staff or consultants in years 2, 3 and 4.
Disseminate information on the adaptation actions supported through local and national media channels	0	Co-financed through existing programmes of work
Develop and present project outcomes and relevant policy recommendations at local, national fora	22,905	EE or Facilitating Agency staff or consultants over life time of project. Allocated funds are for the elucidation and production of policy recommendations - attendance at fora, and especially at international fora, would need to be co-financed through other programmes of work.
Establish linkages with tertiary institutions		EE, Facilitating Agencies and NIE to work with their university networks to identify post graduate students who will track the Community Adaptation SGF project as part of their studies
Total Components Cost	**2,056,000**	
Project Execution cost (9.5%)	**195,320**	
	48,762	SSN Project Manager
	56,173	SSN Trust Contracts Office contribution
	14,194	Mopani & Namakwa site visits
	19,048	Project audits
	57,143	Programme M&E
Total Project Cost	**2,251,320**	
Project Management Fee charged by the Implementing Entity (8.5%)	191,362	Project Management Fee charged by the Implementing Entity (8.5%)
Amount of Financing Requested	**2,442,682**	

Implementing Entity budget

Category	Budget notes	Year 1	Year 2	Year 3	Year 4	USD
Management	Staff salaries (or part thereof) for finance, procurement, admin and project management staff	28,705	28,704	28,704	28,704	114,817
Operating costs	Travel, S&T, workshop and catering costs associated with project oversight, governance activities and M&E supervision function	11,960	11,960	11,960	11,960	47,840
Equipment	Costs associated with the provision of equipment to the NIE secretariat including computers and associated peripherals	3,827				3,827
Auditing and consulting services	Costs for external consulting services, notably external audits and other technical support	3,349	3,349	3,349	3,348	13,395
Administration costs	Printing, photocopying, telecoms and other costs related to office operations	2,871	2,871	2,870	2,870	11,482

H. Include a disbursement schedule with time-bound milestones.

	Upon Agreement Signature	End of Year 1	End of Year 2	End of Year 3	End of Year 4	Total (USD)
Schedule Date (Tentative)	November 2014	March 2016	March 2017	March 2018	March 2019	
Project Funds (USD)	85,714	342,855	642,797	662,785	321,849	2,056,000
EE Fee (USD)	8,636	34,544	63,116	34,544	54,480	195,320
NIE Fee (USD)	7,978	31,911	59,828	61,689	29,956	191,362

PART IV: ENDORSEMENT BY GOVERNMENT AND CERTIFICATION BY THE IMPLEMENTING ENTITY

A. Record of endorsement on behalf of the government

Ms Nosipho Ngcaba, *Director General,* *Department of Environmental Affairs*	Date*: July 30 2014*

B. Implementing Entity certification

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans (The National Climate Change Response Policy White Paper, the National Development Plan, South Africa's 2nd National Communication to the UN Framework Convention on Climate Change) and subject to the approval by the Adaptation Fund Board, commit to implementing the project in compliance with the Environmental and Social Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.	
 Dr Mandy Barnett Implementing Entity Coordinator	
Date: *August 1 2014*	Tel. and email: +27 21 7998875; m.barnett@sanbi.org.za
Project Contact Person: Gigi Laidler	
Tel. And Email: +27 21 7998766; g.laidler@sanbi.org.za	

ANNEXES

I. Climate analysis

Annex I.1 Historical trend figures from LTAS Zonal analysis
Annex I.2 Analysis of downscaled climate model results for the areas of Mopani and Namakwa, South Africa, at the district municipality scale, ACDI draft report

II. Vulnerability Analyses

Annex II.1 Vulnerability Assessment Greater Letaba and Greater Giyani Local Municipalities, draft report
Annex II.2 Namakwa Profile Vulnerability Assessment

III. Letters of support

Annex III.1 DEA request of support for the selection of the MDM as a pilot site
Annex III.2 Municipal Manager letter of support of the MDM as a pilot site

IV. Attendance Registers

Annex IV.1 Namakwa stakeholder workshop 13 February 2014
Annex IV.2 Mopani meeting to introduce the Community Adaptation SGF to the MDM 14 February 2014
Annex IV.3 Mopani meeting with MDM executive committee 07 March 2014
Annex IV.4 Mopani proposal development process workshop 03 April 2014
Annex IV.5 Mopani water vulnerability assessment workshop 10 April 2014
Annex IV.6 Mopani disaster management vulnerability assessment workshop 11 April 2014
Annex IV.7 Mopani extension officer vulnerability assessment workshop 14 April 2014
Annex IV.8 Letaba CDWs vulnerability assessment workshop 22 May 2014
Annex IV.9 Giyani CDWs vulnerability assessment workshop 26 May 2014
Annex IV.10 Mopani health vulnerability assessment workshop 28 May 2014
Annex IV.11 Mopani stakeholder workshop 13 June 2014

V. Discussion Document

VI. Community Adaptation Small Grant Facility Project Review, Oversight and Environmental and Social Risk Management Plan

VII. Other supporting documents

Annex VI.1 Technical Note
Annex VI.2 Call for expression of interest and NIE SC Task Team recommendation

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Annex I: Climate analysis

Annex I.1 Historical trend figures from LTAS Zonal analysis[1]

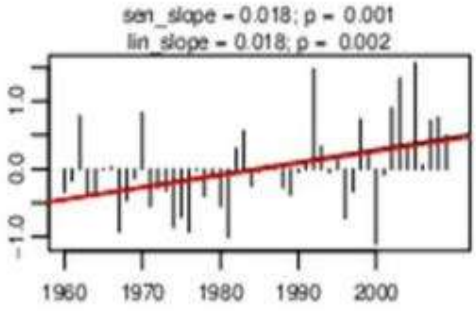

Figure 1: Average annual max temperatures – zone 1 including the Mopani area.

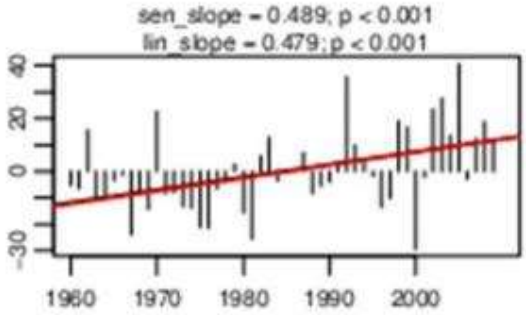

Figure 2: Average annual number of hot days for stations – zone 1 including the Mopani area.

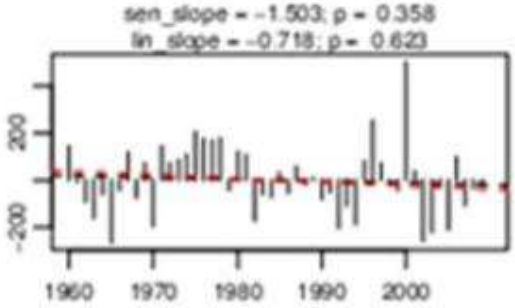

Figure 3: Average annual rainfall – zone 1 including the Mopani area.

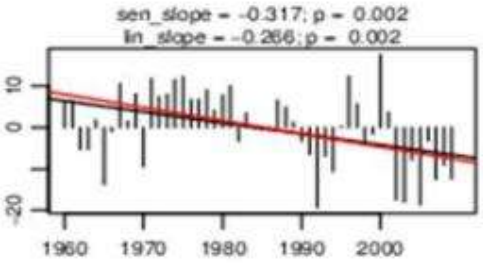

Figure 4: Annual no of rain days – zone 1 including the Mopani area.

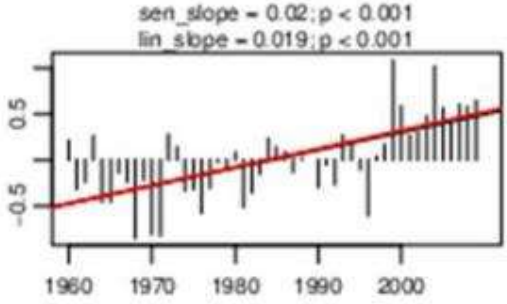

Figure 5: Average annual max temperatures – zone 6 including the Namakwa area.

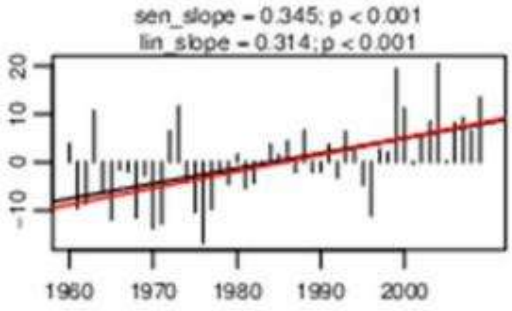

Figure 6: Average annual number of hot days for stations – zone 6 including the Namakwa area.

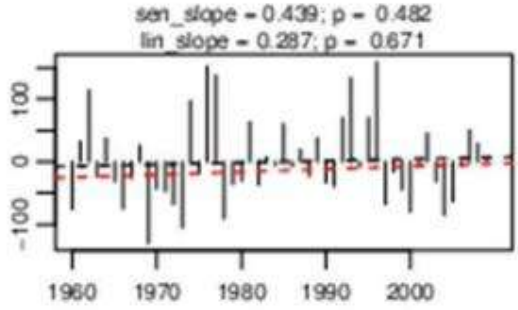

Figure 7: Average annual rainfall – zone 6 including the Namakwa area.

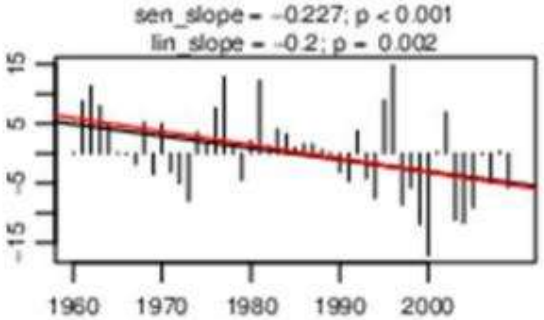

Figure 8: Annual no of rain days- zone 6 including the Namakwa area.

[1] Department of Environmental Affairs, 2013. Long-Term Adaptation Scenarios Research Programme (LTAS) for South Africa. Climate Trends and Scenarios for South Africa. Pretoria, South Africa.

LONG-TERM ADAPTATION SCENARIOS FLAGSHIP RESEARCH PROGRAMME (LTAS)

Analysis of downscaled climate model results for the areas of Mopani and Namakwa, South Africa, at the district municipality scale

African Climate & Development Initiative (ACDI)
University of Cape Town (UCT)

Abridged Technical Report
30 July 2014

Christopher Brodrick*, Muhammad Rahiz and Mark New
*Christopher.Brodrick@uct.ac.za

CONTENTS

LIST OF FIGURES – PLEASE NOTE: Figures are not included in this abridged version, but are included in the full report, available on request from the NIE.

LIST OF ABBREVIATIONS

ACDI	African Climate & Development Initiative
ANN	Annual
CCAM	Conformal-Cubic Atmospheric Model
CGCM	Coupled Global Circulation Model
CSAG	Climate System Analysis Group
DJF	December, January, February (Summer)
ensmed	Median of the model ensemble
ens10	10^{th} percentile of the model ensemble
ens90	90^{th} percentile of the model ensemble
ENSO	El Niño Southern Oscillation
IOD	Indian Ocean Dipole
JJA	June, July, August (Winter)
LTAS	Long-Term Adaptation Scenarios Flagship Research Programme
MAM	March, April, May (Autumn)
RCP4.5	Representative Concentration Pathway, radiative forcing of $4.5W/m^2$
RCP8.5	Representative Concentration Pathway, radiative forcing of $8.5W/m^2$
rnd24	Total precipitation in a 24 hour period
SAHP	South Atlantic High Pressure
SAM	Southern Annual Mode
SON	September, October, November (Spring)
SST	Sea surface temperatures
TC	Tropical cyclone
tmax	Maximum temperature
tmin	Minimum temperature
TTT	Tropical-temperate trough
UCT	University of Cape Town
2020s	2015-2035 (short-term future)
2050s	2040-2060 (medium-term future)
2080s	2075-2095 (long-term future)

ACKNOWLEDGEMENTS

The African Climate & Development Initiative (ACDI) wish to thank the Council for Scientific and Industrial Research (CSIR) for the provision of the Conformal-Cubic Atmospheric Model (CCAM) data, and the Climate System Analysis Group (CSAG) for the provision of the statistically downscaled CSAG data. Thank you to the South African National Biodiversity Institute (SANBI) for providing GIS data.

1. INTRODUCTION

This technical report presents an analysis of downscaled climate model results for the areas of Mopani and Namakwa, South Africa, at the district municipality scale. Future climates are presented for the regions for the short (2020s), medium (2050s) and long (2080s) term futures, as well as for the two emission scenarios, RCP4.5 and RCP8.5.

The climate projection data is visualised by means of graphs and maps. Both regions are summarised – for maximum temperature, minimum temperature, and precipitation – for each time period.

2. EXECUTIVE SUMMARY

The CSAG and CCAM projection results, for both the emission scenarios, and all three of the time periods, can be summarised as follows:

For both regions, it is clear that there is less uncertainty in the temperature projections than the precipitation projections. All approaches show a distinct warming trend, growing stronger towards the end of the 21st Century. In general, there is a tendency for stronger increases in maximum temperatures than for minimum temperatures. The RCP4.5 emission pathway (mitigation) results indicate that extreme warming trends and significant precipitation changes can largely be avoided, especially towards the end of the century.

Many of the projected changes fall within the range of historical natural variability, and – especially in the long-term – the inherent uncertainty is high.

2.1 Mopani

As mentioned above, appreciable warming over the area is projected, in line with the recent historical climatology. In the short-term future, temperature rises will be in the range of 1-2°C, with greater warming in Summer than in the other seasons. The north, and to a lesser extent the west, is projected to warm more than the south, and east. Mid-term sees warming between 1 and 3°C, again more in the west than the east, and particularly in Spring. For the long-term future, warming in the region of between 2 and 5°C is projected, particularly in the south and in Winter, with less warming in the central regions in Autumn. The RCP8.5 emission pathway (no mitigation) results indicate very significant warming in the long-term future – up to 6°C.

Precipitation projections are less clear. In the short-term, a weak annual wetting trend is shown, especially in the east, with more robust evidence of wetting in Autumn. In the Summer and Winter months, however, weak drying is projected, mostly in the north-east and west respectively. In the Autumn of mid-term, the south-east is set to receive slightly more precipitation, whereas in Summer, the north and east are projected to become drier. With the exception of Winter, the long-term future is projected to dry more in the north than the south.

Please refer to Appendices A and B for a full suite of the visualised data for the Mopani region.

2.2 Namakwa

As with the Mopani region, temperature rises in the short-term future will be in the range of 1-2°C, with greater warming in Spring than in the other seasons. For all the seasons, there is a fairly strong warming bias to the north-east. Mid-term sees warming between 1 and 3°C, with greater warming in the east, particularly in Summer. Long-term sees warming between 2 and 5°C – particularly in Winter – with greater warming projected for the east than the west, across the seasons. Warming is generally less pronounced over the coastal areas of the region. That said, however, Namakwa appears to be more at risk of warming – particularly under RCP8.5 – relative to Mopani. The need for mitigation – and following as closely to the RCP4.5 pathway as possible – needs to be stressed.

For short-term precipitation, there is high variability within and between datasets. As with the Mopani region, weak annual wetting is projected, particularly to the east in Autumn, with a drying Summer.

The north-east is set to dry in Autumn, while the south-west is set to wet slightly. Mid-term shows weak wetting in Autumn, particularly in the south-west. In Spring and Summer, however, it is set to dry weakly and moderately respectively, especially in the south-west. In Autumn and Winter of the long-term, weak wetting is projected in the south-west, while weak drying is projected for the south-west in Spring and Summer.

Please refer to Appendices A and B for a full suite of the visualised data for the Mopani region.

3. REGIONAL CLIMATE

Both regions will be affected by water balance changes. Increasing temperature results in higher rates of evaporation, leading to changes in atmospheric water vapour concentrations and water vapour transport (Solomon et al. 2009). This effectively alters the hydrological cycle. Although the effects of this may not necessarily relate to large-scale changes in rainfall amounts and variability, higher evaporation rates will most likely result in decreased surface water – both spatially and temporally – which will impact agriculture in particular. Accordingly, hydrological risks are set to increase, especially under the RCP8.5 pathway, where much greater warming is expected.

3.1 Mopani

3.1.1 Current climate

The Mopani District Municipality falls into the Summer rainfall zone of South Africa. Summers are warm – mean maximum and minimum temperatures in the range of 28-38°C (mean of ~30°C), and 16-22°C (mean of ~19°C) respectively – and wet, with the majority of precipitation falling in mid-Summer. Winters are mild – mean maximum and minimum temperatures are in the region of 19-26°C (mean of ~23°C) and 5-11°C (mean of ~8°C) respectively – and dry.

Annual rainfall in the Mopani district varies between 400 and 900mm, largely as a result of the complex topography. To highlight this, Tzaneen – surrounded by large hills – receives mean annual precipitation of 881mm (SA Explorer – Tzaneen climate, 2014), while Giyani only 421mm (SA Explorer – Giyani climate, 2014). There is large interannual variability, with monthly maximum rainfall sometimes reaching 340mm, in comparison to the usual 50-100 monthly totals (FAO, n.d.) for the Summer months. Causes of this variability are described in Sect. 3.1.2 below.

3.1.2 Regional factors that may affect variations in climate

Southern African mean annual precipitation shows an interannual and quasi-decadal (circa 18-year) time-scale of variability (oscillation). Summer rainfall zones that are governed largely by mesoscale convective activity – such as Mopani – are particularly affected. The oscillation manifests itself by means of nine years of above average rainfall followed by nine years of below average rainfall (Tyson & Preston-Whyte, 2000:113).

Dry spells are characterised by greater spatial variability in precipitation, increased thunderstorm activity, and thus increased hail-fall frequencies. Wet spells are characterised by more even precipitation (Tyson & Preston-Whyte, 2000:113), both in nature and in spatial extent.

Tropical temperate troughs (TTTs) are responsible for much of the Summer rainfall in the region. TTTs usually form when a surface easterly low occurs in conjunction with an upper atmosphere westerly wave (van den Heever et al., 1997). Pohl et al. (2009) found that TTTs are modulated by the El Niño Southern Oscillation (ENSO). During an El Niño phase, atmospheric circulation in the Summer rainfall zone of South Africa is influenced sufficiently to shift rain-inducing processes away from the sub-continent (Pohl et al., 2009). Generally speaking, drought conditions are associated with El Niño. Conversely, during the La Nina phase, rain-inducing processes are enhanced, thus producing wetter than normal conditions, increasing the likelihood of heavy rainfall and flood events. ENSO is therefore responsible for appreciable interannual variability in the Summer rainfall zone of South Africa.

Summer rainfall is also linked to the Indian Ocean sea surface temperatures (SSTs). When the SSTs are anomalously high, dry Summer conditions follow (Rocha & Simmonds, 1997). Conversely, anomalously low SSTs precede wetter conditions. Goddard & Graham (1999) intimate that SST variability in the Pacific Ocean may be positively correlated to SST variability in the Indian Ocean. Hence, it is possible that the ENSO phase is linked to Indian Ocean SSTs.

The Indian Ocean Dipole (IOD) is a mode of interannual variability that also manifests itself through changes in tropical ocean SST (Christensen et al., 2013). Anomalously warmer water in the east of the Indian Ocean results in cooler and drier conditions in the west (and thus, *inter alia*, the Limpopo Province), with the converse producing warmer and wetter conditions.

Climate change will increasingly affect ENSO, which in turn will influence the formation of TTTs, and Indian Ocean SSTs. Accordingly, it is possible that interannual variability in rainfall will increase further in this region. That said, the changes in the variation and spatial pattern of ENSO projected by climate models are very large, which means that there is low confidence in any particular projected change in variability (Christensen et al., 2013).

Related to SST are tropical cyclones (TCs). In recorded history, few TCs have penetrated South Africa. With the mean global increase of SSTs due to climate change, the 26°C isotherm (integral to the formation of TCs) is moving further south (Fitchett & Grab, 2014). Along with increased energy in the global atmospheric system, it is possible that these TCs may contribute towards heavy rainfall and flooding in the eastern parts of the Limpopo province, further exacerbating rainfall variability.

3.2 Namakwa

3.2.1 Current climate

The Namakwa District Municipality is very large – thus a single climate is difficult to characterise. The vast majority of the District falls into the Winter rainfall zone of South Africa, mostly receiving its rainfall from mid-latitude cyclones (cold fronts). It is not uncommon, however, for the extreme east of the District to experience thunderstorm-associated rainfall in the Summer months. Summers are hot – mean maximum and minimum temperatures in the range of 26-45°C (mean of ~30°C) and 12-20°C (mean of 17°C) respectively – and dry. Winters are cool – mean maximum and minimum temperatures are in the region of 10-25°C (mean of 17°C) and -8-12 (mean of 1°C) – and wet in places.

Namakwaland is classified as semi-desert, due to its low precipitation amounts. The mean annual rainfall in the Namakwa district varies between less than 100mm along the coastal belt to between 100 and 250mm inland. Much of Namakwaland is succulent Karoo, which receives low – but more importantly – largely predictable winter rainfall (Desmet & Cowling, 1999). Spatially, the largest factor affecting rainfall is the escarpment. On the coast, Port Nolloth only receives 50mm mean annual precipitation (SA Explorer – Port Nolloth climate, 2014), while just over the escarpment, Nieuwoudtville receives 245mm precipitation (SA Explorer – Nieuwoudtville climate, 2014).

3.2.2 Regional factors that may affect variations in climate

One of the principal modes of atmospheric circulation variability in the Southern Hemisphere (Marshall, 2003) is the Southern Annual Mode (SAM). The SAM describes the latitudinal movement of the westerly wind belt. Changes in this movement drive the intensity and position of mid-latitude cyclones (cold fronts), particularly affecting rainfall variability in the winter rainfall zone of South Africa (and thus, *inter alia*, Namakwaland).

The western interior of South Africa – which incorporates the Namakwa region – receives in excess of 80% of possible sunshine, in both Summer and Winter (Tyson & Preston-Whyte, 2000:82). This pre-disposition to solar radiation makes the region particularly sensitive to increasing temperatures, particularly maximum temperature. As mentioned above, the extreme eastern parts of the District can receive Summer rainfall linked to thunderstorm activity. Because total radiation directly affects cloud-producing weather systems (Tyson & Preston-Whyte, 2000:82), this region may receive increased rainfall from such systems in the Summer months.

In the future, Namakwaland is projected to experience changes in rainfall amounts, as well as increased variability in rainfall (Midgley & Thuiller, 2007). The South Atlantic High Pressure (SAHP) largely drives the Benguela current (Tyson & Preston-Whyte, 2000:178), which has an enormous influence on the climate of Namakwaland. Also linked to the SAHP is the West Coast Trough, which produces widespread rain over the western parts of South Africa, from early Summer to Autumn (Tyson & Preston-Whyte, 2000:201). Under current climate changes, increases in energy to the system may affect the SAHP, thus having a direct effect on the area's climate and particularly rain-producing systems.

As a result of a possibly strengthening SAHP, the frontal systems that provide the majority of Namakwaland with its Winter rainfall are projected to move further south, but also increase in intensity. This may result in fewer rainfall events, but with heavier rainfall during such events. This will further increase the variability of rainfall in the region.

It is important to note that climate models are not always able to accurately capture complex ocean-atmosphere interactions, and how these might change in the future. Many of the drivers of variability mentioned above are complex and there is much uncertainty as to how exactly they will respond to climate change in the future. Downscaling rainfall in particular is still limited by our understanding of these large-scale drivers of variability.

4. DATA

4.1 Statistically downscaled projections – CSAG

A statistical downscaling technique, downscaled to 0.5° by 0.5° resolution, has been applied for temperature and precipitation fields over the regions. This was done for both the RCP emission scenarios, for each one of a suite of ten different CGCMs.

4.2 Dynamically downscaled projections – CCAM

A dynamical downscaling technique, downscaled to 0.5° by 0.5° resolution, has been applied for temperature and precipitation fields over the regions. A three-model suite was used for RCP4.5, whilst a two-model suite was used for RCP8.5. Further CCAM model information, as well as its strengths and weaknesses, can be found in the previous LTAS report: *Climate Trends and Scenarios for South Africa, LTAS Phase 1, Technical Report (no. 1 of 6).*

The complex topography over small distance scales in the regions – particularly Mopani – must be taken into account when interpreting the model results. The downscaled regional models are unable to accurately resolve large changes in topography over small distance scales.

By way of example: In theory, Tzaneen (mean annual rainfall 881mm) and Giyani (mean annual rainfall 421mm) may fall into the same grid cell at the resolution used in this project (2.5 x 2.5°). Therefore, both sub-regions would share the same grid cell characteristics, whereas in the reality, their rainfall is rather different, due to the topography. This must be borne in mind when assessing the spatial results.

5. RESULTS

5.1 Mopani

5.1.1 2020s

5.1.1.1 Temperature

Annually, maximum temperature is projected to increase by between 1 and 2°C, and minimum temperature by 1°C. For maximum temperature, Summer is projected to warm more significantly than

the other seasons, especially in the north and west. The west is projected to experience greater maximum temperatures than the east.

5.1.1.2 Precipitation

Annually, a weak wetting trend is projected, much more so in the east. This is particularly evident in Autumn, which shows a strong trend of wetting, but is also accompanied by high variability within and between datasets. Summer and Winter, however, display weak drying trends, particularly in the north-east and west respectively.

5.1.2 2050s

5.1.2.1 Temperature

On an annual basis, maximum temperature is projected to increase by between 1 and 3°C, and minimum temperature by 2°C. For maximum temperature, Summer is projected to warm more significantly than the other seasons, particularly in the west, while for minimum temperature, Winter is projected to warm less significantly. Furthermore, both annually and in Spring, minimum temperature is set to rise more in the west than in the east. It is worth noting that for maximum temperature, CCAM RCP 8.5 dataset displays a large anomaly range, as well as greater absolute magnitude of anomaly.

5.1.2.2 Precipitation

There is no appreciable annual trend for precipitation. In Autumn, a moderate wetting trend is projected, particularly in the south-east, whereas in Spring and Summer there exists a weak drying trend, in the case of the latter, to the north and east. Winter shows very high variability between the datasets, some showing wetting and others drying.

5.1.3 2080s

5.1.3.1 Temperature

Annually, maximum temperature is projected to increase by between 2 and 5°C and minimum temperature by between 2 and 4°C. For the 2080s, the datasets begin to diverge appreciably from one another, with large anomaly ranges. In Winter, minimum temperature is projected to rise more significantly than the other seasons, particularly in the south. The central part of the region is projected to experience reduced warming in Autumn.

5.1.3.2 Precipitation

A weak drying trend is projected, on an annual basis. Summer, Spring and Autumn are projected to see more drying in the north than the south. Winter is set to dry moderately, with low variability between the datasets.

5.2 Namakwa

5.2.1 2020s

5.2.1.1 Temperature

Annually, maximum temperature is projected to increase by between 1 and 2°C, and minimum temperature by 1°C. For maximum temperature, Summer, Winter and Spring show a warming bias to the north-east; for minimum temperature, this holds true for all the seasons. In Autumn, maximum temperature is projected to rise less significantly than the other seasons, while in Spring, minimum temperature is projected to rise more significantly.

5.2.1.2 Precipitation

A weak wetting trend is projected on an annual basis, and particularly in the east in Autumn, where there is a fairly strong trend. Furthermore, the north east is set to dry in Autumn, while the south-west is projected to wet slightly.

In Summer, rainfall is projected to decrease slightly in some projections, while in others, increase slightly. It must be noted, however, that there is high variability within and between these datasets.

5.2.2 2050s

5.2.2.1 Temperature

On an annual basis, maximum temperature is projected to increase by between 1 and 3°C, and minimum temperature by 2°C. For both maximum and minimum temperature, Summer is projected to warm more significantly than the other seasons. There is a fairly strong trend of increased warming in the east, and to a lesser extent north-east, in all the seasons.

5.2.2.2 Precipitation

Annually, a very weak wetting trend is projected, particularly in Autumn and Winter, and in the south-west. In Spring and Summer, however, it is set to dry weakly and moderately respectively, especially in the south-west. Furthermore, there is low variability between the datasets, indicating higher confidence.

5.2.3 2080s

5.2.3.1 Temperature

An increase of between 2 and 5°C in maximum temperature, and between 2 and 4°C in minimum temperature, is projected on an annual basis, with a fairly strong bias towards the east. For both maximum and minimum temperature, the RCP 8.5 datasets both display a large anomaly range, as well as greater absolute magnitudes of anomaly. For maximum temperature, Winter is projected to warm more significantly than the other seasons. For both Winter and Summer, minimum temperatures are set to rise more significantly than the other seasons.

5.2.3.2 Precipitation

There is no appreciable trend in annual precipitation. In Autumn and Winter, however, weak wetting is projected in the south-west, while weak drying is projected for the south-west in Spring and Summer.

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APPENDIX A: TIME-SERIES AND BOXPLOTS

A1 Interpretation

Bar graphs

For a given scenario and dataset:
The first column represents the historical period.
The second to forth columns represent the 2020s, 2050s and 2080s, respectively. The bars display the greatest anomaly within the dataset. The anomaly represents the range between the ensemble maximum minus the historical mean, and the ensemble minimum minus the historical mean. Therefore, this gives an indication of the inherent uncertainty in each case.

Time-series (line graphs)

For a given scenario and dataset:
The area making up each 'line' displays the range of the anomaly within the dataset. The anomaly represents the range between the ensemble maximum minus the historical mean, and the ensemble minimum minus the historical mean. Therefore, this gives an indication of the inherent uncertainty in each case.
The two dashed lines in the first column (historical period) indicate two standard deviations above- and below the models' mean, respectively.

Temperature anomaly in °C and precipitation anomaly is % change.

Note: For the Winter months (core JJA), the CCAM raw data was populated almost exclusively with zeroes. It appears as if there is a fault of sorts in the raw data. Please interpret the CCAM spatial plots for this period accordingly.

Annex II: Vulnerability Analyses

Annex II.1: Vulnerability Assessment Greater Letaba and Greater Giyani Local Municipalities

Vulnerability Assessment Greater Letaba and Greater Giyani Local Municipalities

July 2014

Prepared by Katinka Waagsaether

Table of Contents

1. INTRODUCTION & BACKGROUND

In its most simple terms vulnerability can be defined as “The degree to which human and environmental systems are likely to experience harm due to perturbation or stress” (Luers et al, 2003: 255). In the context of climate change, for which evidence is now unequivocal from the current warming trends of the climate system (IPCC, 2013), the understanding of how human and environmental systems are likely to experience harm due to a changing climate has become increasingly important. This is because in order to respond to impacts it is important to understand the dynamics that shape the impacts of climate change, as well as the current ability to respond. This will not only work to ensure that the responses that are developed for climate change are as appropriate as possible, it will also work to ensure that money and efforts are focused on the sectors and activities that need it the most.

The approaches to assessing vulnerability are many and they vary widely. As such they also provide very different insights, from an understanding of the extent to which Africa is more vulnerable to climate change than Europe, to an understanding of the degree to which tomato production in Limpopo is vulnerable to climate change. In choosing a vulnerability assessment approach it is therefore important to consider the goal of the assessment, the level of analysis and the data that is available.

This vulnerability assessment set out to create an understanding of the local dynamics shaping livelihoods and sectors in Greater Letaba Local Municipality (Letaba) and Greater Giyani Local Municipality (Giyani), and how climate change might impact these. The background for the assessment was to provide the foundation on which priority sectors for climate change adaptation could be chosen, and to ensure that the climate change adaptation responses are based on a sound understanding of the local dynamics and the needs as identified by local stakeholders.

Greater Letaba and Greater Giyani Local Municipalities

Figure 1: Left: Illustrating the location of Mopani District Municipality in South Africa. **Right:** Outlining the five local municipalities in Mopani District Municipality.

Letaba and Giyani are located in the north eastern part of South Africa, forming two out of five local municipalities in Mopani District Municipality in the Limpopo Province. The area falls within the summer rainfall region of South Africa, where the majority of rainfall falls in the period October through March. Rainfall often comes in the form of convection thunderstorms, and can vary significantly at the inter-decadal scale due to the influence of El Nino Southern Oscillation thunderstorms (Davies et al, 2010). The annual average rainfall for the Letaba Catchment, within which the Mopani District is located, is 612 mm (MDM, 2010). But there is a west - east rainfall gradient, with the mountainous areas of the west receiving around 2000 mm a year and the dryer low veld areas in the east receiving around 400 mm a year (MDM, 2010). Frost is a rare occurrence in Mopani District, and annual average temperatures also show a slight west-east gradient, with an average of 21°C in the Mountainous areas in the west and an average of 25°C in the dry low veld areas in the east (MDM, 2010). As reflected in the rainfall and temperatures gradients landscapes vary greatly, from the lush mountainous areas of western Letaba to the plains and lowlands of eastern Giyani.

While population size is relatively similar in the two local municipalities, 212 701 in Letaba and 244 217 in Giyani, densities are a lot higher in Letaba, whose total land area is 1 891 km^2 versus Giyani's 4 172 km^2. Under the Apartheid Regime, large areas of the Mopani District was part of the so called Gazankulu and Lebowa "homelands", and a lot of the land is today held in trust for tribal and community authorities (MDM, 2008). Accordingly, traditional authorities still play an important role in decisions around land made available for economic purposes or to individuals for settlements (MDM, 2008). Land ownership is still a contentious issue in Giyani and Letaba, and while only 186 km^2 of Giyani is currently subjected to claims (GGLM, 2013), as much as 48% of Letaba's total land area is subjected to land claims (GLLM, 2013).

Key economic sectors in Giyani, both formal and informal, include: the public sector (government services); agriculture (maize, vegetables, tomatoes, beef); retail and services; transport (mainly taxi and bus industry); and tourism (MDM, 2008). Agriculture is the backbone of the local economy of Giyani, and there are vast areas of arable land and irrigation schemes (GGLM, 2013). Yet agricultural products have recently been found to undergo serious decline due to drought and shortage of water availability (GGLM, 2013).

In Letaba key sectors include: public sector (government services); agriculture, forestry and fishing; wholesale, retail trade, catering and accommodation; transport and communication; and finance and business services (GLLM, 2013). Giyani has the lowest employment rate at 39.6% (GGLM, 2013), versus Letaba where 58.8% are employed (GL, 2013). Agriculture is one of the major employers in Letaba, with large areas of moderate arable land, much of which is currently under cultivation, mainly located in the central parts of the municipality (GLLM, 2013). Commercial farming products mainly comprise mangoes, citrus and avocadoes, and the municipality is also the location for the largest tomato farm in Southern Africa, ZZ2. The Northern and North Western parts of Letaba feature marginal potential arable and non-arable land, while forestry plantations are located in the southern parts of the municipality (GLLM, 2013).

Scattered villages and limited infrastructure makes service delivery challenging for Letaba and Giyani. The role out of sanitation for all areas of the local municipalities is progressing, yet lack of access to basic sanitation is still a major problem that leads to environmental and health challenges in both rural and urban areas (MDM, 2008). In Letaba 12% have access to flush toilets, while the majority, 69%, have pit toilets and 18.6% do not have access to any toilet system (Letaba, 2013). While the most recent statistics for Giyani (Census 2011) are not available, it can be expected that sanitation access has improved over the last few years the 2007 Census which showed that 54.9% had no access to toilet systems (GGLM, 2013). Refuse removal still has a big backlog in both municipalities, with removal generally being focused on urban areas. In Letaba only 4 out of 80 villages have access to municipal refuse removal (GLLM, 2013), and in Giyani only 13% of households have access to municipal removals (GGLM, 2013). For areas that do not have access to municipal removals, households generally use communal dumps or their own dumps. Access to electricity on the other hand is generally high, 91% in Letaba and 81% in Giyani[2] (GLLM, 2013; GGLM, 2013).

Water is a challenge across both Letaba and Giyani. Both areas are characterised by low rainfall, especially in the low lying areas of Giyani, and there is stiff competition for water with agriculture consuming around 70% of the water in Mopani District Municipality (MDM, 2008). In Letaba communities often face situations where they have to use contaminated water from contaminated natural sources, leading to spread of for example bilharzias disease (GGLM, 2013). The majority of households access piped water, 87% of households in Giyani and 91% of households in Letaba, though the majority of these are communal taps (GGLM, 2013; GLLM, 2013 – based on StatsSA 2011 Census). This means that accessing water is a time consuming and strenuous task for many people in Giyani and Letaba.

2. LITERATURE REVIEW

In a spatially focused study, Chapter Four of the Technical Report 2013/14 of the Financial and Fiscal Commission (Turpie and Visser, 2012) rates the climate change vulnerability of local municipalities in South Africa. The assessment considers vulnerability in terms of exposure, sensitivity and adaptive capacity, using an index based approach. Out of the 226 South African local municipalities, 20 are

[2] Note that the statistics only show access to energy for lighting, and do not reflect the energy used for cooking or heating

rated at five, the highest vulnerability score. Two of these local municipalities are Greater Letaba Local Municipality (Letaba) and Greater Giyani Local Municipality (Giyani). The vulnerability assessment finds that rural municipalities are generally more vulnerable than other types of municipalities, and that rural municipalities in former homeland areas are particularly vulnerable (Turpie and Visser, 2012). The most vulnerable areas were also found to generally contain most of the country's rural poor, which can in turn be linked to the lack of socio-economic capacity seen as an important part of adaptive capacity (Turpier and Visser, 2012). Letaba and Giyani fit these generalisations, being located in former homeland areas and featuring very low income levels, with around 90% of the population in both Letaba and Giyani earning less than R800 a month (MDM, 2006-2013). The municipal vulnerability assessment also highlights that high exposure in parts of the north eastern parts of the country can be contributed to changes in temperature, rainfall and increased exposure to malaria (Turpier and Visser, 2012).

In South Africa health risks likely to be aggravated by climate change include both vector-born diseases such as malaria, and communicable and non-communicable diseases (DEA, 2013b). Infections carried by vectors, such as malaria, are climate sensitive, and a recent study done in Limpopo found that temperatures greatly influence the incidence of disease (Thompson et al, 2012). Focused on children's health, the study found that unit increases in temperatures led to over 100 percent increase in incidents of infections such as malaria and diarrhea (Thompson et al, 2012).

Malnutrition is also highlighted as one of the key climate related health risks in South Africa, with strong linkages to the water and agriculture sectors (DEA, 2013b). Climate change is expected to affect food systems, and lead to food shortages and increasing food prices (DEA, 2013b). The IPCC (2014) expects that rising food prices resulting from reduced agricultural production is likely to have the greatest effect on the wage-labor dependent poor households in Africa, who are generally net buyers of food. In turn, compromised access to food can ultimately lead to malnutrition. As was found by Turpie and Visser in the Technical Report 2013/14 of the Financial and Fiscal Commission (2012), a generally warmer and drier climate in South Africa is expected to largely have negative effects on South African agriculture and food security. Women from poor households can be seen as particularly vulnerable in this regard, as they tend to be the shock absorbers during food crisis, skipping meals to ensure that their family members do not go hungry (Groenmeyer, 2013). Women have also been found to spend more of their income on food purchases than men, and are therefore set to be affected disproportionally by fall in agricultural production (Maponya and Mpandeli, 2012a).

The issue of food security, with its strong links to agricultural production and access to water resources, can thus be seen as a critical issue when addressing climate change impacts in Giyani and Letaba. The Limpopo Province has been found to be particularly vulnerable to climate variability and change, due to agricultural dependence on climatic conditions, especially on the quality of the rainy season (Maponya and Mpandeli, 2012a). This vulnerability is particularly for dry-land producers, as irrigated production is generally less vulnerable to climatic conditions (Maponya and Mpandeli, 2012b). A study looking at tomato production in Limpopo found there to be a correlation between temperature and tomato production, and noted that for farmers without advanced technology and good modern agricultural practices climate change could experience negative impacts on tomato yields (Tshiala and Olwoch, 2010).

Limpopo is one of the poorest provinces in the country (Maponya and Mpandeli, 2012b), and climate change impacts on agriculture will take place in the context of developmental stresses, including poverty and unemployment (Maponya and Mpandeli, 2012a). As was highlighted by Disaster Risk Assessments conducted for Giayni and Letaba (NETGroup South Africa, 2012a; NETGroup South Africa, 2012b) key items contributing to the current vulnerability status of communities include poverty, health, water and road infrastructure. This reflects how developmental issues, the lack of economic development and basic services, make communities in Letaba and Giyani more vulnerable to disaster. Accordingly, the Disaster Risk Assessments propose the implementation of poverty alleviation programmes as a key means to improve community resilience to deal with disaster. Key priority threats that communities in Letaba and Giyani were found to be vulnerable to include fires, drought, floods, hazardous material, deforestation, epidemics/disease, water pollution, dam failure, agricultural disease, sand mining and extreme weather (NETGroup South Africa, 2012a; NETGroup South Africa, 2012b). Current disaster threats thus include a combination of climatic and human induced threats. Proposed responses, additionally to poverty alleviation, include a number of precautionary responses: precautionary and proactive measures to deal with veld fires; drought

management practices, farm management practices to avoid spreading of epidemics and sustainable farm management; and early warning systems and information dissemination systems (NETGroup South Africa, 2012a; NETGroup South Africa, 2012b).

While there is some understanding of the dynamics that shape the current vulnerability of communities and people in Giyani and Letaba, this research will provide an in-depth understanding of local vulnerabilities and of vulnerability to climate change more specifically. It will expand on the health and agricultural focused climate change research already conducted in the Limpopo province, and provide a broader yet more spatially focused picture of climate change impacts and vulnerabilities.

3. THEORETICAL FRAMEWORK AND METHODOLOGY

The vulnerability analysis was built around the understanding of vulnerability as a result of potential impacts and adaptive capacity, as outlined in figure 2 below.

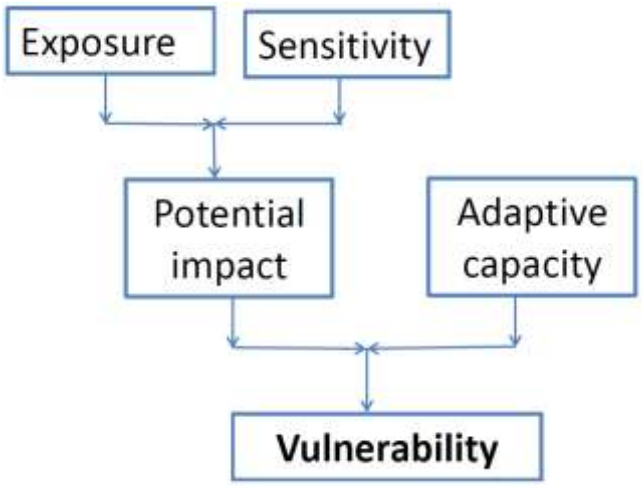

Figure 2: Outline of vulnerability (based on outline in GIZ, 2011)

For the purpose of this assessment the concepts above are defined as follows:

- **Exposure:** The degree of stress a system is subjected to.
- **Stressor**: Events and trends, often not climate-related, which have an important effect on the system exposed and can increase vulnerability to climate-related risk (IPCC, 2014).
- **Sensitivity**: The degree to which a system or species is affected, either adversely or beneficially, by stress.
- **Impacts:** Effects on lives, livelihoods, health status, ecosystems, economic, social and cultural assets, services (including environmental), and infrastructure (IPCC, 2014).
- **Adaptive capacity**: The ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or to respond to consequences (IPCC, 2014).

This vulnerability assessment is grounded in a participatory approach, with the information for analysis being gathered through a number of workshops conducted with stakeholders from Letaba and Giyani. Through participatory workshops stakeholders were asked to assess local vulnerability by using the above concepts to various extents.

The workshops were based on the adaptation planning cycle, where understanding of current and future vulnerability provides the foundation for climate change adaptation planning. This means that, an important first step is to understand current vulnerability. As people live and work in multi-stressor environments, and are constantly dealing with climatic as well as other stressors, this analysis focused on vulnerability to multiple stressors, including climatic, socio-economic and political.

Having built that foundation, understanding some of the dynamics of the present, the next step was to assess vulnerability to projected climate change. Only with that understanding of current vulnerability and vulnerability to future climate change could one identify appropriate adaptation responses, which further work to build an understanding of relevant sensitivities and the adaptive capacities that are required to create more resilient communities in the face of climate change.

Two different methodological approaches were used for these workshops, a livelihoods and a sectoral approach. These two approaches are seen as providing complimentary yet somewhat differential information. The two approaches are outlined in more detail below.

Livelihoods approach

Number of workshops:	Two, one in Letaba and one in Giyani
Participants targeted:	Community Development Workers (CDWs) [3] from Letaba and Giyani
Workshop participants:	28 at Letaba[4]
	22 at Giyani

The livelihoods workshops were grounded in the definition of livelihoods as the entitlements and assets to which people have access (IPCC, 2014). Such assets can be categorized as human, social, natural, physical, or financial (IPCC, 2014). By identifying the main livelihood activities, the challenges facing those activities and the underlying causes and possible solutions to those challenges, it was possible to build some understanding of not only the activities but also the capabilities and assets that livelihoods in Letaba and Giyani are comprised of.

Accordingly the workshops had the following three main steps:

- Outlining the main activities from which people in Letaba and Giyani currently make a living, and rate the most important of those in terms of the number of people making a living from that activity.
- Creating an understanding of the main stressors that people currently face in conducting those activities, the underlying causes of these challenges and the possible solutions to deal with the stressors.
- Exploring how climate change might impact the activities through which people make a living.

While step one was conducted in plenary the workshop, participants worked through step two and three in groups, and the findings of each group was then shared back to plenary. In the workshops stressors were referred to as challenges, in order for it to be easier for the group to relate to.

Sectoral approach

Number of workshops:	Four, at Municipal venues in Giyani and Tzaneen	
Sectors targeted:	Agriculture, water, health and disaster management	
Participants targeted:	Agriculture:	Extension officers
	Water:	Water supply and waste management practitioners
	Health:	Environmental health practitioners
	Disaster management:	Municipal officials working in disaster management
Workshop participants:	Agriculture:	11
	Water:	12
	Health:	17
	Disaster management:	15

The approach of the sectoral workshops was developed based on the methodologies developed by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH (2011) and UK Climate Impacts Programme (UKCIP) (2009). While based on the systematic step by step approaches outlined by GIZ and UKCIP, it was developed to fit the six hours' time frame of each workshop and the fact that to the large majority of participants climate change was a new theme altogether.

[3] For the Letaba Livelihoods Workshop the Local Municipality also invited community representatives from the environmental projects, and due to a low turnout from CDWs these project representatives made up the majority of participants. Though not the initial intention, this still provided an opportunity to get further insights from community members across Letaba.

[4] While 28 people signed up on the attendance register for the workshop, it is important to note that there were only on average between 15 and 20 people participating throughout the day.

The methodology was focused on the following three main steps:

1) Assessing vulnerability to current stress

Participants were asked to assess the vulnerability of key systems that they work with in their sector, guided by a table with the following headings:

Table 1: Table used in group work on current vulnerability

Exposure (stressor: climatic and other)	System/ activity	Impacts	Consequences	Current sensitivity	Current adaptive capacity

2) Assessing vulnerability to future stress

The participants were presented with an overview of the climate change projections for the Mopani area, together with historical trends. Based on the main messages that came out from the historical trends and the projections, they were then asked to go back to the vulnerability lens, and look at how the systems they work with are vulnerable to climate change.

Table 2: Table used for group work on vulnerability to climate change

Exposure (climate change trends)	System/ activity	Impacts	Consequences	Current sensitivity	Current adaptive capacity

3) Identifying climate change adaptation responses

Having developed some understanding of the current vulnerabilities, and vulnerabilities to future stress, the groups could start exploring climate change adaptation responses. The groups were asked to take the flipcharts on which they had outlined the vulnerability to climate change, and identify possible responses to deal with each of the identified exposures, the climate change trends, taking the possible impacts and consequences into account.

Workshop participants worked in groups throughout the day. The workshop process was such that for each step the participants were given a short contextual presentation, followed by an explanation of the group work that would follow.

Climate change projections and observed trends used for livelihoods and sectoral approaches

An important component of both the livelihoods and sectoral approach was the presentation of climate change trends. The trends presented at the workshops were based on the Long Term Adaptation Scenario (LTAS) report on Climate trends and scenarios (DEA, 2013a). Due to the limited experience of workshop participants in interpreting climate information, there was focus on making the message as simple yet robust as possible. Accordingly the message was based on both the historical trends and the projections outlined in the LTAS report. For the initial workshops the following main messages, referred to as climate change trends, were communicated, following an outline of historical trends, projections and related uncertainties:

Increasing temperatures:

- Increase in average temperatures
- Increase in the number of extremely warm days

Uncertainty in rainfall:

- Unpredictable change in annual average
- Less frequent but **more intense** rainfall events
- Longer **dry spells** in-between

These were amended and simplified somewhat for the two livelihoods workshops:

- ***Increase in number of extremely hot days***
- ***Increase in average temperatures***
- ***More intense heavy rainfall events***

Importantly, the communication around these climate change trends was that there is a lot of uncertainty related to future projections, both in terms of the Global Circulation Models and the future trajectory of greenhouse gas emissions. The fact that there is more certainty relating to the temperature trends than to the rainfall trends was also communicated.

Methodological challenges

The six hour time frame of each workshop limited the extent to which time could be spent on collectively understanding and exploring all the climate change related concepts, and the issue of climate change itself. It was therefore somewhat challenging to ensure that all the concepts were understood correctly, and this had some impact on the quality of the data collected. In the sectoral workshops sensitivity turned out to be a particularly challenging concept, while current adaptive capacity was often confused with desired adaptive capacity. The differentiation between impacts and consequences was also challenging for some participants. These challenges are therefore reflected in the differential information analysed below for the different sectors.

A number of different languages and dialects are spoken across Letaba and Giyani, including Northern Sotho, Tsonga and Afrikaans. English provided a common language for the workshops, but some time was taken to explore whether there are any words for vulnerability in Northern Sotho, Tsonga or Afrikaans. The difficulty faced in finding and agreeing on translations reflects the challenges related to working with diverse groups with various mother tongues.

At the livelihoods workshop in Letaba language was a challenge, as it turned out that participants were nor comfortable to communicate in English. While co-facilitators were able to provide translation, this proved challenging and time consuming. Furthermore, some workshop participants spoke a difficult dialect that made it somewhat challenging for the co-facilitators to translate.

This vulnerability analysis is purely based on the input of the 111 stakeholders from across Letaba and Giyani participating in the workshops, and it is therefore important to note that the information gathered is based on the subjective perception of stressors, impacts etc. of the stakeholders.

4. ASSESSING THE MULTIPLE FACTORS SHAPING CURRENT VULNERABILITY

In order to understand vulnerability to climate change an important first step is to create an understanding of current vulnerability, as the present challenges and dynamics are the foundation for future vulnerability. Given the multi-stressor environment that people live and work in, it is important to understand the various dynamics, be it climatic, social, economic or political, that shape people's current vulnerability. This section looks at current vulnerability by assessing the different stressors that are currently impacting livelihoods, and expands on this by taking a closer look at the exposure, impacts and adaptive capacity of some of the main sectors, including agriculture, water, health and disaster management. The information for each sector varied somewhat, as the extent to which the groups understood and fully engaged with various aspects differed to some extent. Furthermore, for some sectors breaking down the different concepts and making linkages was more complicated than for other.

4.1 Livelihoods

This section focuses on outlining the most important income generating activities practiced in Letaba and Giyani, and the stressors that people are currently faced with in carrying out these activities. The aim of this focus is to create an understanding of livelihoods in Letaba and Giyani, and the type of stressors that currently make them vulnerable.

The list below provides an overview of the income generating activities practiced across Letaba and Giyani, as outlined by participants at the two livelihoods workshops. The relative importance of the different activities, in terms of the perceived number of people making a living from that activity, is indicated by the sequence of the activities, with the most important, hawkers, listed first and the less

important activities towards the end[5]. As can be observed in the list below the most important livelihood activities include hawking, small-scale farming, commercial farming and the subsequent need for farm workers, and the running of a large variety of small businesses and cooperatives. Agriculture, as well as the sale of agricultural products and other products, and innovation through the set-up and running of small businesses can therefore be seen as central to livelihoods in Letaba and Giyani.

Overview of the most important income generating activities practiced in Letaba and Giyani:

- **Hawkers[6]**
- **Small-scale crop and livestock farming**: (Beans, potatoes, green pepper, tomatoes, banana, apples, cattle, pigs, chickens and goats)
- **Commercial farming/Farm workers** (Crop farming, livestock (poultry))
- **Small scale businesses/cooperatives:**
  - ✓ *Arts and crafts*
  - ✓ *Sewing*
  - ✓ *Making and selling shoes*
  - ✓ *Baking (bread, cookies, scones etc)*
  - ✓ *Making and selling peanut butter*
  - ✓ *Catering and decoration (for weddings etc)*
  - ✓ *Buy goods i.e. window and sell it to get profit*
  - ✓ *Brick making*
  - ✓ *Collect sand from river and sell to the local community for house building*
  - ✓ *Welding (Door frames, window frames, gates, burglar doors)*
  - ✓ *Hair dressing*
  - ✓ *Washing cars*
  - ✓ *Giving cash loans at an interest*
  - ✓ *Selling water from boreholes*
  - ✓ *Cash for scrap*
  - ✓ *Waste recycling*
- **Office work** (Schools, hospitals and private companies)
- **Social grants**
- **Funeral parlours**
- **Taxi/Bus workers**
- **Expanded Public works Programme** (Street maintenance, closing dongas)
- **Domestic workers**
- **Shop keepers**
- **Construction work**, skilled and or temporary
- **Collection, processing and sale of natural resources**
  - ✓ Making and selling beer from Amarula or traditional beer from Sorghum
  - ✓ Collecting wood in the wild and transport it to buyers using donkey carts
  - ✓ Pick and sell Mopani worms
- **Driving schools**
- **Roadside mechanics**
- **Goods transportation**
- **Illegal mining**

These livelihood activities are under stress due to a number of factors, the majority of which have social, economic or political linkages that shape the degree to which the livelihoods of people in Letaba and Giyani are currently vulnerable. Workshop participants focused a lot on agricultural activities, including commercial and small-scale crop and livestock farming, with a lot of focus on climatic stressors as highlighted in red in the table below.

[5] This sequence is based on the perceptions of workshop participants at the Letaba and Giyani livelihoods workshops.
[6] Hawker refers to a vendor of products that can easily be transported, and hawkers generally sell their products in formal or informal markets or along the roadside. Their products can be items they have made or grown themselves, but it is often also products, commonly agricultural products, that they have bought in order to sell on.

Table 3: Stressors facing agriculture, and their causes and possible solutions, with climate related stressors highlighted in red.

Income generating activity	Stressors	Causes	Solutions
Commercial farming/farm workers	The seasonality of farming reduces income and encourages retrenchment	Some crops are ploughed seasonally; some are for winter (merepa) whereas some are for summer, e.g mangoes, mafela, leach	Reduce monoculture: They must plough different crops during the different seasons to reduce lack of jobs during certain times of the year
Small-scale crop farming	There is a problem of accessing fertilizers, tools and machinery	There is no money	To collect leaves, dead plants to make compost/ There is a need for equipment to use in the farm/ Need support to make fences/ Need herbicides to kill insects on plants
	Lack of knowledge about farming	There is a lack of workers to support farming activities	Farmers need to work with fellow farmers/ There is need to educate people about farming
	Drought - kills crops	Drought is caused by lack of rainfall	There is a need for water, need boreholes. Can use waste water to irrigate crops
	More rain, more insects arise on the crops and they end up rotten or dead	Climate change	Limit the burning of hazardous waste that disturbs the atmosphere
	Floods - Plants die, fertile soil is washed away – leads to reduced income		
	Extremely sunny (hot) - some crops cannot survive, workers cannot be physically active – leads to low production and reduced income		
Small-scale livestock farming	Drought	Climate change	
	Floods		
	Overgrazing, overstocking/ food		Feed lot and abattoir (value addition)
	Stock theft	Unemployment, criminal justice system not effective	Tighten the criminal justice system
	Foot and Mouth Disease	Proximity to Kruger National Park, damage to redline and other fences	Refurbishment of fences
	Markets	Lack of marketing skills	Skills development

Beyond the agriculture focus, workshop participants chose to focus on hawkers, small businesses and cooperatives, domestic workers, funeral parlours, taxi and bus drivers and social grants, and the details of stressors, causes and possible solutions are outlined in the table below. The table shows how climate related stressors are not seen as impacting these activities in the present.

Table 4: Stressors facing various income generating activities, and their causes and possible solutions.

Income generating activity	Stressors	Causes	Solutions
Hawkers	No proper suppliers Low profit Fruits and Veg rotting Transporting- stock Mushrooming – no consistency	They are not organised Selling same goods Lack of storage Pricing high Selling same goods Lack of by- laws	Hawkers association Cool storage- municipality Grouping- club- rotation Market stalls Law enforcement
Small scale businesses/ cooperatives	Cost of transportation High competition/ no diversity Marketing Space	Being far from market : cost of fuel e.g. petrol, diesel, oil Lack of business knowledge Lack of marketing skills No market stalls	Establishment of local market Diversity of products Skill development Development of market stalls by municipality
Domestic workers	Low payment Long working hours	They are not properly organised Workers are often illiterate Lack of information on labour acts	Proper training needed
Funeral parlour	Low payment No contracts	Workers are often illiterate Work is casual / seasonal	Should be registered Permanent position
Taxi/ Bus drivers	Roads are not accessible Low payment	Lack of roads maintenance High cost of fuel	Provision of good roads/services Provision of subsidy
Social grants	High dependency rate (74%) Misuse of grants Teenage pregnancy Fraud (illegal airtime, loan sharks) Loans and gambling	Poverty and unemployment Peer pressure Social grant system poor (poor technological system and human element) Grant money is little Cost of living	Introduction of life skills in schools Creation of sustainable jobs Tighten the system and to link the social grant system to Home Affairs Employment Increment of grant

Below is a summary of the main stressors currently affecting people relying on these income generating activities, with climate related challenges highlighted in red. Non-climate related stress is much more common than climate related stress.

- *Transport costs/ high costs of fuel*
- *Badly maintained roads*
- *Lack of organized labour/ associations*
- *Knowledge of workers' rights*
- *Knowledge/skills*
- *Lack of stalls/ storage facilities*
- *Lack of access to products*
- *Drought*
- *Heavy rain*
- *Extreme heat*
- *Water shortages*
- *Overgrazing/overstocking*
- *Stock theft*
- *Foot and Mouth Disease*

When analaysing the underlying causes of stress through the lens of livelihoods assets, it can be found that these livelihood activities are largely vulnerable to stress due to limited access to livelihoods related assets. The table below highlights the links between the most important livelihood activities and the assets people lack in dealing with stressors faced in that activity.

Table 5: Linking livelihood activities with the livelihood assets that are currently limited or lacking.

	Human assets: skills, knowledge and info, ability to work, health	**Natural assets:** land, water, wildlife, biodiversity, environment	**Financial assets:** savings, credit, remittances, pensions	**Physical assets:** transport, shelter, water, energy	**Social assets:** networks, groups, trust, access to institutions
Hawkers			**X**	**X**	**X**
Small-scale crop & livestock farming	**X**	**X**	**X**		**X**
Small businesses/ cooperatives	**X**			**X**	

As illustrated in the analysis of income generating activities and some of the stressors faced in making a living from these activities, livelihoods in Letaba and Giyani can be considered vulnerable in that they have limited financial, physical, human, natural or social assets to deal with the stressors. Besides for the agricultural activities, for which climatic stress plays a very important role, all of the stressors facing income generating activities are non-climatic.

4.2 Sectors

Sectoral analysis of current vulnerability provides a different perspective, a more detailed insight into the context in which people live, the services that they have access to and the stress facing those services. The sectoral assessment of vulnerability looked at exposure to various stressors, sensitivity and adaptive capacity, as defined in the methodology. Grasping and applying these complex concepts during the course of a one day workshop can be challenging, and the information gathered for the different sectors therefore varies. For some sectors, such as agriculture, these concepts are for example easier to apply than in other sectors.

Agriculture

To get a more in-depth picture of the issues facing the agricultural sector, a workshop was convened with extension officers from Letaba and Giyani. The diagram below highlights stressors currently impacting agricultural production, both commercial and small-scale, and subsequent impacts, as identified at the agriculture workshop.

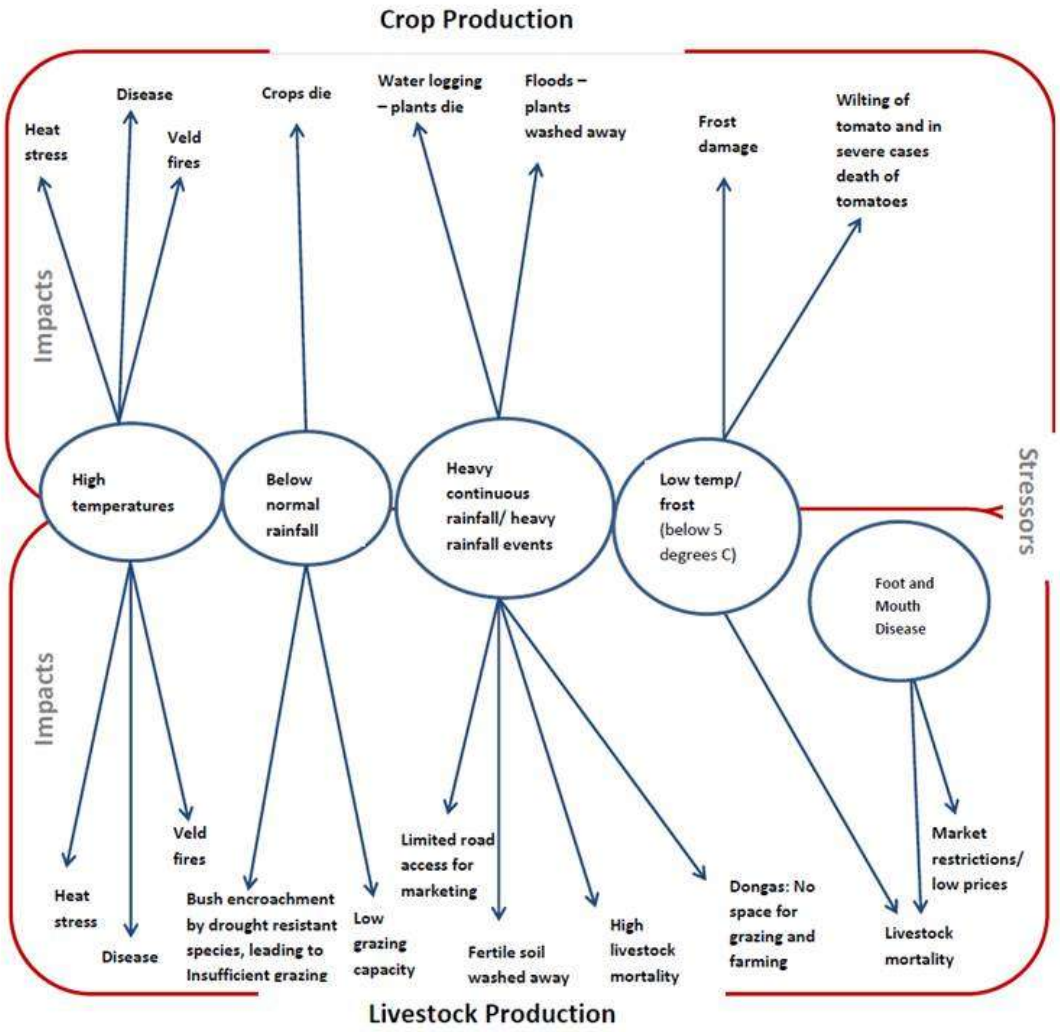

Figure 3: Stressors currently impacting the agricultural sector. The red boxes outline the systems that workshop participants chose to focus on, Crop production (top) and Livestock production (bottom), with the stressors affecting those systems outlined in the blue circles. The arrows point to the specific impacts identified for the different stressors, within the different systems.

Besides Foot and Mouth Disease (FMD), the stressors identified for agricultural activities are all climate related stressors, hence confirming the message that came out of the livelihoods workshops, that climate already plays a very important role in agricultural production. Both high and low temperatures were seen as causing stress for crop and livestock production, as well as below normal rainfall and heavy rainfall, reflecting how agricultural production is only optminal within a specific climatic envelopes.

As can be observed in the diagram above, some of the impacts identified have direct consequences for agricultural production, such as wilting of tomatoes due to low temperatures or heat stress in animals due to high temperatures. Other impacts highlighted are indirect, with for example bush encroachment impacting grazing space or physical access to markets being restricted due to heavy rainfall events damaging roads.

Levels of sensitivity and adaptive capacity provide further insights into the current dynamics of agricultural production in Letaba and Giyani, as these are the aspects that shape the extent to which agricultural activities are vulnerable to stress. The table below outlines some of the sensitivities and the adaptive capacity existing in the agricultural sector today, as linked to stressors, impacts and consequences. As outlined by extension officers, lack of access to resources, knowledge/ application of certain management practices and access to information are aspects that currently make crop and livestock production sensitive to impacts of climate stressors. As reflected in the current adaptive capacity outlined below resources and information, such as pesticides and early warning information,

are often exclusively accessible to a privileged group, generally the commercial farmers. This reflects the differential vulnerabilities within the agricultural sector in Letaba and Giyani, shaped by differences in sensitivities and adaptive capacity between commercial and small-scale farmers. This highlights the need to focus on supporting the small-scale farmers, who are generally less resourced and have more limited access to new knowledge and information.

Table 6: Overview of sensitivities and adaptive capacity linked to stressors currently impacting the agricultural sector.

Stressors	Impacts and consequences	Sensitivity	Current Adaptive Capacity
High temperatures	**Crops:** Heat stress, disease, veld fires **Livestock:** Heat stress, disease, veld fires	• No construction of fire belts • No pesticides • Not enough water sources (drinking troughs)	• Some construct fire belts • Some buy pesticides • Some have earth dams
Low temperatures/ frost	**Crops:** Frost damage, wilting and death of tomatoes **Livestock:** Livestock mortality	Lack of knowledge on resource utilisation (e.g. burning of tyres and use of kraal manure)	Early warning information systems in place, though not accessible to all due to language etc
Below normal rainfall	**Crops:** Crops die **Livestock:** Bush encroachment, low grazing capacity	• Poor grazing conditions (i.e. over-stocking which leads to overgrazing) • Poor veld management • No dedicated grazing camps • No access to supplementary feeding	• Control of invasive plants • Rotational grazing, enabling enough grazing (commercial) • Supplementary feeding (commercial) • Small-scale farmers wait for supply from government
Heavy continuous rainfall/ heavy rainfall events	**Crops:** Water logging – crops die, floods – plants washed away **Livestock:** Limited road access for marketing, fertile soil washed away, high livestock mortality	• No access to early warning systems • Ploughing on river banks (because of insufficient access to land) • No contours or soil conservation structures	Some farmers are able to make contours (commercial)
Foot and mouth disease	**Livestock:** Market restrictions/ low prices, livestock mortality	Destruction of fence at redline gates[7]	Road blocks for FMD control and vaccinations

Water Sector

With the majority of households in Letaba and Giyani having access to water supplied by the Municipality, more often than not through communal taps, the vulnerability of the municipal water supply system plays a role in shaping people's access to water. The diagram below highlights stressors currently facing water supply, and subsequent impacts, as identified at the workshop with water supply and waste management practitioners from the local municipalities.

[7] Redline gates: where livestock/game should not cross. Set up to prevent interaction between livestock and game, as FMD is caused by the interaction of wild and domestic animals.

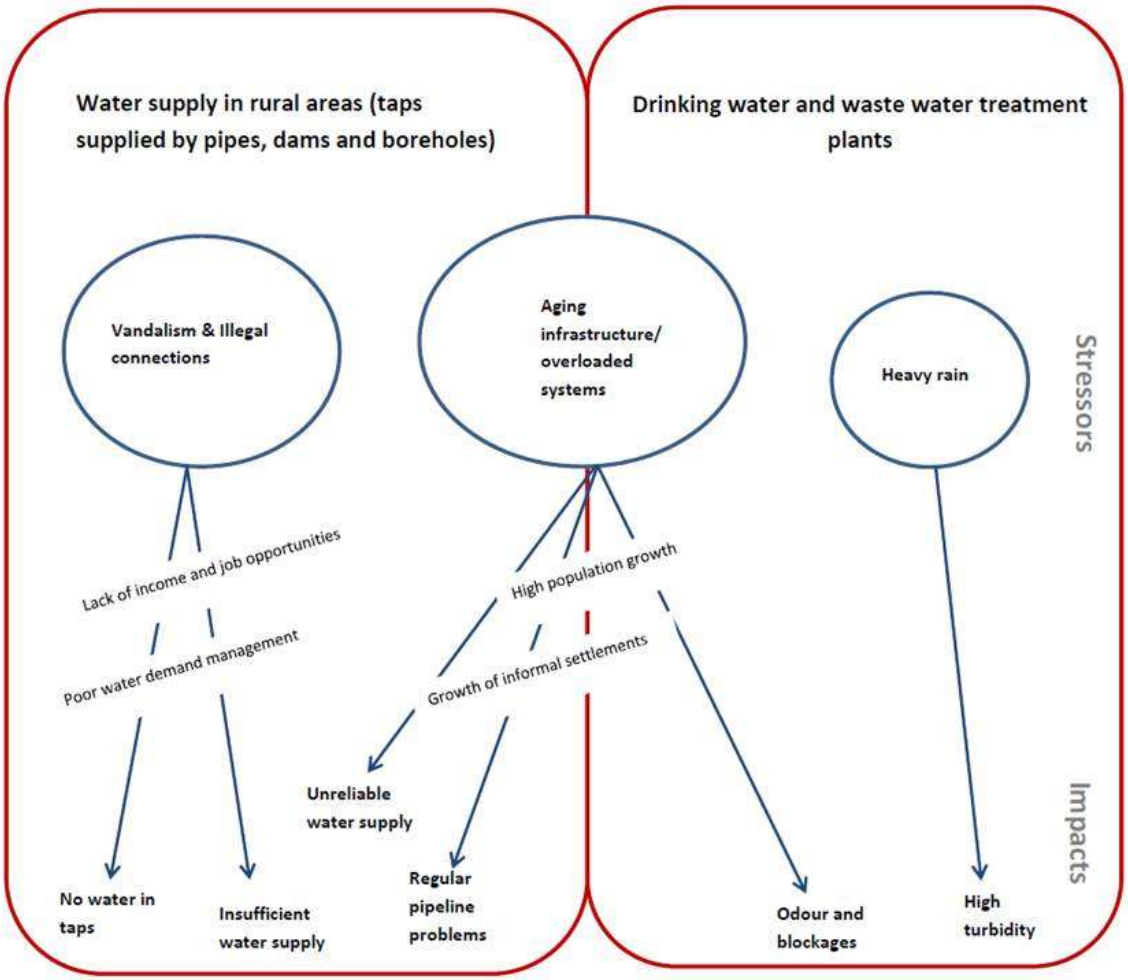

Figure 4: Stressors currently impacting the water supply and waste water system. The red boxes outline the systems that workshop participants chose to focus on, Water supply in rural areas and Drinking water and waste water treatment plants, with the stressors affecting those systems outlined in the blue circles. The arrows point to the specific impacts identified for the different stressors, within the different systems. The text outlined between the stressors and the impacts are the aspects that make the system sensitive to the impacts of these stressors.

As highlighted in the figure above the key factors currently stressing water supply in rural areas, as identified by municipal water managers, are not climate related and instead relate to aging infrastructure and systems overload, as well as vandalism and illegal connections. Water managers at the local municipalities highlighted how vandalism, stealing of transformers, cables and diesel engines, is a big problem, which relates to the lack of income and job opportunities, leaving people with few opportunities to create an income. Illegal connections are also related to the same causes, lack of income and opportunities, together with poor water demand management.

Because the water supply system is currently overloaded, due to continued growth in informal settlements, it is also more sensitive to stress caused by old, or even outdated, infrastructure. The systems overload and the old infrastructure causes problems with the ability of the system to provide regular water supply.

In the case of the drinking water and waste water treatment plants the systems overload and the old infrastructure cause odour and blockages. The drinking water and waste water treatment plants were also considered to be stressed by heavy rain, causing turbidity which makes the chemicals generally used to clean the water insufficient and lead to the spread of water borne diseases.

The water managers identified the need for security measures, monitoring of water usage and dialogues with communities in order to deal with vandalism and illegal connections. The need for refurbishment of infrastructure, said to be limited in the present due to budget restrictions, as well as

the provision of water tanks were further ideas for dealing with aging infrastructure and systems overload.

Health

Health is an important factor in the lives of everyone, shaping people's well-being and ability to work. Analysis of the health sector was done through a workshop with health practitioners, mainly environmental health practitioners and health inspectors.

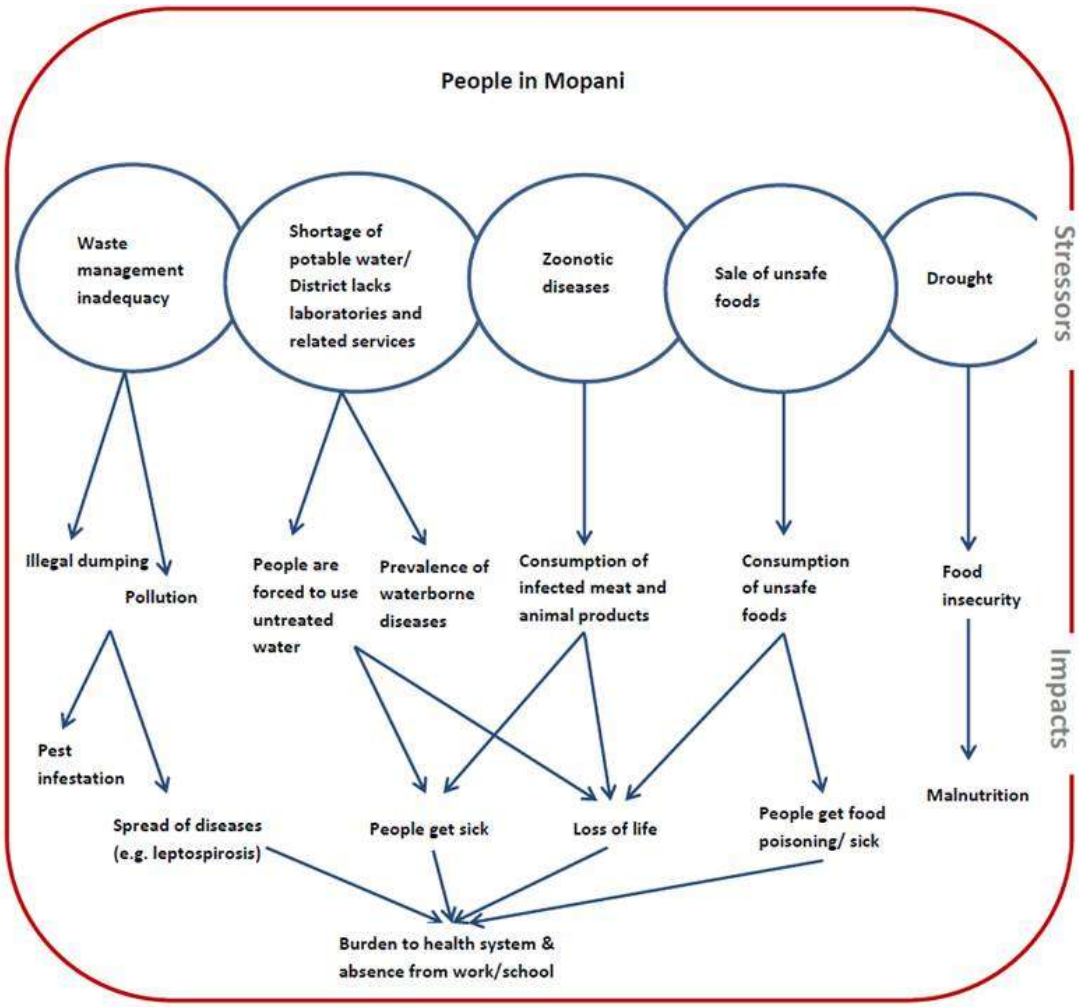

Figure 5: Stressors currently impacting the health sector. The red box outline the systems that workshop participants chose to focus on, which in this case could be grouped into the People in Mopani. The stressors affecting people in Mopani are outlined in the blue circles. The arrows point to the specific impacts identified for the different stressors.

Looking at the health sector and current challenges the stressors identified relate to waste management, potable water, zoonotic diseases[8], unsafe foods and drought. Two of the stressors, waste and water, are rooted in service delivery challenges[9]. These issues of water and waste are linked to challenges of general access, maintenance and lack of infrastructure.

Lack of access to potable water, be it due to lack of supply or due to contamination of natural or constructed water supply systems, results in the consumption of unsafe water and people getting sick. While health practitioners noted that most people know that they should treat the water[10] if they think

[8] Contagious diseases spread between animals and humans.
[9] The service delivery challenges relate back to the large backlog of basic service delivery for all, which faced the Democratic Government which took over in 1994.
[10] By boiling the water or using chemicals

it is comes from a source that could be contaminated, they generally lack the time and resources to do so.

People get sick, or even lose their lives, due to consumption of infected/unsafe food. Such food ends up on people's plates as a result of poor hygiene practices, or due to the lack of inspection of meat and animal products. While there are regulations in place to deal with these, for example in relation to regulations for hawkers, lack of enforcement of hawker policies or misunderstandings of the policies, prevents such regulations from minimising the risk of food poisoning. Promotion of good hygiene practice and food handling is currently taking place through government initiatives, and there are thus some steps underway to try to deal with these issues.

Drought is a health related stressor in that it can result in food shortages and subsequent malnutrition. Letaba and Giyani were seen as being ill prepared for such stress, due to the lack of any contingency plan.

Disaster Management

Disaster management can be seen as cross-cutting, dealing with crisis and stress experienced across all sectors. Analysis of disaster management was done through a workshop with people working in disaster management, including risk management and disaster response planning.

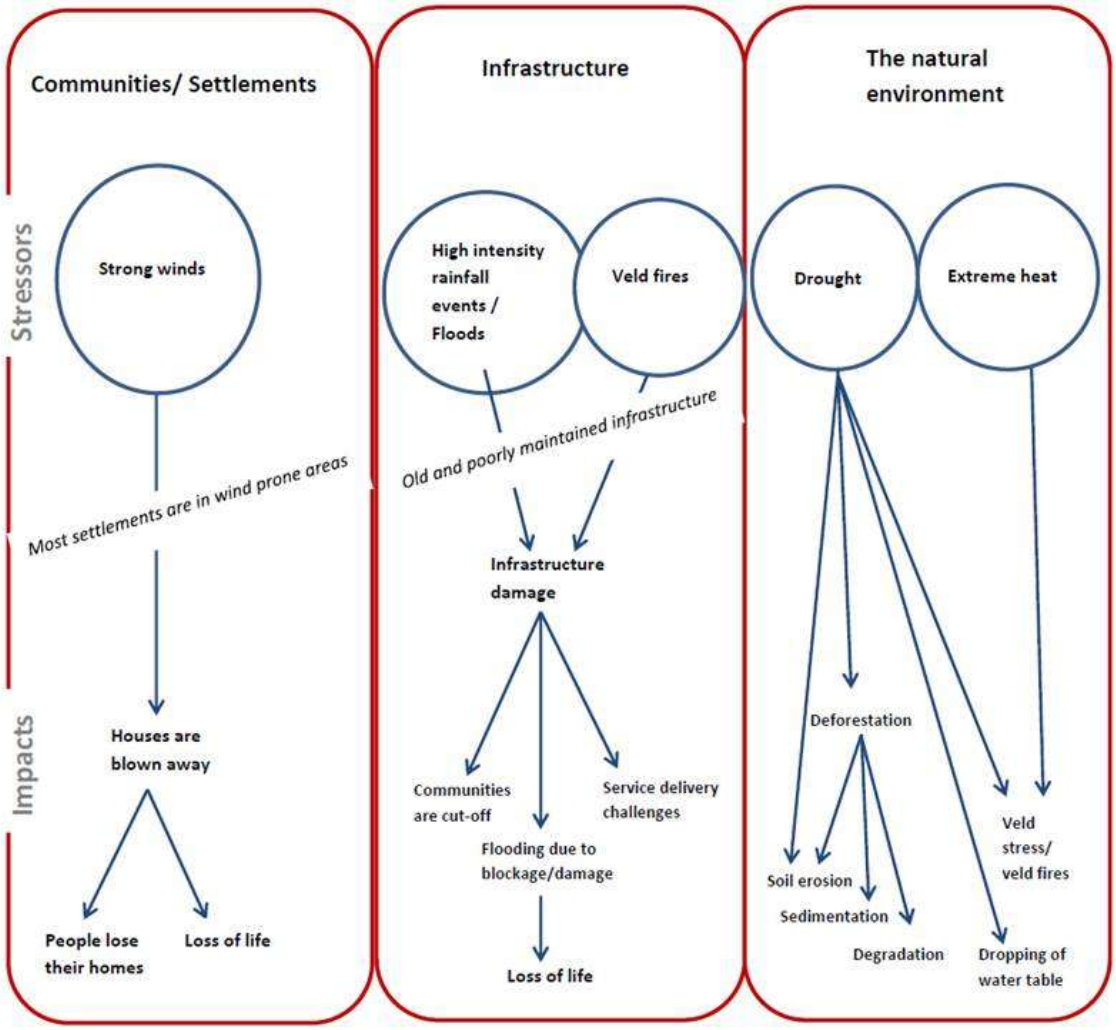

Figure 6: Stressors currently impacting the Disaster Management Sector. The red boxes outline the systems that workshop participants chose to focus on, Communities/Settlements, Infrastructure and the Natural environment, with the stressors affecting those systems outlined in the blue circles. The arrows point to the specific impacts identified for the different stressors, within the different systems.

As can be observed in the figure above the stressors identified in relation to disaster management are all climate related stressors, thus confirming the central role of climate in disaster management. The identification of these climate related stressors and the related impacts are to some degree confirmed by the findings of the Disaster Risk Assessment and Disaster Risk Reduction report for Mopani District (2012), where for Letaba and Giyani fires, drought, dam failure, floods, deforestation, erosion, hazardous material, epidemics/disease, water pollution, water management, crime and extreme weather are highlighted as priority threats.

Communities and settlements in Letaba and Giyani are prone to stress caused by wind, resulting in damage to homes and loss of life. It was noted that many settlements are sensitive to such damage, as they are located in wind prone areas.

Infrastructure damage, due to veld fires, heavy rainfall or flooding, can disrupt service delivery and can result in communities being cut-off from basic services. Some infrastructure is particularly sensitive to damage from such events, due to the old age of a lot of infrastructure, and poor maintenance in some places.

The natural environment, the resource base on which people live and from which they depend, is prone to stress from climate related factors like drought and extreme heat. Resulting impacts, such as soil erosion, a dropping water table and veld degradation and fires, depletes this resource base and requires disaster management responses post disasters. The resource depletion further requires responses that aim to restore the resource base, and that promote sustainable resource use.

These findings give an indication of how people in Letaba and Giyani are disaster management vulnerable to a number of climate related stressors, with the disaster management sector having to develop approaches to respond. The findings further show how the impacts of these stressors can be severe, with communities being cut-off, losing access to services or losing their homes, and can in the worst cases lead to loss of life.

Summary of sectoral analysis

Summarised the key stressors currently facing the agriculture, water, health and disaster management sectors include:

- High temperatures
- Below normal rainfall
- Drought
- Heavy rainfall events/ floods
- Low temperatures/ frost
- Strong winds
- Veld fires
- Zoonotic disease - Foot and Mouth Disease
- Vandalism & illegal connections
- Aging infrastructure
- Overloaded water supply and waste and water treatment systems
- Waste management inadequacy
- Shortage of potable water/ lack of laboratories and related services
- Sale of unsafe foods

The stressors highlighted in red above refer to the climate related stressors. These were mainly highlighted in relation to agricultural production and disaster management, while in water and health stressors were largely focused on non-climate related stress such as service delivery challenges, old infrastructure and social and economic issues.

For agriculture, differential sensitivities and adaptive capacity emerged, with small-scale farmers seen as having less resources and information than commercial farmers, thus reflecting the need for efforts to focus on supporting the strengthening of the resilience of small-scale farmers.
For the water sector overloaded systems, due to the growth of settlements, and vandalism and illegal connections, due to unemployment and lack of opportunities, were identified as the main stressors, thus reflecting how non-climatic stressors are currently of more concern than for example lack of rainfall.

For the health sector, challenges with service delivery, in terms of water supply and waste management, came out as important issues, leading to spread of disease. People also get sick from unsafe foods and uninspected meats, and there is a need for better hygiene, and better understanding and of enforcement of hawker policies. Drought also has health related consequences, as the lack of sufficient food supply can leads to malnutrition, thus highlighting the need for focus on food security.

For disaster management, as for agriculture, climate stressors were central. Current impacts experienced include damage to houses, infrastructure and the natural environment, with communities being cut-off and loosing access to services.

While the different sectors will need sector specific response to lessen the factors that shape the impacts of the exposure to these stressors, it seems that upgrading infrastructure, improving maintenance plans and improving potable water and waste management services, could be an important step towards decreasing the sensitivity and increasing adaptive capacity. These aspects are already high on the list of municipal priorities, and these research findings thus support continued prioritisation, while emphasising the need for greater urgency.

5. VULNERABILITY TO CLIMATE CHANGE

Having developed an understanding of current vulnerability of sectors and people in Letaba and Giyani to multiple stressors, this section proceeds to look at the vulnerability to climate change. Vulnerability to climate change is analysed through the assessment of how climate change trends may impact income generating activities, and expands on this by taking a closer look at how climate change trends may impact sectors, and the adaptive capacity currently in place to deal with such impacts.

The information for each income generating activity and sector varies somewhat, as the extent to which the groups understood and fully engaged with various aspects differed somewhat. Furthermore, for some sectors or income generating activities breaking down the different concepts and making linkages is more complicated than for other.

5.1 Livelihoods

The livelihoods assessment of climate change vulnerability looks at how climate change trends might impact income generating activities, and at the possible responses or solutions required to deal with these.

Farming

The majority of participants at the livelihoods workshops chose to focus on the possible impacts of climate change on farming activities. As outlined in the table below, an increase in the number of extremely warm days is perceived to have numerous possible impacts on farming activities. These impacts are strongly linked to water, as evaporation rates increase on extremely warm days, while at the same time crops and animals require more water due to the heat. The impact of heat on grass,

crops and livestock is another concern, resulting in decrease in livestock numbers, death of crops and livestock, and subsequent production, income and job losses.

For farm workers on commercial farms increase in the number of extremely warm days is seen to increase incidents of skin disease, as well as loss of jobs as overall production goes down. Solutions suggested in this regard include protection from the sun through protective clothing, and the establishment of alternative income through community gardens.

More intense heavy rainfall events are expected to lead to an increase in exposure to disease for both livestock and crops, resulting in a loss of crops and loss of grazing area. More intense heavy rainfall could also have indirect impacts on agricultural production, as heavy downpours will prevent farmers from going to work in the fields.

Table 7: Possible impacts of a changing climate on agriculture

Climate change trends	Perceived impacts	Suggested responses/solutions
Increase in number of extremely warm days	**Livestock farming:** Streams, rivers and dams dry up Grass becomes dry Excessive heat can lead to buying food supplements for livestock Livestock consumes more water Increase in diseases More livestock death Less livestock Low production of milk and meat **Crop farming:** Lack of water People will not plough The plants get dry Crops die No production Lack of food due to drying out of plants **Commercial farming/farm workers:** Workers exposed to skin diseases Low income due to reduced production Loss of jobs due to low income	Introduction of earth dams and drinking troughs Clear demarcation of grazing land Storage facilities (food) Encourage stock owners to keep livestock at minimal number (to sell) Establish local abattoir Establishment of cooperatives Water tank to store water for watering homestead gardens Protective clothing/shelter To be organised into associations/ unions Establishment of community gardens
Increase in average temperatures	**Livestock farming:** Livestock become lean Scarcity of dairy and meat products **Crop farming:** Seasonal crops are affected Loss of income	Need big areas of arable land for livestock Feed lots Construction of infrastructure - Need dams to store water
Intense heavy rainfall	**Livestock farming:** Reduced grazing areas Exposure to diseases Livestock will not be able to go for grazing Degradation of livestock quality Livestock dies **Crop farming:** Water logged crops Soil erosion Exposure to diseases No agricultural activities due to heavy rainfall	Maintenance of water drainage Maintenance of water drainage Use rocks to prevent soil erosion Grow grass to avoid erosion, it will absorb water during heavy rainfall

Hawkers

For hawkers the possible climate change impacts highlighted are a combination of direct impacts on the hawkers themselves and on their products, as well as on the ability or willingness of customers to come to markets during very warm weather or during heavy rainfall. Concerns around products being spoilt, either due to heat or rainfall, are similar to some of the challenges that hawkers are facing at

the present, due to a lack of proper storage facilities and market stalls. Thus difficulties that hawkers are already facing might become more pronounced problems into the future.

Table 8: Possible impacts of a changing climate on Hawkers

Climate change trends	Perceived impacts	Possible responses/solutions
Increase in number of extremely warm days	Affected by skin diseases Vegetables quality affected and products become rotten No business Less profit and loss of income People tend to buy cold drinks	Modernised market stalls Pack houses/ Proper storage/ shelter for goods Organise hawkers into cooperatives Training in business skills The type of goods they sell must correspond to the temperature or seasons. E.g. gem tomatoes in winter and cold drink when the temperatures are high
Increase in average temperatures	Affected by skin diseases People are affected by diseases e.g. high blood pressure Products are spoiled Consumers may be affected due to increase in temperature, they may not come to town therefore business suffers Loss of profit, low income and job loss	Get treatment on time Proper storage for goods
More intense heavy rainfall	Day to day activities affected Products spoiled by rain Consumers do not go to town or people stay indoors, even hawkers themselves stay indoors	Government should provide hawkers with market stalls in order to protect goods and the owners

Health

When considering the possible impacts of climate change on income generating activities workshop participants also made connections to health and infrastructure. As outlined in table 9 below, climate change trends are expected to have a variety of possible impacts on people's health, including more diseases and weakness.

Table 9: Possible impacts of a changing climate on health

Climate change trends	Perceived impacts	Suggested responses/solutions
Increase in number of extremely warm days	More diseases, like high blood pressure Diseases will be rife and people will not be able to go to the clinic Diarrhoea Dehydration Skin rash, skin cancer When there is drought people cannot go to work cause they will be weak People can lose energy due to excessive heat and they can die People die from heat	No suggestions made
More intense heavy rainfall	There will be diseases, like malaria	

Infrastructure

For infrastructure, key concerns relate to damage to houses, roads and bridges, with for example increased risk for children having to cross rivers to get to school. Here a number of possible responses and solutions were highlighted, including the building of bridges and erosion control measures.

Table 10: Possible impacts of a changing climate on infrastructure

Climate trends	Possible impacts	Suggested responses/solutions
More intense heavy rainfall	Roads, houses and bridges collapse Cars will not be able to drive Rivers get full and children drown People cannot go to work and this result to lower income Heavy rainfall kills people and there will not be jobs and there will be hunger	Resilient bridges must be constructed so that children may cross over when they go to school Constructing strong bridges so we can pass to other side Put stones in the river to create a bridge When the houses get wet or fall due to rain, we can cover them with tent covers Construct a structure so that when it must rain we'll be able to sew inside the building Create gabions on the road side to prevent landslides so that cars can pass through. When it destroys the roads what can we do We make bridges

5.2 Sectoral

The sectoral assessment of climate change vulnerability looked at how climate change trends might impact the various sectors, and the adaptive capacity currently in place to deal with the impacts. Grasping and applying these complex concepts during the course of a one day workshop can be challenging, and the information gathered for the different sectors therefore varies, as reflected in the sections below.

Agriculture

The agricultural workshop allowed for some in depth analysis of how agricultural production might be impacted by climate change, and what might be required for it to respond to these impacts. The impacts, as identified by agricultural extension officers, are outlined in the diagramme below.

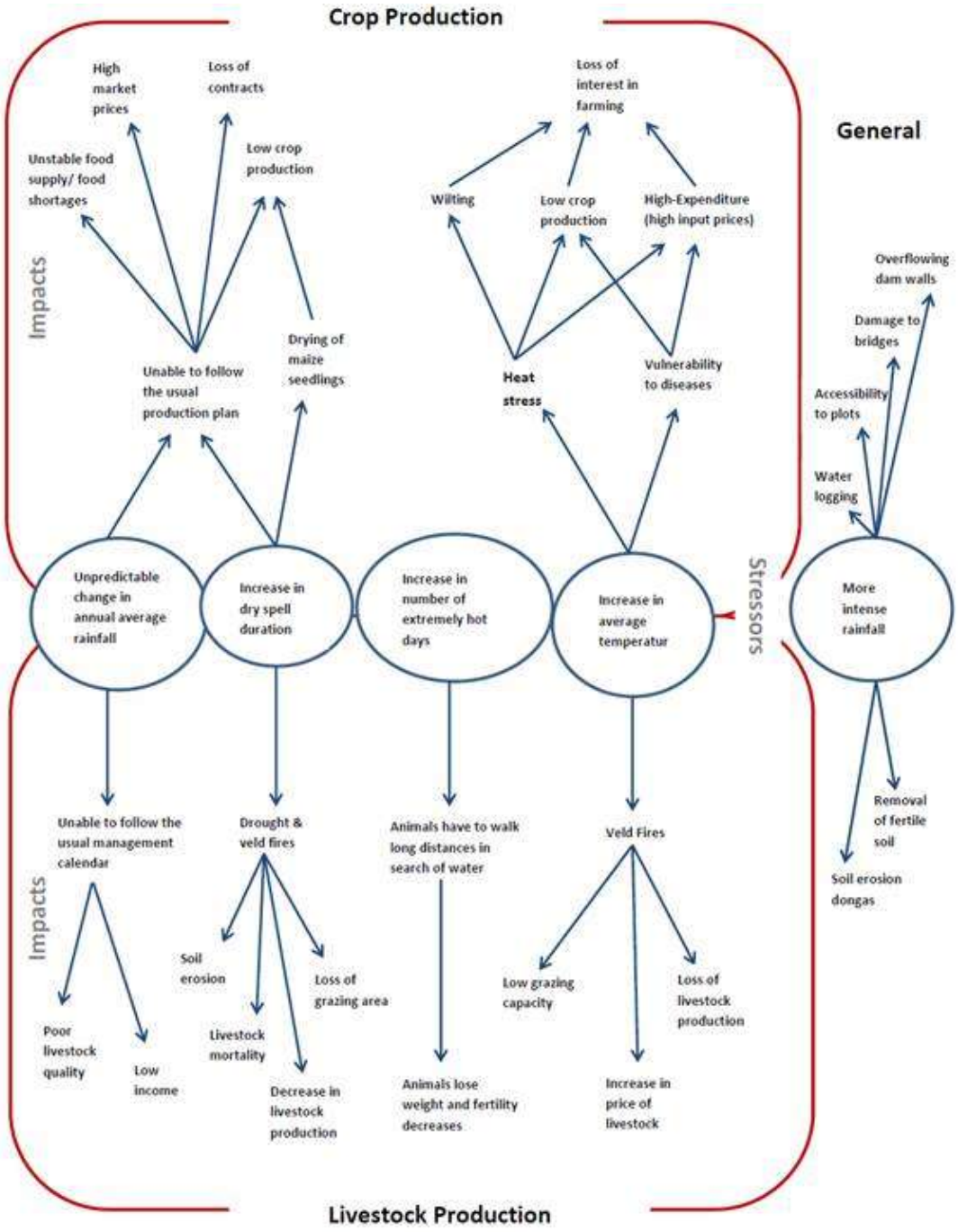

Figure 7: Possible impacts of climate change on the agricultural sector. The red boxes outline the systems that workshop participants chose to focus on, Crop production (top) and Livestock production (bottom), with the climate change trends (stressors) expected to affect those systems outlined in the blue circles. The arrows point to the specific impacts identified for the different stressors, within the different systems.

Impacts on agricultural production, including commercial and small-scale farming, was analysed through two main focuses, livestock production and crop production. For livestock (see the bottom half of diagramme above), concerns centred around impacts on grazing availability and quality and the animals becoming weaker and less fertile due to heat and decreased water availability. These impacts could lead to a fall in the overall livestock quality and production.

For crop production (see top half of diagramme above) generally low production is a secondary impact resulting from different climate change trends. The low production is linked to aspects such as inability to follow the usual production plans, drying of seedlings, heat stress in plants and vulnerability

to disease. All of the above could lead to loss of production, contracts and farming assets, and subsequent loss of interest in farming.

Looking at both crop farming and livestock farming (see far right of the diagramme above), more intense heavy rainfall events can lead to water logging, soil erosion and loss of fertile soil, as well as damage to infrastructure and problems with accessing the farming land.

Existing adaptive capacity highlighted in relation to the mentioned climate change impacts include: planting of drought resistant cultivars; sharing of knowledge and information through farmer days and workshops; frequent irrigation; and spraying programmes. For livestock, cattle movement, supplementary feeding provided by government and selling of livestock were highlighted by extension officers, with the latter two illustrating what can be seen as emergency responses. In relation to more intense heavy rainfall ploughing and planting across the slopes, construction of gabion baskets and planting of vertiver grass were highlighted as current practices that build adaptive capacity. The practice of integrated farming systems, with both crops and livestock, is also seen as strengthening farmer adaptive capacity.

While the various impacts of climate change related stressors on crops and livestock are general, and can thus apply for both commercial and small-scale farming, the extent to which farmers are able to adapt, and thus prevent or minimise impacts, differs. As outlined in the agricultural section on current vulnerability, adaptive capacity, including access to resources and information, is often exclusively accessible to a privileged group, generally the commercial farmers. Hence while there are a number of climate smart practices available, commercial and small-scale farmers have differential access to these, due to differential access to the resources or information required.

Hence while some of the challenges faced by commercial and small-scale farmers in the face of climate change are be similar, small-scale farmers will require additional support to access and implement climate smart practices that reduce vulnerability to climate change.

Water Sector

Concerns around decreasing water supply were emphasised both in the livelihoods workshops and in the agricultural workshop, thus highlighting how access to water is a concern across various aspects of everyday life. The water sector workshop provided a space for more indepth analysis of the water supply system. As can be observed in the diagramme below, participants at the water workshop focused on the possible impacts of climate change on boreholes, dams and the pipelines that transport water and sewage.

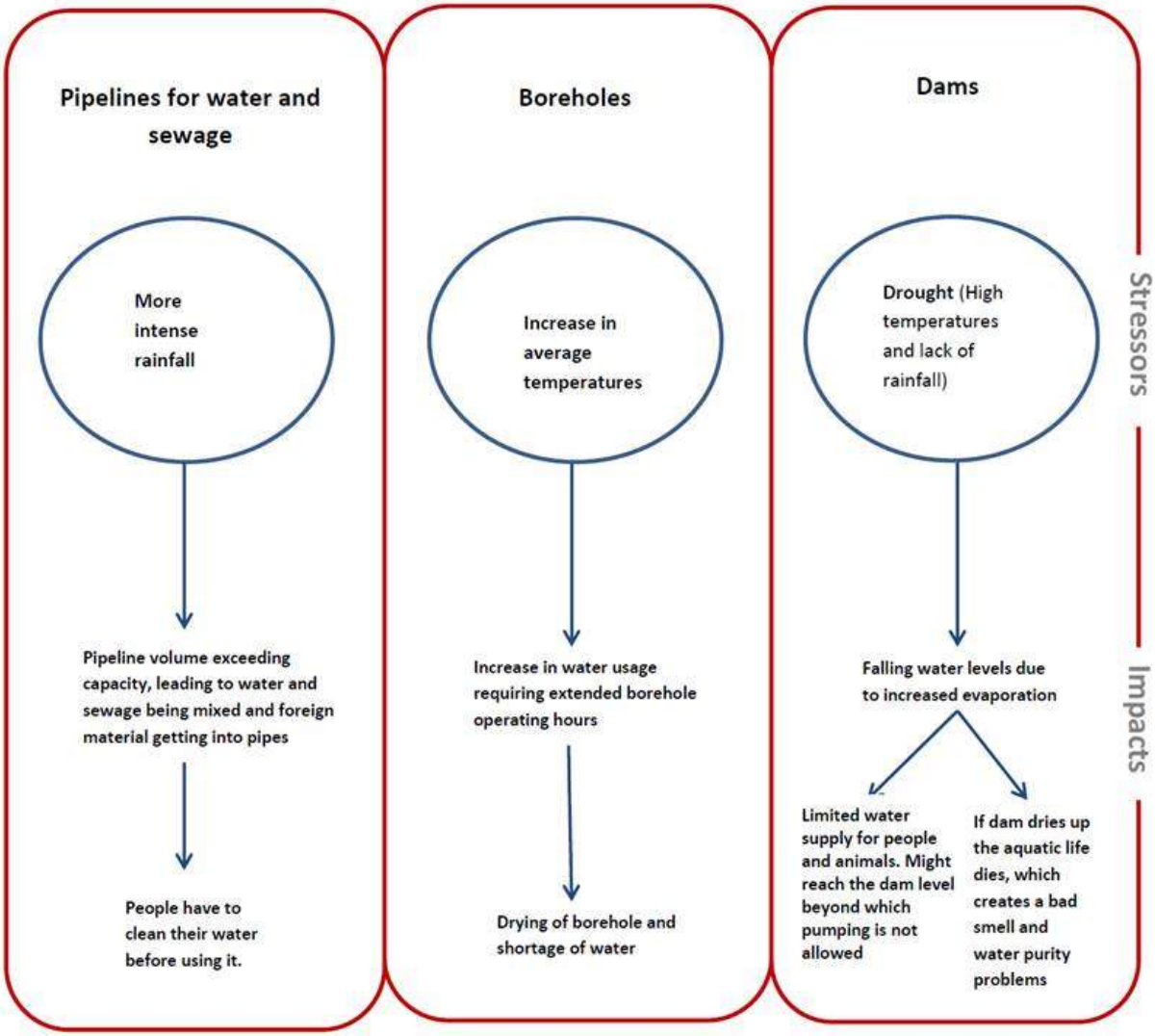

Figure 8: Possible impacts of climate change on the water sector. The red boxes outline the systems that workshop participants chose to focus on, Pipelines for water and sewage, Boreholes and Dams, with the climate change trends (stressors) expected to affect those systems outlined in the blue circles. The arrows point to the specific impacts identified for the different stressors, within the different systems.

Water related concerns relate to decrease in water availability as well as increased water usage, thus highlighting how due to a combination of changing temperatures and rainfall patterns water demand might increase while water supply might decrease. A challenge in relation to current infrastructure, with pipelines being incapable of dealing with increased volumes from more intense heavy rainfall, further highlights the need for water infrastructure development to be centred around more dynamic trends and flexible volumes.

Suggestions made by workshop participants for how to respond to or prepare for such impacts included decreasing water demand through restrictions and awareness, as well as increasing supply by introducing for example water tanks. Introducing more budget for repair of infrastructure was also suggested.

As for the agricultural sector, the water sector hence highlights the importance of preparing for shifts in water supply and water demand. They further highlight the need for infrastructure to be able to deal with shifting water volumes due to the possibility of more intense heavy rainfall events.

Health

Health, like water, is a cross-cutting issue that was raised in both the livelihoods workshops and the agricultural workshop. Health practitioners from Letaba and Giyani provided some more indepth insight into what climate change might mean for the health system.

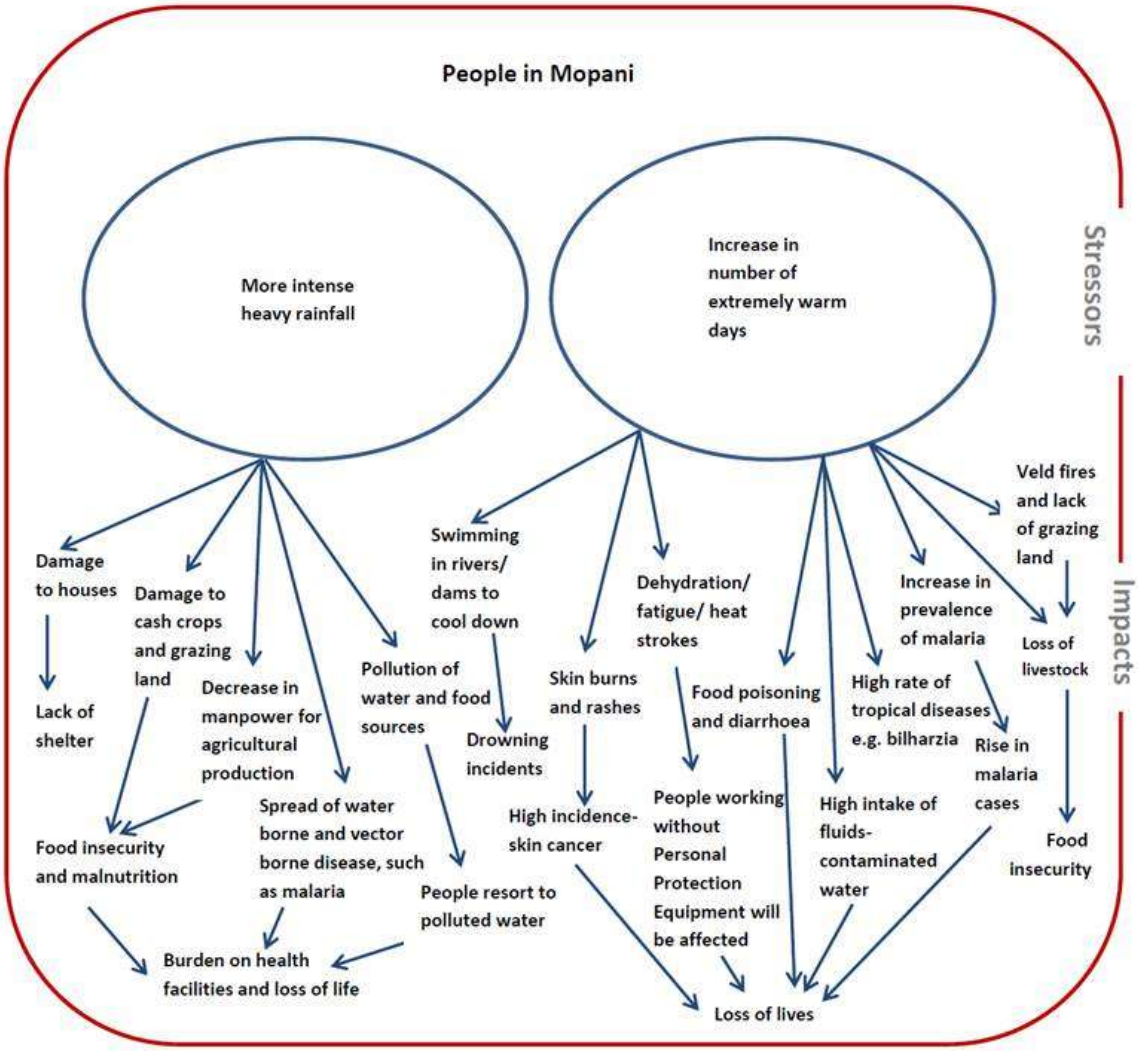

Figure 9: Possible impacts of climate change on human health. The red boxes outline the system that workshop participants chose to focus on, People in Mopani, with the climate change trends (stressors) expected to affect that system outlined in the blue circles. The arrows point to the specific impacts identified for the different stressors, within the different systems.

As can be observed above possible impacts of climate change on the health sector are intricate and many, and the impacts could be organised into impact chains, showing how one impact triggers another. Secondary impacts highlighted relate to a range of issues including spread of various diseases and sicknesses, people working outdoors being affected by dehydration and fatigue, people consuming polluted food and water and food insecurity and malnutrition. Burdened health facilities and loss of lives feature at the end of most of these impact chains. Health practitioners also noted how people who are physically inactive, and thus not very fit, are more sensitive to the impacts of heat stress, and that people with lighter skin are more sensitive to damage from the sun.

With regards to the adaptive capacity that exists to respond to the possible impacts highlighted above, a large number of factors were highlighted, and have thus been listed in the table below. Some of the adaptive capacity outlined relates to lessening the impacts, for example the spread of disease or dehydration and fatigue among farm workers, through a combination of skills, facilities, awareness and regulatory frameworks. Some adaptive capacity also relates to being able to cope in times of

crisis, through relief programmes and borrowing of necessary resources. This thus shows that in the health sector there is already a combination of preventative and disaster response capacity.

Table 11: Overview of current adaptive capacity for the health sector.

Exposure (climate change trends)	**Current adaptive capacity**
More intense heavy rainfall	• Skilled personnel • Protection of products E.g. cover bananas • Disaster management centre • Outbreak response teams • Borrowing of resources from neighbouring districts • Disaster management relief programme in place (provision of tents and clean water)
Increase in number of extremely warm days	• Law enforcement on Personal Protection Equipment (PPE) • Occupational Health and Safety awareness • Health facilities • Skilled personnel • Water tankers • Emergency Medical Services in place • Disaster management relief programme in place • Food relief for animals

Disaster Management

Disaster management, like health and water, is a cross-cutting issue that was raised in both the livelihoods workshops. Disaster managers from Letaba and Giyani provided some more indepth insight into what climate change might mean for disaster management.

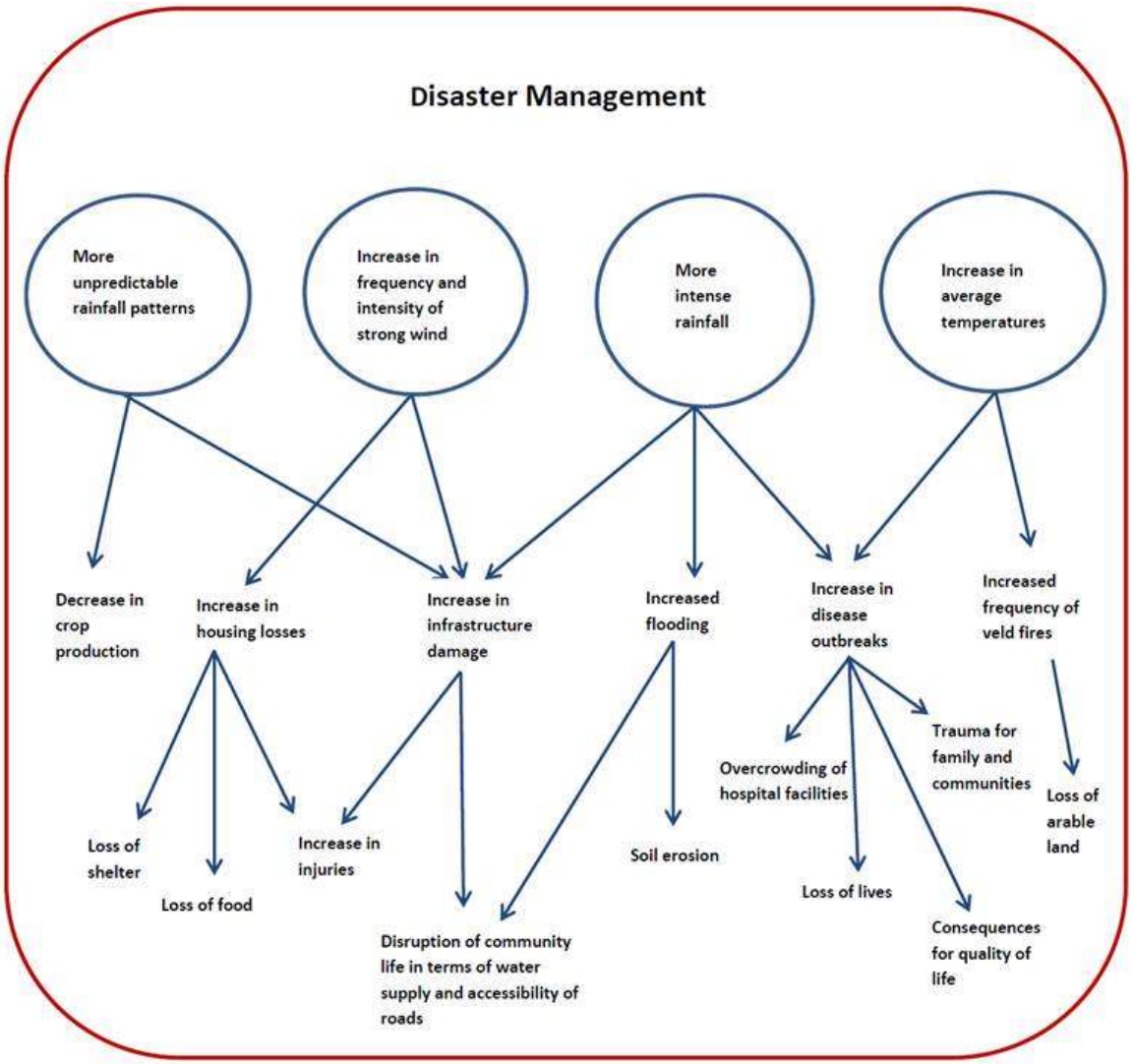

Figure 10: Possible impacts of climate change on the Disaster Management sector. Workshop participants focused on impacts that cross various systems and sectors, and the red box is therefore referred to as overall disaster management, with the climate change trends (stressors) expected to affect those systems outlined in the blue circles. The arrows point to the specific impacts identified for the different stressors, within the different systems.

As can be observed above possible impacts of climate change on the disaster management could also be organised into impact chains, showing how one impact triggers another. Impacts relate to a variety of aspects, ranging from housing and infrastructure damage to aspects that are important for food security, such as erosion and availability of arable land. Impacts on the quality of life, water supply challenges, roads accessibility, trauma injuries and loss of lives are some of the secondary impacts highlighted.

As was found in the analysis of current vulnerability, the current location of settlements in wind prone areas makes them sensitive to the impacts of strong winds[11]. The veld is also considered to be sensitive to increase in the frequency of veld fires, as the veld is already prone to fires under current climatic conditions. Some of the adaptive capacity currently in place to deal with these impacts, include fire response plans, early warning systems, planting of wind shields and building of walls, and emergency plans that are in place.

(i) [11] Note that the increase in the frequency and intensity of strong winds was not presented as a climate change trend, it was a conclusion that workshop participants made, based on the trends that were presented.

As can be observed in the diagramme above climate change is set to exacerbate some of the challenges that the disaster managers are faced with in the present by increasing the intensity and frequency of current hazards, including fires, flooding and disease outbreaks.

6. VULNERABILITY TO CLIMATE CHANGE IN THE CONTEXT OF CURRENT VULNERABILITY

By bringing together the findings of the livelihoods and sectoral workshops it is possible to create a narrative of how vulnerable people and their activities are to the possible impacts of climate change.
In the livelihoods workshops participants focused largely on the impacts of climate change on farming. While highlighting the importance of farming in Letaba and Giyani, it is also again an indication of the perceived importance of climate in **agriculture**. Especially an increase in the number of extremely warm days was a concern, with subsequent increase in water demand yet possible decrease in **water** availability. While people, animals and plants requiring more water during extreme heat, being able to keep crops alive, and **providing sufficient food and water for people and animals** can become a big challenge. Considering the lack of resources and information among small-scale farmers, as highlighted in the analysis of current vulnerability, the extent to which small-scale producers can adapt to such challenges is of concern. **Loss of agricultural production** and the resulting **loss of jobs** on commercial farms was another possible impact of concern.

These concerns were to some extent echoed in the agricultural workshop, where extension officers also explored impacts on livestock and crops in more detail. The extension officers also highlighted a long list of **low cost, low tech practices that currently contribute to adaptive capacity** currently available to deal with the possible climate change impacts. This includes: planting of drought resistant cultivars; sharing of knowledge and information through farmer days and workshops; frequent irrigation and spraying programmes; cattle movement; ploughing and planting across the slopes; construction of gabion baskets and planting of vertiver grass; and the practice of integrated farming systems, with both crops and livestock. Some reliance on emergency response in relation to livestock were also evident, supplementary feeding provided by government and selling of livestock, reflecting the need to build capacity to ensure that livestock have access to grazing and water. **Spreading of information and resources** that enable the spread of the outlined low tech and low cost practices can thus help build adaptive capacity among small-scale farmers, whose lack of resources and information was highlighted in the analysis of current vulnerability. The issue of water, and the possible decrease in water availability due to increased evaporation and changes in rainfall patterns, was also highlighted by extension officers. The need to secure **access to sufficient water**, and for the parallel implementation of agricultural practices that lower water requirements was emphasised by extension officers, echoing the key messages from the livelihoods workshops.

The workshop focused on water supply and waste water management further echoed the concerns around **decreasing water supply coupled with increasing water demand** in the face of a changing climate. Workshop participants indicated that preparing for such shifts will require developing **alternative water supply**, through for example water tanks, while at the same time working on **demand management** through awareness raising. The need for water related infrastructure development to be centred around **more dynamic trends and variable water volumes** was also emphasised.

Health, while not initially a central focus of the livelihoods workshops, came up in relation to various income generating activities, and further emerged as a separate area of concern among participants. For example, in relation to an increase in the number of extremely warm days there were concerns related to an **increase in skin diseases** among farmers and hawkers. For hawkers there was also concerns that **consumers may be affected by increasing temperatures**, and thus be unable to come to markets and stalls. The impact of heat on vegetables and other foods was also highlighted, and becomes particularly important in the context of limited storage facilitates and proper stalls, as highlighted in the analysis of current vulnerability. Participants at the health sector workshop pointed out how **consumption of unsafe foods** is already a problem under present conditions, and in the context of projections of rising temperatures this could become an increasing problem. **High blood pressure, diarrhoea, dehydration, fatigue and increase in diseases like malaria** were other impacts highlighted at both the community and health workshops. In terms of current adaptive capacity to deal with such impacts, aspects highlighted at the health workshop include **skills,**

facilities, awareness and regulatory frameworks, as well as some emergency response measures. The adaptation responses that were subsequently proposed highlighted the need to lessen the possible impacts, by for example distribution of mosquito nets, and making communities more resilient by for example ensuring that they have access to back-up sources of clean water.

A link between climate change and health was also made at the **disaster management** sector workshop, with **disease outbreaks** highlighted as a possible consequence of both increase in average temperatures and more intense heavy rainfall. Other key aspects of disaster management considered to be vulnerable to projected climate change include **infrastructure and food production**. Concerns related to the vulnerability of infrastructure also came out strongly in the livelihoods workshops, with **damage to houses, roads and bridges** due to wind and intense heavy rainfall being key concerns. For example, damage to bridges might **put children who have to cross rivers on their way to school at risk**. As was further emphasised in the disaster management workshop, damage to roads and bridges can **cut communities off,** can **disturb service delivery** to communities and in worst case lead to **loss of lives**. Disaster management officials highlighted fire response plans, early warning systems, planting of wind shields and building of walls, and emergency plans as key components of current adaptive capacity. Proposed adaptation responses to deal with projected climate change included better preparedness to respond through **planning and awareness, as well as more focus on early warning systems**. Suggested adaptation responses also illustrate an attempt to **lesson impacts through improved quality of building structures**, as well as the amendment and enforcement of various government regulations.

7. CONCLUDING REMARKS AND RECOMMENDATIONS

This vulnerability assessment set out to create an understanding of the local dynamics shaping livelihoods and sectors in Letaba and Giyani, and of how climate change might impact these. The participatory vulnerability assessment approach has enabled the gathering of rich local knowledge. It has also shown how the reality is complex and inter-connected, and not necessarily as clean cut as researchers would like it to be.

From the assessment some priority focus areas for assisting vulnerable groups to take action in the face of climate change have emerged. While it is important to note that these priorities are not exhaustive, as they are based on the interaction with a set number of local stakeholders (111), they create a picture of the main areas which stakeholders themselves perceive as beings vulnerable to the impacts of climate change:

- **Insufficient access to clean water:** Increase in average temperatures and increase in extreme temperatures will lead to increase in water demand, with people, plants and animals all requiring more water. Yet a subsequent increase in evaporation due to higher temperatures will decrease water supply. Water supply may be put under further pressure due to an increase in the intensity of heavy rainfall events, as infrastructure is unable to deal with the increase in volumes and turbidity, leading to mixing of water and sewage and foreign materials entering the water supply system.

- **Reduced food security:** The area's agricultural productivity and quality, in terms of both livestock and crops, is at risk in the face of projected climate change. Increase in average temperatures and the number of days with extreme temperatures, coupled with a shift towards rainfall falling in shorter and more intense events, can lead to heat stress, water scarcity as well as flooding and erosion. This may result in decreased grazing capacity and subsequent livestock mortality, as well as wilting and loss of crop harvests. At the same time, high intensity rainfall events can lead to soil erosion, as well as water logging of crops and grazing areas. Increasing temperatures may also lead to the introduction of or increased spread of pests, such as chilo, a moth that causes damage to fruits.

- **Additional health challenges:** Climate change may put people's health under stress, due to both direct and indirect impacts of increasing average temperatures and increase in days with extreme temperatures. Direct exposure to heat can lead to high blood pressure, diarrhoea associated with dehydration and fatigue. Increasing temperatures can also lead to the spread of disease, through for example the spread of mosquitos carrying malaria into areas that were previously too cold for transmission.

- **Economic losses for small businesses & traders:** The running of small businesses and traders might become increasingly challenging in the face of climate change, as increasing temperatures impacts products for which there is insufficient cooling storage. Sales of food that is unfit for human consumption due lack of access to appropriate cooling storage is already a problem in the present, and increasing temperatures will compound this problem. The health of traders without proper stalls or outlets may also be impacted by the heat.

- **Damage to infrastructure:** Communities in Mopani are set to be put under further stress as infrastructure damage from high intensity rainfall events wash away roads and bridges, cutting communities off from economic hubs and service delivery. There is also potential for damage to housing and in the worst cases drowning of humans and livestock.

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Annex II.2: Namakwa Profile Vulnerability Assessment

Namakwa District Municipality Climate Change Adaptation Small Grants Facility: Profile report for the Adaptation Fund

March 2014

Introduction to the Namakwa District

In South Africa, resources are limited and unequally distributed across the country and across different social groups. This results in large numbers of people lacking what they need to effectively adapt to climate change. South Africa is also likely to be greatly impacted by climate change in the future, in terms of rising temperatures and changes in rainfall patterns. This is particularly so in the arid north-west of the country, where the Namakwa District Municipality (NDM) is located.

The 126 836 km² District is the largest is the country and home to spectacular biodiversity of global importance. Home also to around 126 700 people, the District has the lowest population density in the country at more or less 1 person per km^2. The economy of the NDM is based on agriculture (sheep, goats, and, increasingly, game, with irrigated cropping limited to the banks of the Orange River) and mining. Productivity in both of these sectors is declining. Widespread poverty, lack of access to shelter and safe water and sanitation, food insecurity, drought, and land degradation is prevalent in most of the Northern Cape. High levels of poverty are due to high unemployment rates, which in turn is a result of job-shedding on stock farms, increasing numbers of game farms which utilize large areas of land but employ relatively few staff, and the downscaling of mines. The low population density means little attention for the area from national government and large geographic areas translate into limited access to markets, basic services, health care and education. A large proportion of the population lives in rural areas and is dependent on communal rangelands for their livelihoods.

Already drought prone and suffering from extreme heat in the summer months, the NDM is projected to be hotter and drier in the future. In addition, surface and underground water supplies are increasingly over-utilised and further threatened by climate change. An increase in aridity due to climate change could exacerbate unemployment, water scarcity, and difficulties with agricultural productivity.

Background to the Adaptation Fund Small Grants Facility

The Adaptation Fund was established as a means to finance adaptation programmes and projects in developing countries that are parties to the Kyoto Protocol. Conservation South Africa (CSA) and the South African National Biodiversity Institute (SANBI) are currently working on submitting a final proposal for funding to the Adaptation Fund. The original project concept is **Taking Adaptation to the Ground: A Small Grants Facility for enabling local level responses to climate change**. This Small Grants Facility will aim to ensure that appropriate and effective local adaptation measures are developed and implemented for supporting increased resilience of vulnerable groups and long term

sustainable livelihoods – taking into account short- and long-term climate forecasts. The emphasis of the project will be to support projects that generate tangible adaptation responses, with a particular focus on rural areas.

Due to the NDM's susceptibility to climate change and the vulnerability of its communities, CSA and SANBI are targeting the NDM as one of the beneficiary landscapes for the Small Grants Facility. Projects funded through the facility will ensure direct access to climate change benefits for local communities affected by the impacts of climate variability and change.

Expected Climate Change Impacts in the Namakwa District

In 2012, CSA conducted a climate change vulnerability assessment (VA) for the NDM which included identifying the climate change impacts that the District could expect in the medium term future. Recent projections from the Climate Systems Analysis Group, the Centre for Scientific and Industrial Research, and the South African Long Term Adaptation Scenarios confirm the trends captured in the VA. Temperatures in the region have increased slightly on average over the last 40 years based on South African Weather Services data obtained by CSA. In the NDM VA, **increasing temperatures** are predicted to 2050 in all scenarios, particularly along the Orange River and the south-central interior (Midgley and Holness, 2012). Drastic increases in temperature of up to 6° are projected for the region by the end of the century, forecasting temperatures well beyond the natural historical temperature variability of the region (DEA 1, 2013).

Changes in rainfall expected as a result of climate change are more difficult to predict. Many projections suggest a pattern of drying along the West Coast of the South Africa, including the NDM. However, rainfall in the NDM is very variable (for example Vioolsdrif on the Orange River may receive anything from 0 to 150mm of rainfall in a year) and 'the projected rainfall anomalies remain within the realm of present day climate' (DEA 1, 2013:121). Regardless, increasing temperatures will increase evaporation and evapo-transpiration**, increasing aridity** in the region overall and negatively affecting water quality and water availability.

The people, animals, and ecosystems of the NDM are already drought and heat adapted as a result of the natural historical climate of the region. However, the drastic increases in temperature and aridity projected by Midgley and Holness (2012) and DEA 1 (2013) begs the question of how hot and dry is too hot and dry, what are the region's thresholds?

Fire is part of the system in the Fynbos nodes throughout the District. CSIR, as part of the GEF funded Fynbos Fire Project, is comparing the frequencies of synoptic patterns, conditions conducive to large fires a week and also a season ahead, under current and future climates to determine whether the likelihood of conditions that favour fires will increase. Results suggest the burning season will become longer with an **increase in the number high fire danger days** per month (Forsyth, 2013). These changes would be attributed to increases in temperature and aridity projected for the region. According to the VA, however, Fynbos nodes in Namakwa may recede under climate change.
There is a clear gradual trend demonstrating **local sea level rise** along the Namakwa coast. This is likely linked to either an increase in the number or the intensity of low pressure cells off the coast causing a doming effect on the ocean surface (Mather, Garland, and Stretch, 2009). The same impacts could lead to **storm surge** activity such as was experienced in Port Nolloth in 2009. The high intensity coastline, with a steep rocky profile, is relatively less sensitive to wave action than softer, flatter coastlines, and there is relatively little valuable infrastructure along the Namakwa coast as compared with the rest of South Africa. There are however some specific vulnerabilities linked to local fishing and diamond dredging fleets, as well as ground water aquifers and coastal estuaries that may be damaged by inundation.

Vulnerability Assessment Priority Areas

Adaptation (EbA) to climate change. Some features in the landscape are more likely to resilience to climate change than others and these were mapped as good candidates for supporting climate change adaptation in the region. These features include riparian corridors and buffers, coastal corridors, areas with temperature, rainfall and altitudinal gradients, high biodiversity areas, south-

facing slopes and kloofs, and large unfragmented landscapes (Midgley and Holness, 2012). Keeping these areas in a natural or near-natural state will allow ecosystems and species to adapt naturally to climate change as far as possible, thus supporting healthy landscapes and the ability of ecosystems to continue to provide ecosystem services. They should be considered vital elements of South Africa's ecological infrastructure in the face of climate change, underpinning local EbA.

EbA has been defined by the Convention on Biological Diversity as 'the use of biodiversity and ecosystem-services as part of an overall adaptation strategy to help people to adapt to the adverse effects of climate change'. As such, this mapping exercise also included a focus on relevant socio-economic indicators that can also inform this process. A disaster management survey conducted with 52 settlements throughout the NDM was used to determine whether there were particular areas that were more vulnerable than others in terms of their exposure to weather-related disaster risk. Coastal communities and those living along the Orange River are more vulnerable overall due to their remote location and exposure to a greater number of environmental risks, such as storm surges and catastrophic flooding respectively. The important landscape features for supporting climate change resilience were then combined with layers for areas most important for providing water in the NDM, communal farming areas important for supporting community livelihoods, and proximity to towns for the maximum ecosystem service delivery for people. A priority map for EbA in the NDM was created and is shown below.

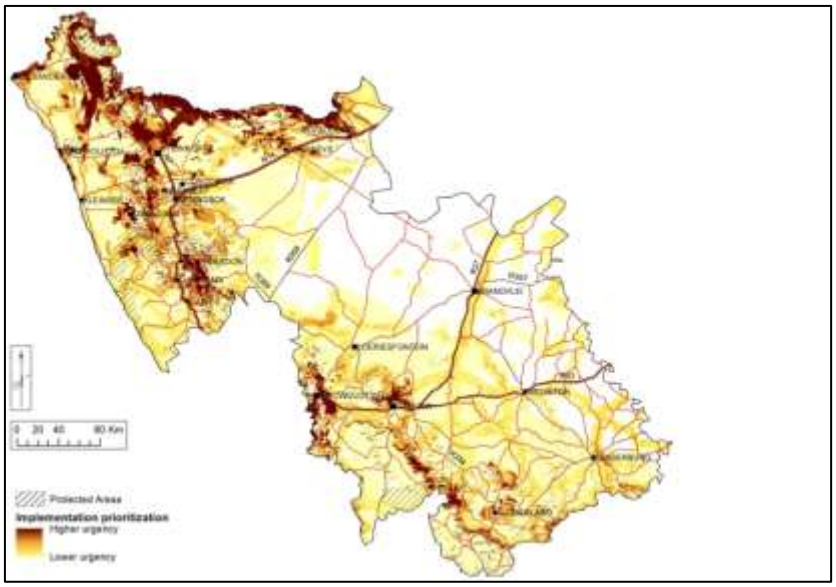

Figure 1: EbA priority areas map for the Namakwa District (Midgley and Holness, 2012)

Stakeholder mapping and engagement

To enable broader engagement with climate change adaptation beyond EbA, CSA began a stakeholder engagement process in 2013. This began with 9 workshops with local government – 2 at the District level and 7 and the local municipal level – based in the Let's Respond Toolkit (DEA 2, 2012). These sessions were focused on integrating climate change risks and opportunities into municipal planning through strategic integration of the topic into the Integrated Development Plans for each municipality and through project design and budgeting. Later in 2013 and in early 2014, linked with Adaptation Fund proposal development, CSA and SANBI began to engage directly with affected community groups, local NGOs and CBOs, and relevant government departments and research and development institutions. The goal of all of these engagements has been to develop a sensible, strategic, effective, stakeholder engaged strategy for climate change adaptation in the NDM.

On 27 November 2013 an initial engagement session was held in Cape Town at the AGM of the Northern Cape Regional Network, a network of NGOs and CBOs active across the Northern Cape including the NDM. Stakeholder mapping started at this meeting, where participants were asked to confirm that the list of stakeholders CSA and SANBI had compiled was made up of relevant organisations, and to expand this list with additional organisations they are aware of and working with.

After a short input on expected climate change impacts in the region, the group was asked to prepare some comments on good adaptation actions for the NDM.

On 13 February 2014 a second, larger stakeholder engagement session was held in Springbok and attended by 61 representatives of 38 locally active institutions. After inputs on the Adaptation Fund and Small Grants Facility, climate change and local impacts, and understanding community-based adaptation, much of the day was spent in interactive sessions identifying focus areas and appropriate actions for local level climate change adaptation in the NDM. The stakeholder mapping exercise was also completed at this meeting.

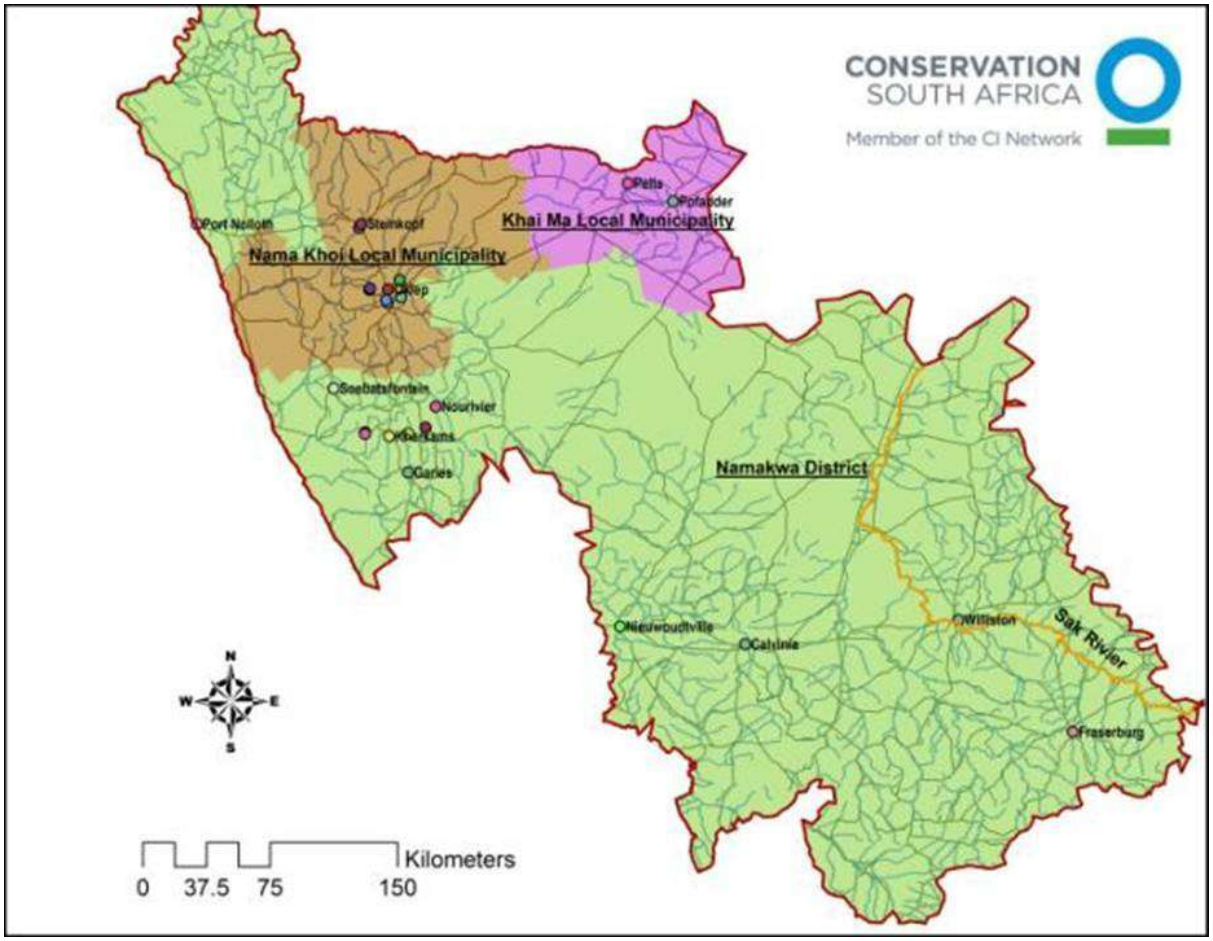

Figure 2: Stakeholder Map of the CBOs, NGOs, and Community Groups active in the NDM who completed the mapping exercise at the 13 Feb 2014 meeting

Many more organisations, institutions, research and implementation partners, and community groups were contacted for their preliminary inputs over the phone and by email. Their submissions and suggestions are also included in this profile report.

Adaptation Priorities from Stakeholder Engagements

At the April 2013 Let's Respond inception meeting with local government, some strategic priority areas for climate change response emerged and were captured to inform project design. These are shown in the diagram below:

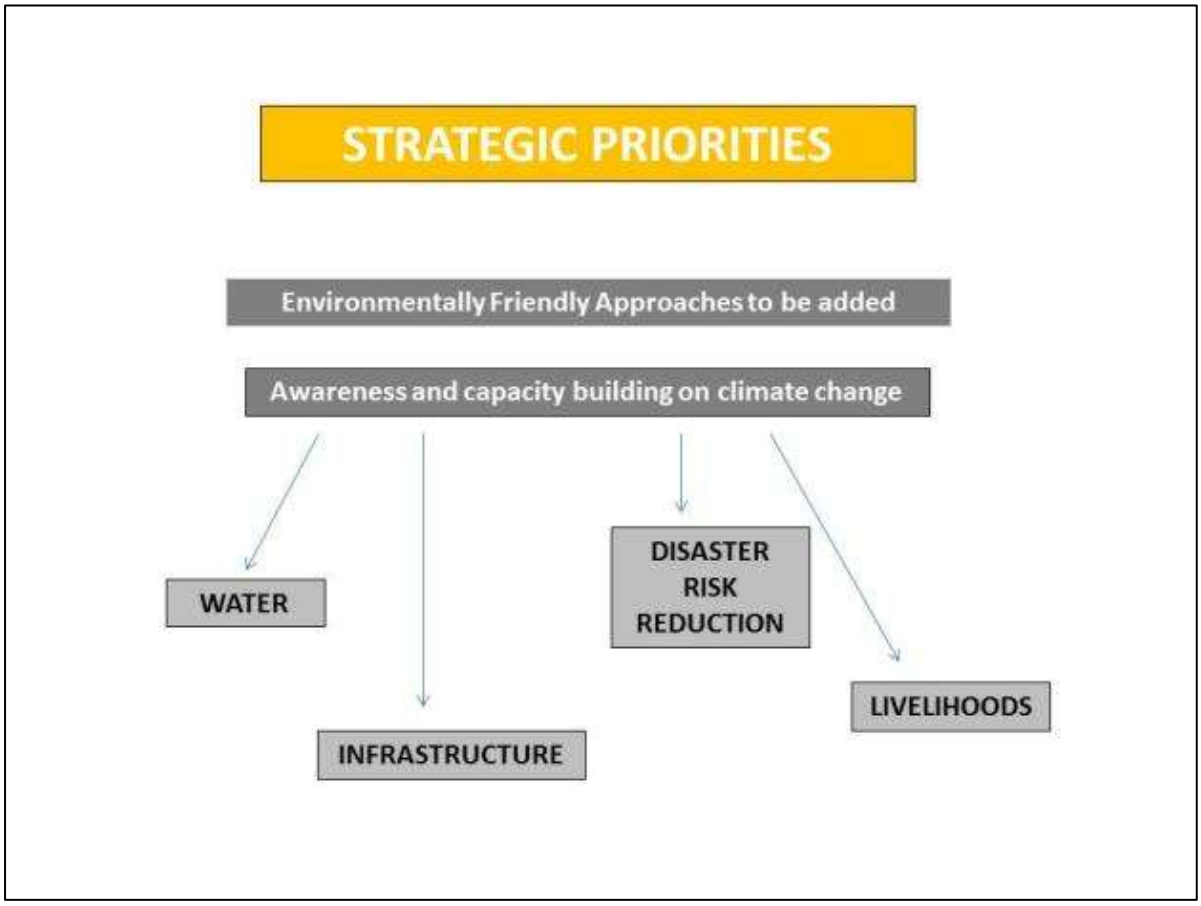

Figure 3: Namakwa District climate change adaptation priority response areas, as defined by local government officials in 2013

Since this inception meeting, 10 stakeholder engagement sessions have taken place (8 local government climate response planning workshops, and 2 Adaptation Fund proposal planning sessions). The above Strategic Directions have remained the same – all the stakeholder groups, when asked to think about adapting to climate change, have similar priorities in mind for the NDM. They have, however, been refined somewhat by further discussion with an increasing number of stakeholders. These Stakeholder Priorities for climate adaptation in Namakwa are, as captured above, **Water Scarcity**, **Awareness and Education**, **Sustainable Infrastructure**, **Sustainable Livelihoods**, **Disaster Risk Reduction**, and **Biodiversity Management** for ecosystem service delivery.

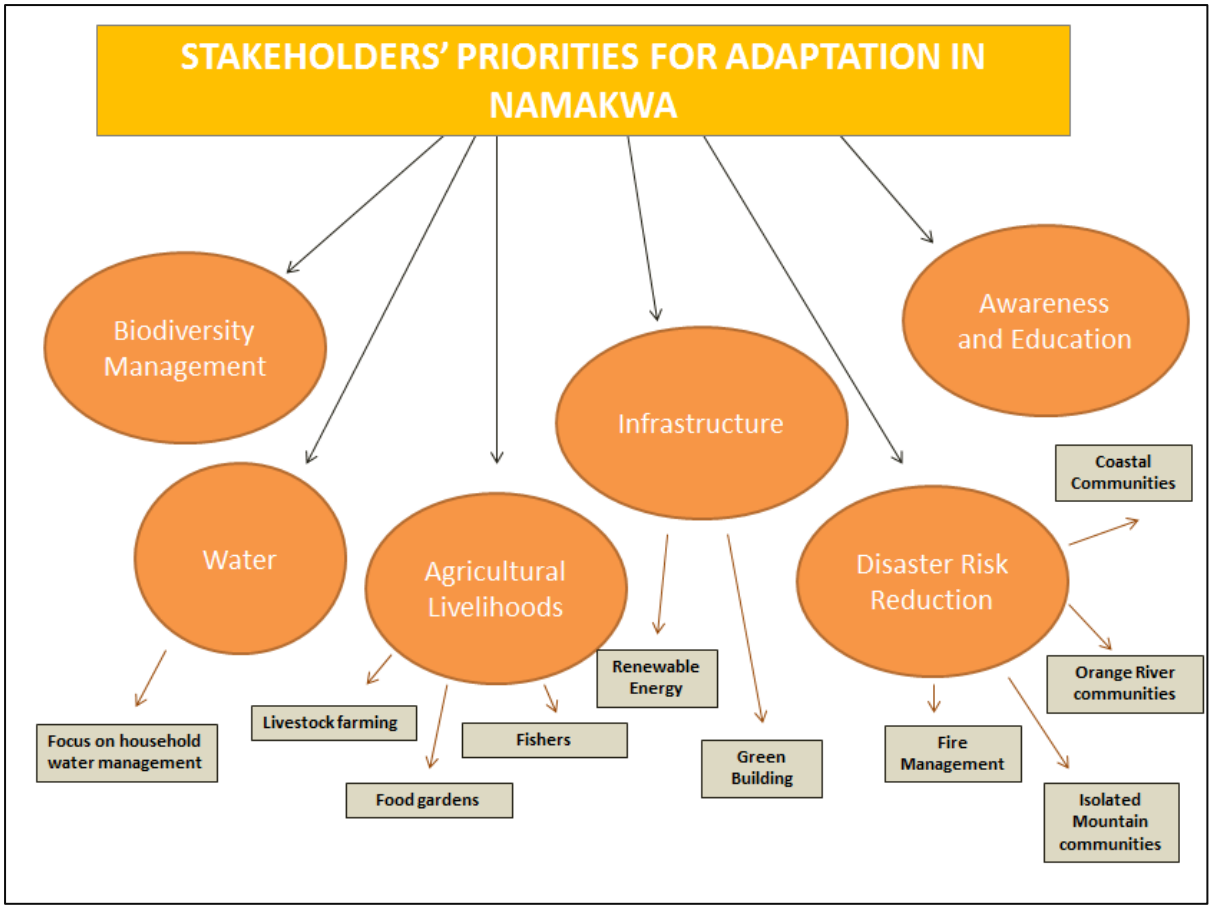

Figure 4: Refined schematic of NDM adaptation priorities following expanded stakeholder engagement

These are the similar to and certainly fall within the same broad categories as the indicative project ideas listed in the original proposal to the Adaptation Fund.

Global Adaptation Fund Eligibility and Project Selection Criteria

The Global Adaptation Fund is looking to support projects that increase the resilience of vulnerable groups and long term sustainable livelihoods, with an emphasis on projects that generate tangible adaptation responses in rural areas. The integration of scientific and local knowledge is an area of particular interest. Reduced vulnerability of local communities to existing and anticipated impacts of climate change may be achieved through strengthened livelihood strategies, increased adaptive capacity, and building ecosystem resilience, amongst other approaches. Listed below are criteria for the selection of small grant recipients and for the assessment of the climate adaptation projects they will submit for funding.

Criteria for Small Grant Recipients (Note: these criteria have since been updated, based on stakeholder feedback – see Section II.A of Community Adaptation SGF Full Project Proposal)

- Grant recipients must be South African institutions with a proven project implementation track record
- Grant recipients will have worked on human development and/or climate change response projects previously
- Grant recipients must have a sound record of good governance and financial management
- Grant recipient project management structures must include women as well as men, and should show a commitment to BBEEE
- Grant recipients will have established long standing relationships with communities in the District
- Grant recipients will have a clear mandate from project beneficiaries to work in the project focal area, and this mandate will be aligned with project investments

- Grant recipients will demonstrate willingness to participate in learning and knowledge development and dissemination processes
- No duplication of funds

Criteria for Project Selection:
- Projects must clearly demonstrate that they respond to a particular climate change or climate variability threat/s as identified in the Vulnerability Assessment
- Projects must support concrete actions and deliver tangible results that increase resilience to climate variability and change in vulnerable groups
- Projects must be implemented in rural or semi-rural areas and support grass root communities and especially women
- Projects must responds to the needs of vulnerable people and be located within the broader development context (provide economic, social, and/or environmental co-benefits)
- Projects will beneficiate groups rather than single individuals
- Projects must be designed so that they are replicable and scalable
- Projects must clearly demonstrate how success will be measured
- Projects must clearly demonstrate how they will maintain sustainability after the SGF funding ends
- Projects must demonstrate willingness to support learning outcomes and inform processes to scale up and replicate approaches in other communities

Additionally:
- Projects are encouraged to provide benefits across different sectors
- Where relevant, projects are required to demonstrate sustainable land tenure arrangements
- Projects are encourages to support sustainable partnerships

The Adaptation Fund is looking to fund projects that address a very clear climate change related threat and have a clear and demonstrable link to tangible, measurable, visible adaptation for people. Simple projects with real impacts that generate a public good for communities or groups rather than individuals will be favoured.

The Adaptation Fund will not fund:
- Projects that cannot demonstrate clearly that they directly respond to climate risks
- Projects that do not result in tangible, measurable adaptation benefits for people – this includes any project that is only awareness and education, only planning, or only research without feeding into an implemented activity.

Small Grants Facility for Adaptation: Investment Priorities

The key climate change related risks that the Namakwa District is facing are related to **increasing temperatures** and **increasing aridity**. These lead to **heat stress** and **water stress** (both in terms of water availability and water quality) for people, as well as the plants and animals that are the foundation of a high percentage of the region's livelihoods. Severe weather events, such as **droughts**, **floods**, **storm surge**, and **fire** could be very serious climate related risks in some areas at certain times. The **Investment Priorities** summarised here seek to address these climate risks and will inform project selection for funding through the small grants facility.

Investment Priority: Agriculture and Food Security
95% of land in the Namakwa District is actively utilised for agricultural pursuits – mostly small stock farming. A large percentage of the population is engaged in farming and directly dependent on this for their livelihoods. Agriculture is likely to be affected by drought, heat stress in plants and animals, as well as water quality concerns. Coastal communities dependent on fishing activities that are likely to be affected by climate change are also included here.

Investment Priority: Human Settlements
There are 52 rural human settlements in the NDM. Typically, human settlements in Namakwa are clustered closely, usually around a water source. The region has a population of around 126 000 and

settlements are often isolated. Human settlements are likely to be affected by heat stress in people (particularly the very young and very old) and water stress both in terms of water availability and water quality as a result of climate change. Coastal settlements may be increasingly at risk from storm surge, and settlements are vulnerable to flooding after long periods of drought.

Investment Priority: Ecological Infrastructure

Ecological infrastructure refers to the functioning ecosystems in a landscape that deliver valuable services to people, such as water and grazing. Investing in ecological infrastructure is intended to manage, maintain, and sometimes restore the ecosystems functions and services that support climate resilient livelihoods.

Ensuring Benefits Accrue to the Most Vulnerable

Defining vulnerability and ensuring that climate vulnerable groups benefit most from project activities is one of the core challenges the SGF will face. Vulnerability in the climate change arena refers to the degree to which a population is susceptible to, or unable to cope with, the adverse effects of climate change, variability, and extremes. Vulnerability is made up of features related to the character, magnitude, and rate of climate impact the population is exposed to, the internal characteristics of the population that influence how affected by, or sensitive to, the impact it is, as well as the population's capacity to adapt to a changing climate or one characterised by climate extremes (www.ipcc.ch/pub/syrgloss.pdf).

At the 13 February 2014 stakeholder meeting it emerged that defining vulnerability is complex, sensitive, and occasionally politically charged. It is not easy to define who the most vulnerable groups are and an agreed definition of the term is needed to inform project implementation.
Nonetheless, small scale farmers and coastal communities were identified as vulnerable groups generally. Stakeholders suggested water shortage, income, food security measures, and level of education might be appropriate indicators, but it was agreed that poverty and vulnerability are neither straightforward nor static conditions.

Group discussions with stakeholders resulted in the following broad ideas on ensuring that the most vulnerable groups, however defined, are the main beneficiaries of any Adaptation Fund:

1. Research (needs assessment) is needed as a first step to identify the groups and their needs. This could include questionnaires in schools and ECD centres, door to door surveys, talking with local leaders/elders, or focus groups. The focus of this research should be on problem definition, problem solving and project design.
2. Challenges, solutions, and sustainable project ideas should be identified by the beneficiary communities themselves.
3. Pilot projects may benefit from implementation where it has a good chance of succeeding, rather than focusing exclusively on the MOST VULNERABLE and having projects fail for logistical reasons.
4. Following SMART project design – specific, measurable, achievable, realistic, and time-bound (the group also added EcoFriendly) – will ensure tangible results are achieved and scientific and local knowledge are well integrated.
5. Project implementers should ensure broad participation but work with beneficiary groups to establish agreed upon processes that enable any benefits to flow first to those who need them the most, as defined by the community themselves and not by outsiders.
6. Using accessible and easy to understand messaging around projects will ensure that people of all age groups, gender, cultural groups, and levels of education will be able to participate meaningfully.
7. Good communication, frequent review and reflection (monitoring), and regular lessons sharing is critical for ensuring that projects are achieving their intended goals and benefitting the intended groups. Sharing lessons on what has worked is valuable, but sharing lessons on things that did not work so well perhaps even more so.

Conclusion

Through engagement with a wide range of stakeholders on the subject of climate change response in Namakwa over several years, 3 Investment Priorities for climate change adaptation planning and project design have been identified. These are **Climate Resilient Agriculture and Food Security, Climate Resilient Human Settlements,** and **Climate Resilient Ecological Infrastructure.** The Global Adaptation Fund Small Grants Facility provides an opportunity to explore concrete projects with tangible results for local rural populations within some or all of these Investment Priorities.

Supporting Documentation and References

Supporting documents

Workshop reports from April and October 2013 climate change response planning with the Namakwa District

Workshop reports from June, August, September, and November 2013 climate response planning with the Namakwa local municipalities

Meeting notes from December 2013 meeting with the Northern Cape NGO Network

Meeting report from February 2014 Adaptation Fund Small Grants Facility stakeholder engagement session

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Annex III: Letters of support

Annex III.1 DEA request of support for the selection of the MDM as a pilot site

environmental affairs
Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Private Bag X 447 · PRETORIA · 0001 · Fedsure Building · 315 Pretorius Street · PRETORIA
Tel (+ 27 12) 310 1730 · Fax (+ 2786) 588 7402

Ref: NIE
Enquiries: Mr. Shonisani Munzhedzi
Tel: 012 310 1730 Fax: 086 588 7402 E-mail: smunzhedzi@environment.gov.za

The Municipal Manager
Mopani District Municipality
Private Bag x 9687
Giyani
0826

25 February 2014

Dear Municipal Manager

Re: Request for support for the selection of the Mopani District Municipality (MDM) as a pilot site for South Africa's Climate Change Adaptation Small Grants Facility project

DEA has appointed SANBI to act as National Implementing Entity (NIE) to the Global Adaptation Fund. As part of this process, SANBI is seeking the support of the Mopani District Municipality (MDM) for the selection of an area within the MDM as a pilot site for the development and implementation of a Small Grants Facility for climate adaptation finance.

The Adaptation Fund was established by the Parties to the Kyoto Protocol of the UNFCCC, as a mechanism to finance concrete adaptation projects and programmes in developing country parties. The fund is capitalised mainly from a percentage of proceeds of the Clean Development Mechanism. Projects that are designed to implement adaptation responses may be eligible to access project funds via Multilateral Implementing Entities (MIEs) and National Implementing Entities (NIEs). In South Africa, SANBI has been accredited by the Department of Environmental Affairs (DEA) to serve the role of National Implementing Entity (NIE).

In late 2012, the NIE issued a call for proposals and developed two project proposals that were successfully submitted to the Adaptation Fund. Together with its partner institutions, the NIE is currently developing these proposals into fully developed project concepts. These will need to be submitted to the Adaptation Fund for further consideration in mid 2014.

One of these projects is for a Small Grants Facility for Climate Change Adaptation. Entitled "Taking adaptation to the ground: a small grants facility for enabling local level responses to climate change in

South Africa", this will be a small grant facility that builds resilience in vulnerable communities by supporting the development and implementation of projects that respond to local climate risks. It has been suggested that the Small Grants Facility project will pilot its approach in the Namakwa and Mopani Districts in Northern Cape and Limpopo Provinces respectively. It is envisaged that approximately 6 grants of $80 000 each will be supported in each of these focal Districts. Each project will be led by a local partner organisation that has a track record that illustrates their ability to manage this level of funding. Each project will also deliver tangible, measurable and direct benefits to local beneficiaries. Adaptation Funds will not usually be able to be used to sustain ongoing initiatives.

More information can be found in the approved Project Concept Proposal.

Should the focus on the MDM be approved by the District Municipality, the NIE will work with relevant stakeholders to support the project development process and complete the necessary project documentation. This documentation must be submitted to the Adaptation Fund Board by the end of June 2014 in order for the current deadline to be met.

During the project development process, the NIE will need to identify possible responses that could be supported as well as local organisations that have these project and financial management capabilities. The project was initially conceptualized to support NGOs and CBOs, and the viability of this approach in Mopani will need to be discussed once an inventory of such institutions has been compiled.

In order to ensure that the project is fully aligned with the priorities of the District, the NIE is seeking support from the MDM. In particular, the NIE is seeking support for:

- The identification of suggested project focal areas
- The identification of stakeholders who should be consulted and involved in project design
- The identification of completed, ongoing or planning initiatives that are relevant to the project, including projects that the SGF interventions can align with or build on
- The identification of any climate related research or baseline work that can be used in the compilation of the vulnerability assessment that will be undertaken for the focal areas
- A commitment to support project design and implementation so as to ensure that these are aligned with municipal priorities, including those contained in the IDP, SDF and LED programmes of the DM
- A commitment, where relevant, to support long term project sustainability once the AF investment has come to a hold

We would be very grateful if the MDM could:

- Consider this request
- Indicate possible priority areas where the project could focus
- Provide a letter of support for the involvement of the Mopani District Municipality in the project

The timeframes for the project development process are unfortunately tight. It follows that we would be grateful for a response to this request for support by the end of February 2014.

Please note that Dr. Mandy Barnett (M.barnett@sanbi.org.za; 021 7998895) who is the Director of the National Implementing Entity in SANBI, can be contacted for technical information on the project. Mr. Vhalinavho Khavhagali (vkhavhageli@environment.gov.za; 012 310 3899) and Ms Mikateko Sithole (mfsithole@environment.gov.za; 012 310 3177) are available in the department to provide strategic support to the process.

Your positive response would be highly appreciated.

Yours sincerely

Ms Nosipho Ngcaba

Director-General

Department of Environmental Affairs

Letter signed by: Ms. J Beaumont

Designation: Deputy Director General Climate Change and Air Quality

Date: 26 February 2014.

Annex III.2 Municipal Manager letter of support of the MDM as a pilot site

MOPANI DISTRICT MUNICIPALITY

Government Buildings
Main Road
Private Bag X9687
Giyani
0826

Tel: +27 15 811-6300
Fax: +27 15 812-4301
E-mail: tim@mopani.gov.za

Office of the Municipal Manager

Enq: Nemugumoni TLP

Date: 27 February 2014

The Director General
Climate Change and Air Quality
Dept. Of Environmental Affairs
Private Bag x447
Pretoria
0001

MOPANI DISTRICT MUNICIPALITY (MDM) AS A PILOT SITE FOR SOUTH AFRICA'S CLIMATE CHANGE ADAPTATION SMALL GRANT FACILITY PROJECT.

1. With reference to your letter dated 25 February 2014,

2. Mopani District Municipality hereby provides its support to the proposed programme. As explained from your letter, the adaptation projects will participate in sustaining the livelihood of the community. This programme will also participate in job creations and skills development to the communities.

3. As requested, the identified project focal areas of implementing the projects will be Greater Letaba and Greater Giyani Local Municipalities

4. Hoping that you will find the above in order.

Yours Faithfully,

MT MAAKE
MUNICIPAL MANAGER

Annex IV: Attendance Registers

Annex IV.1 Namakwa stakeholder workshop 13 February 2014

CONSERVATION SOUTH AFRICA
Member of the CI Network

SANBI
Biodiversity for Life
NATIONAL IMPLEMENTING ENTITY OF THE GLOBAL ADAPTATION FUND

ATTENDANCE REGISTER

OCCASION: Adaptation Fund Proposal Stakeholder Engagement

DATE: 13 February 2014

PLACE: Kokerboom Conference Centre Springbok

NO	NAME AND SURNAME	REPRESENTING	CONTACT NUMBER	FAX/E-MAIL	ADDRESS	SIGNATURE
1	Amanda Bourne	Conservation South Africa	027 718 1565	abourne@conservation.org	Springbok	[illegible]
2	Lizelle Matthys	Mine Steinkopf Nausa	074 663 5873	lizelle@muresa.co.za	Steinkopf	S. Matthys
3	Shahieda Davids	SANBI	021 799 8864	s.davids@sanbi.org.za	Kachstad	[illegible]
4	Ellick Steenkamp	Soebatsfontein Advies	0866628127		Soebatsfontein	[illegible]
5	Samuel Monage	Soebatsfontein Advies	0866628127		Soebatsfontein PDS	S Mongae
6	Katinka Waagsaetre	SANBI NIE	0799123100	Katinka@indigo-dc.org	Cape Town	[illegible]
7	Janice Essex	EWT	073 223 5073	[illegible]@ewt.org.za	Loxton	[illegible]
8	Ausie Van Neel	Luvyo Drop Inn P.N	0710287929		Port Nolloth	Ausie Neel
9	Corneels Links	Kamiesberg Erf. Foundation	078 498 5384	corneelslinks@gmail.com	Khurkams	[illegible]
10	Bonnie Schumann	Endangered Wildlife Trust	072 122 4232	bonnies@ewt.org.za	P.O. Box 172 Loxton	[illegible]
11	Leon Laurens	Namakwa WfW	0814004066	leonl@namakwa-dm.gov.za	Stigling Street Calvinia	[illegible]
12	Paulnesia Van Wyk	Khai-Ma Mun	071 7510 234	Paulnesiavanwyk@gmail.com	Pofadder	[illegible]
13	Regina Secondt	FSC	0732822466	Foodsc 02@gmail.com	Paulo	Secondt.
14	Ronald Rooi	Harmony Home	0780252481	harmonihome@gmail.com	Harmony Estate Beeasig	[illegible]

NO	NAME AND SURNAME	REPRESENT	CONTACT NUMBER	FAX / E-MAIL	ADDRESS	SIGNATURE
15	Jacobus Lewis	Spoegrivier A/O	0724449404	027-[illegible]	Spoegrivier	[signature]
16	Shannon Parring	Indigo	0826603803	shannon@indigo-dc.org	Nieuwoudtville	[signature]
17	Jolene Waterboer	Namuc	0783144228		Nababeep	[signature]
18	Frances Abrahams	Mme Re Katse	0835487136	frances.abrahams@gmail	Nababeep	8265
19	Diana Mentoor	Spoegrivier A/O.	0846056070		Spoegrivier	[signature]
20	Brendon Andrews	Namko	0277441010 0718607393	0277441350 namko@telkomsa.net	Okiep	[signature]
21	Bernie Stevens	N.D.F	0733848881	benjaminstevens@hotmail.com	Nababeep	[signature]
22	Cornelius Nels	NDM	0749221331	neelsn@namakwa-dm.gov.za	Springbok	[signature]
23	Andreas Booysen	Sprankie Hoop	078 0404422		Okiep	[signature]
24	Coleen Cloete	Sprankie Hoop	0734888988	Coleen740@gmail.com	Nababeep	[signature]
25	M. Gardiner	CSA	0721769851	mgardiner@conservation.org	SBok.	[signature]
26	R. Newman	CSA	0711091427	rnewman@conservation.	SPK	[signature]
27	J. Magerman	NCRN	0844218943	johann@youandyourmoney.org.za		[signature]
28	E. Muller	Nam Petroleum	0835970737	nampetroleum@gmail.com	Concordia	[signature]
29	M.H. Kuiters	Kook	0719253354	[illegible]@yahoo.com	Komaggas	[signature]
30	R.S van Schalkwyk	SPP	0767861333	ronald@springbok.spp.org.za	Springbok	[signature]
31	Stephen Law	EMG	021 448 2881	stephen@emg.org.za	Cape Town	[signature]
32	Lenie Coetzee	Women on Farms	(054) 3311191	lenie@wfp.org.za.	Upington	[signature]
33						

ATTENDANCE REGISTER

OCCASION: Adaptation Fund Proposal Stakeholder Engagement

DATE: 13 February 2014

PLACE: Kokerboom Conference Centre Springbok

NO	NAME AND SURNAME	REPRESENTING	CONTACT NUMBER	FAX/E-MAIL	ADDRESS	SIGNATURE
1	Amanda Bourne	Conservation South Africa	027 718 1565	abourne@conservation.org	Springbok	
2	Faslona Martin	SANBI	021 7998895	f.martin@sanbi.org.za	Kirstenbosch	
3	Sarshen Scorgie	Conservation South Africa	021 799 8721	SScorgie@conservation.org	Kirstenbosch	
4	Jorinda Whitlow	Advice Office	0278518070	pnadvice@mweb.co.za	Port Nolloth	
5	Yolande Fulton	Pvt	027 712 1249	yolandef@xsinet.co.za	Springbok	
6	Jillian Bezuidt	Khai-Ma Mun.	0549331031	Jillian@khaima.gov.za	Pofadder	
7	Elge Brandt	Bergsig Ontwikkelingsgroep	0277181679	bog@vekenaardienste.co.za	Springbok	
8	Esthdene Moses	Indigo	0272181148	esthdene@indigodc.org	Nieuwoudtville	
9	Katrina Seron	Bergsig Ondersteuning	0726795679	bog@vekenaardienste.co.za	Springbok	
10	Abe Koopman	Eco-Sebenza	0760899457	ecosebenza@gmail.com	Springbok	
11	Evelyn Fortuin	Sekisonki – V/Groep	0711237991		Spoegrivier	
12	Erola Mentoor	" V/Groep	0743647213		Spoegrivier	
13	Quinta Titus	Namko	0739003785	namko@telkomsa.net	Okiep	
14	Ronnie VanWyk	Namko	027-744 1010 073589/122	namko@telkomsa.net	Okiep	

NO	NAME AND SURNAME	REPRESENT	CONTACT NUMBER	FAX / E-MAIL	ADDRESS	SIGNATURE
15	Anna Brandt	NA.DE.C	0736363134	0277138889	Loopstr.C114	[signature]
16	Morné Samson	NADEC	0818626934	0277138889	Sedelaan 518	[signature]
17	James Brandt	Youth Social Change	0736529893	—	Nababeep	[signature]
18	CORA William	CSA	0728496898	0277181565	Springbok	[signature]
19	R Richards	Nama Pride	6728604847		Steinkopf	[signature]
20	E. JULIUS	DEBAT	0767318731	086 602 6100	SPK	[signature]
21	H. Heels	Nama Khoi	0728259271		Spektakel [illegible]	[signature]
22	P Claasen	HOUSE OF JOY			CONCORDIA	[signature]
23	J. CLOETE	HOUSE OF JOY			CONCORDIA	[signature]
24	E. JANTJIES	NAMA KHOI → HOJ	027-7188162	ejantjies@[illegible].co.za	"	[signature]
25	James Jonas	Nama eSkills Centre + Nababeep Dev. Founder	0829302847	jbusinessservices@gmail.com	Nababeep	[signature]
26	Desmond Kordom	LHK	054 331 2200	desmond@lhr.org.za	Upington	[signature]
27	HARRY MAY	SPP	0214485605	harry@spp.org.za	Cape Town	[signature]
28	Leanne Schmidt	SPP	073 647 1131	schmidt.leanne@gmail.com	Concordia	[signature]
29	JAN ADAMS	FSC	0737127262		[illegible]	[signature]
30						
31						
32						
33						

Annex IV.2 Mopani meeting to introduce the Community Adaptation SGF to the MDM 14 February 2014

MOPANI DISTRICT MUNICIPALITY

ATTENDANTS REGISTER
SMALL GRANT FACILITY PROJECT MEETING
CLIMATE CHANGE ADAPTATION
14 FEBRUARY 2014
VENUE: DISASTER MANAGEMENT CENTRE: TZANEEN
TIME: 09H00

Name	Institution	Tel/ Cell	Fax or Email	Signature
Steyn JJ	Mopani DM	0827730275	hsteyn200@gmail.com	[illegible]
Mudau NR	Mopani D.M	0761133733	mudaun@mopani.gov.za	[illegible]
Piluso MB	Mopani D.M	0833985105	pilusob@mopani.gov.za	Piluso
Mikateko Sithole	DEA	0123103177	MFSithole@environment.gov.za	[illegible]
Vhalinavho Khavhagali	DEA	0722656747	vkhavhagali@environment.gov.za	[illegible]
Shoni Munzhedzi	DEA	012 395 1730	Smunzhedzi@environment.gov.za	[illegible]
Mandy Barnett	SANBI	0826008283	m.barnett@sanbi.org.za	[illegible]
Thuso Nemugumoni	MDM	072 422 8676	Nemugumonit@mopani.gov.za	T Nemugumoni

Annex IV.3 Mopani meeting with MDM executive committee 07 March 2014

MOPANI DISTRICT MUNICIPALITY

ORDINARY MANAGEMENT COMMITTEE MEETING

TIME: 08H30
DATE: 07 MARCH 2014 (FRIDAY)
VENUE: DISASTER MANAGEMENT CENTRE

No.	Name & Surname				Mobile No	Signature
		F / M	Youth	Disabled		
1	Mr MT Maake	M			083 256 7563	
2	Mr NG Lebepe	M			079 169 4441	
3	Mr MC Machubene	M			082 549 1461	
4	Mr MS Tsebe	M			076 563 9106	
5	Ms KB Lebopa	F			082 530 8322	
6	Ms TLP Nemugumoni	F			072 422 8676	
7	Mr TE Ralulimi	M			082 366 5851	

8	Mr NP Lebepe	M			076 956 3901	
9	Adv. KE Malatji	M			082 717 1122	
10	Ms N Lebone	F			072 996 0743	
11	Mr LT Motau	M			073 410 1866	
12	Ms ME Motloutsi	F			083 444 1421	
13	Mr NJ Malwandla	M			083 414 0019	
14.	MR N Mdungazi	M			0785040158	
15.	Ms Kgaripeng	F			0834442324	
16.	Mr MJ Rasekgala	M			0735577458	
17.	Mr N. Shikwambana	M	X		0834442645	

Annex IV.4 Mopani proposal development process workshop 03 April 2014

MOPANI DISTRICT MUNICIPALITY

ATTENDANTS REGISTER

CLIMATE CHANGE ADAPTATION FUND SMALL GRANT FACILITY WORKSHOP
03 APRIL 2014
VENUE: MOPANI DISTRICT MUNICIPALITY CONFERENCE HALL
TIME: 10H00

Name	Institution	Tel/ Cell	Fax or Email	Signature
Mikateko Sithole	DEA	012 310 3177	MSithole@environment.gov.za	[signature]
Mandy Barnett	SANBI	0826009283	m.barnett@sanbi.org.za	[signature]
Katinka Waagsaether	SANBI	0799123100	K.Waagsaether@sanbi.org.za	K. Waagsaether
Makhubele M.J	LEDET	082 419 7482	MakhubeleMJ@ledet.gov.za	[signature]
Chauke T.E	LEDET	071 0071 996	Chauketheabusile@gmail.com	[signature]
Leshabane P.S	LEDET	079 515 6492	LeshabanePS@ledet.gov.za	[signature]
Sleyh J	MDM (Disaster)	082 778 3475	sleyhj@mopani.gov.za	[signature]
Mhlongo M.P	TZANEEN PASTORS FRATERNAL	078 321 9022	mpmhlongo@gmail.com	[signature]
Somanje N.J	GGM	0781426232	SomanjeNJ@greatergiyani.gov.za	[signature]

Name	Institution	Tel/ Cell	Fax or Email	Signature
Mauoko MA	LEDET	0828010795	MauokoMA@ledet.gov.za	
Piluse MB	MDM	0833995105	piluseb@mopani.gov.za	
MUDAU NR	Mopani District Municipality	0761133733	mudaun@mopani.gov.za	
Maifala M.J.	Mopani Dist Mun	015 811 6300	maifalamj@mopani.gov.za	
Hlongwane T.W	DEA	015 811 6300	thlongwane@environment.gov.za	
Kgoedi R.S	AGRICULTURE	0726264005	kgoedirs@agric.limpopo.gov.za	
MESO MJ	AGRICULTURE	0834844864	mapulej@gmail.com	
MSWENYA SJ	GLM - AGRICULTURE	0827884218 0826731092	MgwenyaSJ@agric.limpopo.gov.za	
Rababalela	GLM	0795 9411	Erick@glm.gov.za	
Isabe M	Mopani District Mun	015 8116300	t.elem@mopani.gov.za	
Thuso Nemugumoni	MDM (CSD)	082 387 7116.	Nemugumonit@mopani.gov.za	
Mashongwane ME	LDA LETABA	0835367202	masesmaila@yahoo.com	
Maja M	LDA LETABA	0784507287	majotshidi@gmail.com	
Mavunda V.	MDM	083 444 3315	mavundav@mopani.gov.za	

Siamagqwele@gmail.com

Tshouhoe MJ@gmail.com

Annex IV.5 Mopani water vulnerability assessment workshop 10 April 2014

MOPANI DISTRICT MUNICIPALITY

ATTENDANTS REGISTER

CLIMATE CHANGE VULNERABILITY ASSESSMENT WORKSHOP
10 APRIL 2014
VENUE: MDM : GIYANI SATELITE OFFICES
TIME: 09H00

Name	Institution	Tel/ Cell	Fax or Email	Signature
MUDAU NR	MDM	0761133733	mudaun@mopani.gov.za	
Katinka Waagsaether	SANBI	0799123100	k.Waagsaether@sanbi.org.za	
MKUNA M.J.	MDM Giyani	~	~	
MAKHUBELE HJ				
Chabalala R.J.	MDM-Giyani	0730658818	ChabalalaR@Mopani.gov.za	
MAKARINGA S.M	MDM Giyani	0715461645	~	
NKUNA X.E	MDM Giyani	0720269952	Xulalaa@gmail.com	
CHEPAPE RR	MDM Giyani	0795246381	N/A	
NGOMALLE NJ	MDM	076 165 7442	N/A	

Name	Institution	Tel/ Cell	Fax or Email	Signature
Maake M.S	MDM	078 1945220	N/A	
RAPOTU LS	MDM	071 9076524	N/A	
CHAVALALA RS	MDM	0720700936	chanalalars@gmail.com	
RIKHOTSO GD	MDM	0829589671	N/A	
Maulekee MA	MDM	078 2925672	maulekea.mapow@gmail.com	

Annex IV.6 Mopani disaster management vulnerability assessment workshop 11 April 2014

ATTENDANCE REGISTER

CLIMATE CHANGE ADAPTATION WORKSHOP

DATE: 11 APRIL 2014, TIME: 09H00, VENUE: DISASTER MANAGEMENT CENTRE

NAME	INSTITUTION	DESIGNATION			TEL NO.	FAX NO.	E-MAIL ADDRESS	SIGNATURE
		Female	Male	Disabled				
[illegible]	[illegible]		✗		0157830100	015 7810740	[illegible]	
MAKGOPA P	MOPANI DISTR. MUN		✓		0153067010	0153067299	pheagamem@gmail.com	
RIKHOTSO S.S	GGM		✓		015-8115500	015 812 2068	rikhotso ss @ greatergiyani.gov.za	
SHIMANGE G.D	M.D.M		✓		015 3067023	015 3067299	geggashimange@gmail.com	
Shoroma LM	GLM	✓			015 309 9246	0865540025	leratos@glm.gov.za	
Mamanelgm	MDM		✓		0153067010	015 3067299		
Katinka Waagsaether	SANBI	✓			0799123100		k.waagsaether@sanbi.org.za	

NAME	INSTITUTION	DESIGNATION			TEL NO.	FAX NO.	E-MAIL ADDRESS	SIGNATURE
		Female	Male	Disabled				
Mqkhubele HD	MDM							
Ntloana MB			✓		076333 7816	015-306 7299	Mokhobelad @mopani.gov.za	
Ntloana MB	Manileng Muni		✓		0823953695	015793234/	198mb@webmail.co.za	
Modiba E	Maruleng Munic	✓			0719636109	015 7932341	evah_modiba@yahoo.com	
Moroatshehla M.S.	GLM		✓		0824921836	0862990113	simonm@glm.gov.za	
Somo m.m	LEDET	✓			082419 7468	015 812 4684	Somom@ ledet.gov.za	
Lephalara M.P	MDM		✓		0153067244		patrick.lpln @gmail	
Sleyn TJ	MDM		✓		0827780275	0158067012	tsley_2001@gmail.co	
CHAUKE T.E	LEDET	✓			0710071996		Chauketheresa@gmail.com	

Annex IV.7 Mopani extension officer vulnerability assessment workshop 14 April 2014

MOPANI DISTRICT MUNICIPALITY

ATTENDANTS REGISTER

CLIMATE CHANGE VULNERABILITY ASSESSMENT WORKSHOP

14 APRIL 2014

VENUE: MDM CONFERENCE HALL

TIME: 09H00

Name	Institution	Tel/ Cell	Fax or Email	Signature
Mudau NR	MDM	0761133733	mudaun@mopani.gov.za	
BALOYI TH	LDA GIYANI	073 615 3509	Baloyi Tomas [illegible]	
Katinka Waagsaether	SANBI	0799123100	k.waagsaether@sanbi.org.za	
Sithole M.R	LDA AGRIC	0839511548		
Manganyi NJ	LDA Giyani	0828114293	ntsamatiko@[illegible]	
Ngobeni S.R.	LDA - Giyani	[illegible]	ngobenisr@agric.limpopo[illegible]	
MGWENYA SJ	LDA - GIYANI	083 95 22205	MgwenyaSJ@agric.limpopo.gov.za	
MAJA M	LDA - LETABA	0784507287	majatshidi@gmail.com	
Mashangwane ME	LDA - LETABA	0834714441	masekwaila@yahoo.com	

Name	Institution	Tel/ Cell	Fax or Email	Signature
LEPSOALO MJ	LDA - LETABA	0737246249	letsoaleo[illegible]64.gmail	
Mhlongo TI	LDA - LETABA	0794473789	qfntatro@gmail.com	NMhlogo
Khosa Mahlori	LDA Greater Letaba	0732688714	mahlori.inno@gmail.com	
MARUBINI T	LDA - Greater Letaba	0781745202	tsumbedzomarubini@yahoo.co.za	

Annex IV.8 Letaba CDWs vulnerability assessment workshop 22 May 2014

GREATER LETABA MUNICIPALITY

P.O Box 36, Modjadjiskloof, 0835, Tel (015) 309 9246/7/8,
Fax (015) 309 9419, Email:greaterletaba@glm.gov.za

GREATER LETABA MUNICIPALITY

CLIMATE CHANGE WORKSHOP

VENUE: GREATER LETABA MUNICIPALITY (MOKWAKWAILA COMMUNITY HALL)

TIME: 09HOO

DATE: 22 MAY 2014

ATTENDACE REGISTER

	SURNAME & INI-TIALS	COMAPANY	CONTACTS	EMAIL/ FAX	SIGNATURE
1	Seshoka Dm	GLM	078 3350886	dinny-676@live.com	Seshoka
2	Musifane m.c	GLM	073 2008388	charlottemotjie@gmail.com	[signature]
3	Mtombeni S.E	GLM	0799749543	Emelda[illegible]gmail	Mtombeni
4	Mampeule T.T	GLM	0797148125	Babysalu1@gmail	[signature]
5	Morwatshehla m.j	Matshwenyego	083 9683308		m.m.J.

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GREATER LETABA MUNICIPALITY

P.O Box 36, Modjadjiskloof, 0835, Tel (015) 309 9246/7/8,
Fax (015) 309 9419, Email:greaterletaba@glm.gov.za

1

6	Lebepe F	Matshwenyego Recycling project	N/A	N/A	+
7	Kabapape Virginia	Koape Cleaning	076 841 0908	N/A	Rabopape S.V
8	Mashao Christine	Koope Cleaning	073 4076 927	N/A	Mashao C.M
9	MALATJI Conny	MOSIE Cleaning	0732964503	N/A	MALATJI MC
10	Mosibitla MM	Mosie Cleaning	0730580594	N/A	Mosibitla
11	Sekgale S.M	Matlopo	0742853770	N/A	SmSekgale
12	Ramoshaba M.A	Matlopo	0732733522	N/A	Ramoshaba
13	Sethibela Idah	Rehlabologile	0766494329	N/A	Sethibela
14	Mashala Joyce	Rehlabologile cleaning	0747186352	N/A	Mashala J
15	Sesinesi Jane	Ikageng CC	0725255705	N/A	[signature]
16	Maake Maria	Ikalsgeng CC	0722985520	N/A	M.M.Maake
17	Mabulana Glady	Makasha Co-	0724934222	N/A	Mabulana MG
18	Sezaiazaia T.	Makasha Co.	0711941665	N/A	Sezaiazaia T.
19	Sharema L.M	GLM	0825789624	0865540825	[signature]
20	Sipho Tshitalonge	SANBI	0766150132	N/A	[signature]
21	Katinka Waagsaether	SANBI	0799123106	K.Waagsaether@SANBI	K.Waagsaether
23	Sinoyolo Mbanfa	DEA	0782250994	SMbanfa@environment.gov.za	[signature]

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GREATER LETABA MUNICIPALITY

P.O Box 36, Modjadjiskloof, 0835, Tel (015) 309 9246/7/8,
Fax (015) 309 9419, Email:greaterletaba@glm.gov.za

			0128951710		environment.gov.za
24	Mathevula D.A	DEA	0836731454	DMathevula@	D.A
25	Makgwahlela MF	Phekhela Recycling	073 583 9853	—	F. makgwahlela
26	[illegible] T.D	Coghsta	0829592496	thamaha@hotmail.com	[illegible]
27	Moreomi LLP	Coghsta	0722105472	———	[illegible]
28	Tabane M.L	COGHSTA	0829952925		[illegible]
29	Setloama M.A	COGHSTA	0829592566	outlook.com setloama@	[illegible]
30	Makgathwa Matsw	Phekhela Recycling	0735739114	—	[illegible]
31	Monoatshehla Fiona	GLM	0824188585		Matshwimi
32	Mikateko Sithole	DEA	012310 3177	Mts.ithole@environment.gov.za	Fmoroatz
33	Bosoma K.S	GLM	0792573188	kgaugelo[illegible]@gmail.com	[illegible]

"To be an outstanding agro processing and eco-cultural tourism hub"

Annex IV.9 Giyani CDWs vulnerability assessment workshop 26 May 2014

SANBI
Biodiversity for Life
NATIONAL IMPLEMENTING ENTITY OF THE GLOBAL **ADAPTATION FUND**

Attendance Register

Climate Change Vulnerability Assessment Workshop

Date: 26 May 2014, Venue: Giyani Golf Course

Name	Institution/ Job description	Tel/cell	Email or Fax	Signature
Mikateko Sithole	DEA	012 310 3177	MSithole@environment.gov.za	[illegible]
Delani Mathevula	DEA	012 395 1710	DMathevula@environment.gov.za	[illegible]
Mpho Tshitwalange	SANBI	021 799 8786	m.tshitwalange@sanbi.org	[illegible]
Katinka Waagsaeter	SANBI	0799123100	K.Waagsaeter@sanbi	K. Waagsaeter
Sinosolo Mlahla	DEA	012 395 1721	SMlahla@environment.gov.za	[illegible]

Name	Institution/ Job description	Tel/cell	Email or Fax	Signature
Mabunda T.L.	COGHSTA CDW	0746190948		
Mathebula T.G	COGHSTA CDW	0784188167		
Mathebula - L.N.	COGHSTA CDW	0829592696	0829592696@webmail.co	
Raserapo A-B	CDW/COGSHA	0834801270	raserapoa@gmail.com	
MThombeni V.P	CDW	0733879894	—	
Makondo T.M	CDW COGHSTA	0829592804	tinyikomercy@yahoo.com	
Somenje MJ	Greater Giyani Municipality	0731426232	SomenjeMJ@GREATERGIYANI.GOV.ZA	
Mahwangonye S.S	Local coordinator CDWP GGM	0820476032	xewetapa@gmail.com	
MABUNDA T.S	COGHSTA - CDW	0832075971	—	
Mabande RY	COGHSTA - CDW	0837931207	nkateko.yvonne@gmail.com	
ZITHA T.A	COGHSTA - CDW	0837951200	zithaneli@webmail.co.za	
MABASA T.C	COGHSTA-CDW	083 793 1217	ti.hani@gmail.com	
SONO M.M	LEDET	0824197468	sonommc@ledet.gov.za	

Name	Institution/ Job description	Tel/cell	Email or Fax	Signature
CHAUKE T.E	LEDET	0710071996	Chaukethembisile@gmail.com	
KHOSA M.B	COGSTAR	0837998216	——	
MULAUDZI XL	COGSTAR	0730976474		
HLONGWANE C	COGHSTA	0826271314	conanhlon@webmail.co.za	
Mathe V	Coghsta	0829512822	——	
MAKGOPA M.T.	COGHSTA	0829593860	maitetinya@gmail.com	
MALULEKE TC	COGHSTA	0837931213	tinyikoconnym@hotmail.com	
NGOBENI, D.E	COGHSTA CAP	0829592774	davidngobeni87@gmail.com	

Annex IV.10 Mopani health vulnerability assessment workshop 28 May 2014

SANBI
Biodiversity for Life

NATIONAL IMPLEMENTING ENTITY OF THE GLOBAL **ADAPTATION FUND**

Attendance Register

Climate Change Vulnerability Assessment Workshop

Date: 28 May 2014, Venue: MDM Conference Hall

Name	Institution/ Job description	Tel/cell	Email or Fax	Signature
Katinka Waagsaether	Project office, SANBI	0799123100	K.Waagsaether@sanbi.org.za	
Mpho Tshitalange	Project Assistant SANBI	021 799 5784	M'tshitalange@sanbi.org.za	
MASILANI [illegible]	LETABA Hosp	0721845024		
MATHEBULA K.R.	LETABA HOSPITAL	0713473489	mathebular7@gmail.com	
PHAKULA A.D	LETABA Hospital	0838964820	baloyijack@webmail.co.za	

Name	Institution/ Job description	Tel/cell	Email or Fax	Signature
MLAMBO M.T	DEPARMENT OF HEALTH	0825862742	musandiwamlambo@gmail.com	
MOAGI.M.F	DEPARTMENT HEALTH	0768339114		
MOKOENA M.S.	DEPT OF HEALTH	0839509203	—	
Tihuhlu M.S	Dept of Health	0784648665	0784648665@mtnloded.co.za	
Mabunda B.F	Letaba hospital	072 187 9163	bananif@webmail.co.za	
Ngobeni M.E	Malaria institute	072 830 8168	amukelani.eunice@gmail.com	
Tlikateko Sithole	DEA	012 310 3177	[illegible]@environment.gov.za	
SINOJOLO MLANGA	DEA	012 395 1721	[illegible]@environment.gov.za	
Delani Mathevula	DEA	012 395 1710	DMathevula@environment.gov.za	
Engelbrecht T.	E.H.P.	0828040444	biotechlimp@gmail.com	
Shitlhangu DD	Ass Director	0825712456	dumisani@mopani.gov.za	
Rapahlela OM	E.H.P	0764983462	bolu.moses@yahoo.com	
Masinga T.T.	E.H.P.	0822136622	[illegible]	

Name	Institution/ Job description	Tel/cell	Email or Fax	Signature
Baloyi L.m	EHP	0843431945	Baloitinyikooscar@yahoo.com	[signature]
Sithole M.P	EHP	0725156246	Mkastone@webmail.co.za	[signature]
Matjeke HG	EHP	0834842996	matjekeg@yahoo.com	[signature]
MALULEKE D.M	EHP	0723353133	musa.maluleke@yahoo.com	[signature]

Annex IV.11 Mopani stakeholder workshop 13 June 2014

Mopani District Climate Change Adaptation Workshop
Date: Friday 13 June 2014
Venue: Arbor Park Lodge, Tzaneen

SANBI Biodiversity for Life
NATIONAL IMPLEMENTING ENTITY OF THE GLOBAL ADAPTATION FUND

Name	Organisation	Email	contact number	Signature
Antoaneta Letsoalo	Limpopo Dept of Economic Development, Environment & Tourism	LetsoaloAL@ledet.gov.za	015 290 7063 082 903 2276	
Azwianewi Makhado	Nkuzi	azwi@nkuzi.org.za	015 2976972	A.makhado
Brian Mdungazi	GenderCC	mdungazivb@yahoo.co.za	078 326 6579	
Dumisani Shitihangu (David)	Mopani District Municipality: Department of Health	Dunmisani@mopani.gov.za		
Elisa Nghunyule	Khanimamba Training & Resource centre		0729283544	[illegible]
Emily Mabapa	FABCO	[illegible]	082 863 2946	[illegible]
Emily Tjale	LAMOSA	emily@lamosa.org.za	011 833 1063 082 314 1058	[illegible]
Enock Mochaki	FABCO			[illegible]
Farai Hove	Care SA	farai.hove@za.care.org	083 6677 052 015 307 6657	FHove
Fealone Martin	SANBI	f.martin@sanbi.org.za		
Fhatuwani Nemalamangwa	Ramotshinyadi HIV and Youth Guide Centre	ramotshinyadi@gmail.com	079 526 3101 Fax: 086 545 5880	[illegible]
Thabia Ramaiepe	Ramotshinyadi HIV/AIDS Youth Guide			[illegible]
Miyelani Ndindani	Ramotshinyadi HIV/AIDS Youth Guide			Ndinderin.
Hannes Steyn / ~~Makgopa~~		hsteyn2009@gmail.com	082 773 0475	
Jan Graf	AWARD	079 jan@award.org.za	0796838404	[illegible]
Katinka Waagsaether	Indigo Development & Change			
Kenny Phasha	Tsogang water and sanitation	kenny.phasha@gmail.com		
Kholoma William Maake	Modjadji V Care Group	kholomawm@gmail.com	083 486 3039	[illegible]
Lerato Shoroma	Greater Letaba Local Municipality	Lerato5@glm.gov.za	072 288 1586	
Madumetja Tsebe / Dion	Mopani District Municipality	Tsebem@mopani.gov.za	076 563 9106 015 811 6315	
Marie-Tinka Uys	Kruger 2 Canyons	info@kruger2canyons.org	079 205 2458 082 551 7261	
Marisa Coetzee	AWARD	coetzeemarisa@gmail.com	0827393650	[illegible]
Masodi Margaret Letsoalo	Goland Kulani early learning centre	golangkulani@gmail.com	015 303 3258 083 735 1724	
Polyvian Moremi	Golang Kulani Early Learning Centre	"	0834136660	[illegible]
Michael Jennings	SANBI	m.jennings@sanbi.org.za		
Mikateko Sithole	DEA	mfsithole@environment.gov.za		
Mokgadi Pilusa	Itireleng	ieptcoe@mweb.co.za	072 026 2206	NPilusa
Ngobeni Soza Rufus	Dept of Agriculture - Giyani			
Nkululeko Mabuza	Keep The Dream 196	nkululeko.ktd196@gmail.com	076 579 8710	NMabuza

No name Patrick Sekhula	Mopeni Farmers Union	Duwadzigapu@gmail.com	078 5188866	
No name	Mopani Farmers Union			
Nomsa Ngwenya	Limpopo Organic Farmers & Excilile Co-operative (LIYOFA)	nomsangwenya@yahoo.com	079 849 8797	
Norah Mlondobozi	Mopani Farmers Union	Daxanofresh@mweb.co.za	0764424050	✓
Ntshavheni Mudau	Mopani District Municipality	Mudaun@mopani.gov.za	076 113 3733	
Nurse Baloyi	Itireleng	leptcoe@xsinet.co.za		
Oupa Mathebula	FABCO	oupam74@gmail.com	072 254 1585	
Petja Brilliant	Limpopo Department of Agriculture	petjamb@gmail.com	082 727 9058 082 492 1104	
Petros Lepulane	Boitumelo Community Development Initiative	Maakeplazapos@postnet.co.za	078 428 0373	
Poppy Mashamaite	Choice Trust	poppy@choicetrust.co.za	082 9740 544 015 307 6329	
Prof. Kingsley Ayisi	University of Limpopo, Risk and Vulnerability Science Centre	kwabena.ayisi@ul.ac.za	015 268 4051 / 015 268 2474 082 808 7684	
Queen Baloyi	Khanimamba Training & Resource centre	queen@khanimambatraining.co.za	072 417 9312	
R Ramugondo	Limpopo provincial dept of Agriculture and Rural Development	ramugondorr@gmail.com	0716855981	
Samuel	Boitumelo Community Development Initiative	Maake plaza	0833494677	Sec
Sharon Pollard / Jan Graf	AWARD	sharon@award.org.za		
Shirley Mafemo	Nkuzi	shirley@nkuzi.org.za	0848500339	
Thuso Nemugumoni	Mopani District Municipality: Community Development	Nemugumonit@mopani.gov.za	082 387 9116 / 072 422 8676	
Wilson Baloyi	Itireleng	leptcoe@xsinet.co.za	0824613641	
P.P. MAKGOPA	MOPANI DISTR. MUN	pheeganem@gmail.com	0153027025	✓
S.R. NGOBENI	MOPANI DISTRICT - GIYANI	ngobenisr@gmail.com	0799584652	
Patience Chauke	Tsogang Water and Sanitation	tsogang@pixie.co.za	082 909 2449	
MANYEVERE ALEN	UL - RAVAC	alen.manyevere@ul.ac.za	0790980486	
EN Phooko	DEA	Phooko@environment.gov.za	0983103738	
Thabo Hlongwane	DEA	thlongwane@environment.gov.za	079490 2739	
Julie Sonaye	Greater Giyani Municipality	SonayeNJ@GREATERGIYANI.GOV.ZA	0781426232	
Mzamani Khosa	Greater Giyani Municipality	khosami@greatergiyani.gov.za	0713605192	
Mashale Petrus	Mohlanatsi Farm	mashalepi@gmail.com	0836822474	
Siviwe Mlanda	DEA	SMlanda@environment.gov.za	012 395 1721	
Sipho Mhlengo	KIRC	smhlongo@iceinstitute.co.za	0721705084	
Ntokozo Nzimande	NKUZI	ntokozo@nkuzi.org.za	0837459372	
Ramapela Eric	Bahlabine CPA	bahlabinecpa1@webmail.co.za	0728686992	
Mmaditsa Mahlaela	Bahlabine CPA	bahlabinecpa1@webmail.co.za	0734363676	
Mathevula Delani	DEA	DMathevula@environment.co.za	0836731454	

Mopani District Climate Change Adaptation Workshop
Date: Friday 13 June 2014
Venue: Arbor Park Lodge

SANBI Biodiversity for Life
NATIONAL IMPLEMENTING ENTITY OF THE GLOBAL ADAPTATION FUND

Name	Organisation	Email	contact number	Signature
Antoinета Letsoalo	Limpopo Dept of Economic Development, Environment & Tourism	LetsoaloAJ@ledet.gov.za	015 290 7063 082 903 2276	
Azwianewi Makhado	Nkuzi	azwi@nkuzi.org.za		
Brian Mdungazi	GenderCC	mdungazivb@yahoo.co.za	078 326 6579	
Dumisani Shithangu (David)	Mopani District Municipality: Department of Health	Dunmisani@mopani.gov.za	082 5 712 456	
Elisa Nghunyule	Khanimamba Training & Resource centre			
Emily Mabapa	FABCO			
Emily Tjale	LAMOSA	emily@lamosa.org.za	011 833 1063 082 314 1058	
Enock Mocheki	FABCO	Pmocheki @ yahoo.com	0722256063	
Farai Hove	Care SA	farai.hove@za.care.org	083 6677 052 015 307 0657	
Faslona Martin	SANBI	f.martin@sanbi.org.za		✓
Fhatuwani Nemalamangwa	Ramotshinyadi HIV and Youth Guide Centre	ramotshinyadi@gmail.com	079 526 3101 Fax: 086 545 5880	
TSHOVHOTE NDAFHI JANE	Limpopo Department of Agriculture (Giyani)	tshovhotenj@agric.limpopo.gov.za	082 738 4218	
Hannes Steyn / [illegible]		hsteyn2009@gmail.com	082 773 0475	
Jan Graf	AWARD			
Katinka Waagsaether	Indigo Development & Change			✓
Kenny Phasha	Tsogang water and sanitation	kenny.phasha@gmail.com		
Kholoma William Maake	Modjadji V Care Group	kholomawm@gmail.com	083 496 3039	
Lerato Shoroma	Greater Letaba Local Municipality	Lerato5@glm.gov.za	072 288 1586	
Madumetja Tsebe / Dion	Mopani District Municipality	Tsebem@mopani.gov.za	076 563 9106 015 811 6315	
Marie-Tinka Uys	Kruger 2 Canyons	info@kruger2canyons.org	079 205 2438 082 551 7261	
Marisa Coetzee	AWARD	coetzeemarisa@gmail.com		
Masodi Margaret Letsoalo	Goland Kulani early learning centre	golangkulani@gmail.com	015 303 3258 083 735 1724	
Moloko Polynah Moreni	Golang Kulani E.L.C.	"	0834155660	
Michael Jennings	SANBI	m.jennings@sanbi.org.za		
Mikateko Sithole	DEA	mfsithole@environment.gov.za	012 310 3177	
Mokgadi Pilusa	Itireleng	[illegible]	072 026 2206	
Ngobeni Soza Rufus	Dept of Agriculture - Giyani			
Nkululeko Mabuza	Keep The Dream 196	nkululeko.ktd196@gmail.com	076 579 8710	

No name Patrick Sekhula	Mopani Farmers Union	Duvadzifarm@gmail.com	0735185866	[signature]
No name Adam Mabunda	Mopani Farmers Union	vatsonga2@gmail.com	0736428041	[signature]
Nomsa Ngwenya	Limpopo Organic Farmers & Excille Co-operative (LIYOFA) (LIOFA)	nomsangwenya@yahoo.com	079 849 8797	[signature]
Norah Mlondobozi	Mopani Farmers Union	Dovanofresh@mweb.co.za		
Ntshavheni Mudau	Mopani District Municipality	Mudaun@mopani.gov.za	076 113 3733	
Nurse Baloyi	Itireleng	[illegible]		
Oupa Mathebula	FABCO	oupam74@gmail.com	072 254 1585	
Petja Brilliant	Limpopo Department of Agriculture	petjamb@gmail.com	082 727 9098 ~~082 492 1104~~	[signature]
Petros Lepulane	Boitumelo Community Development Initiative	Maakeplazapos@postnet.co.za	078 428 0373	
Poppy Mashamaite	Choice Trust	poppy@choicetrust.co.za	082 9740 544 015 307 6329	
Prof. Kingsley Aysi	University of Limpopo, Risk and Vulnerability Science Centre (Josephine & Allen)	kwabena.ayisi@ul.ac.za	015 268 4051 / 015 268 2474 082 808 7684	
Queen Baloyi	Khanimamba Training & Resource centre	queen@khanimambatraining.co.za		
R Ramugondo	Limpopo provincial dept of Agriculture and Rural Development	ramugondorr@gmail.com	071 685 5981	[signature]
Samuel	Boitumelo Community Development Initiative			
Sharon Pollard / Jan Graf	AWARD			
Shirley Mafemo	Nkuzi	shirley@nkuzi.org.za		
Thuso Nemugumoni	Mopani District Municipality: Community Development	Nemugumonit@mopani.gov.za	082 387 9116 / 072 422 8676	
Wilson Baloyi	Itireleng	[illegible]	0828613641	[signature]
Johnson Nyhatsane	Exilite (Agricultural group)	JohnsonN@worldonline.co.za	0845771026	
Kenny Phasha	Tsogang Water & Sanitation	tsogang@pixie.co.za	0828091039	
Josephine Khosa	University of Limpopo	josephine.khosa@ul.ac.za	0763188127.	
Maueko MA	Economic Development Environment & Tourism	MauekoMA@ledet.gov.za	[illegible]	[signature]
Mabunda S.L	ggm	mabundasl@greatergiyani.gov.za	0725122614	[signature]
Sono M.M	LEDET	Sonomm@ledet.gov.za	0834197468	[signature]
Makhubele N.J	LEDET	MakhubeleNJ@ledet.gov.za	0824197482	[signature]
Noah Matlhogela	Independent Development Trust	noahm@idt.org.za	082 321 0997	[signature]
Alen Manyevere	UL-RAVSC	Alen.manyevere@ul.ac.za	0799980486	[signature]
Mavundza S.N	Greater Giyani Municipality	Mavundzasn@greatergiyani.gov.za	0826448276	[signature]
Mashau Petrus	Mohlanatsi IRDP	mashaupi@gmail.com	0836327474	[signature]
Phasha Mologadi	IAEP	Mokgobeda@gmail.co.za		

Annex V: Discussion Document

South African Adaptation Fund project

Taking Adaptation to the Ground: A Small Grants Facility for Enabling Local Level Responses to Climate Change

Project Discussion Document

Prepared by the SANBI NIE, SouthSouthNorth and Conservation South Africa

25 July 2014

Table of Contents

Acronyms

ACDI	African Climate and Development Initiative
AF	Adaptation Fund
AFB	Adaptation Fund Board
CBO	Community Based Organisation
CSA	Conservation South Africa
Letaba	Greater Letaba Local Municipality
EE	Executing Entity
FA	Facilitating Agency
Giyani	Greater Giyani Local Municipality
LTAS	Long Term Adaptation Scenarios
NGO	Non-Governmental Organisation
NIE	National Implementing Entity
SANBI	South African National Biodiversity Institute
SGF	Small Grants Facility
SSN	SouthSouthNorth
UNFCCC	United Nations Framework Convention on Climate Change

Glossary

Adaptation	The process of adjustment to actual or expected climate and its effects. In human systems, adaptation seeks to moderate harm or exploit beneficial opportunities. In natural systems, human intervention may facilitate adjustment to expected climate and its effects (IPCC, 2014 [12]).
Adaptive capacity	The ability of a system to adjust to climate change, including climate variability and extremes to moderate potential damages, to take advantage of opportunities, or to cope with the consequences (IPCC, 2007[13]).
Climate Change	Climate change refers to the long-term shift in weather patterns. Climate change can be caused by natural causes, such as volcanic eruptions, or human causes, such as greenhouse gas emissions from the burning of petrol. Global warming, which is the general increase in temperature caused by human-related greenhouse gas emissions, is one type of climate change (Lets Respond Toolkit).
Climate variability	Climate variability refers to the way climate variables such as rainfall and temperature, depart from the average state, either above or below average in an area without changing the long term average. For example, a certain area might have an average summer temperature of 21 degrees Celsius but the daily temperature can range between 15-30 degrees (Lets Respond Toolkit).
Climate change Impacts	The consequences of climate change on a human or natural system. For example, climate change impacts would result in less rain in an area but this could result in drought, crop failure, famine, etc. (Lets Respond Toolkit).
Ecological Infrastructure	Ecological infrastructure refers to strategically planned and managed networks of natural lands, working landscapes and other open spaces that conserve ecosystem values and functions and provide associated benefits to society.
Exposure	The presence of people, livelihoods, species or ecosystems, environmental services and resources, infrastructure, or economic, social, or cultural assets in places that could be adversely affected (IPCC, 2014).
Mitigation	In the context of climate change, a human intervention to reduce the sources or enhance the sinks of greenhouse gases. Examples include using fossil fuels more efficiently for industrial processes or electricity generation, switching to solar energy or wind power, and expanding forests and other "sinks" to remove greater amounts of carbon dioxide from the atmosphere (IPCC, 2007).
Resilience	The ability of a social or ecological system to absorb disturbances while retaining the same basic structure and ways of functioning, the capacity for self-organisation, and the capacity to adapt to stress and change. A resilient system is one that is better able to cope with change and can recover quickly (Lets Respond toolkit).
Vulnerability	The propensity or predisposition to be adversely affected. Vulnerability encompasses a variety of concepts including sensitivity or susceptibility to harm and lack of capacity to cope and adapt (IPCC, 2014).

[12] Van Aalst et al, 2014. IPCC working group II, AR 5, Technical Summary Report: *Climate Change 2014: Impacts, Adaptation, and Vulnerability*

[13] Bernstein et al, 2007. IPCC working group II AR 4, Summary Report: Climate Change 2007: Impacts, Adaptation and Vulnerability

1. INTRODUCTION AND HIGH LEVEL OVERVIEW OF PROJECT

The Adaptation Fund (AF) was established to finance concrete adaptation projects and programmes in developing countries that are parties to the Kyoto Protocol and are particularly vulnerable to the adverse effects of climate change. Funds are accessed via implementing entities that are responsible for endorsing project and programme proposals. As part of its intention to promote direct access, the AF strongly promotes direct country access via National Implementing Entities. The South African National Biodiversity Institute (SANBI) was accredited as South Africa's National Implementing Entity (NIE) to the AF in September 2011.

After establishing a high level NIE Steering Committee and a NIE Investment Framework including a set of policies and procedures to guide its work, the NIE issued a call for concept proposals in November 2012. The response to this call, which closed at the end of January 2013, was overwhelming. Over 70 diverse proposals were received. With the support of the NIE Steering Committee and an associated task team, these were subjected to a process of careful review and evaluation. This review was based on key criteria drawn from the Investment Framework and based on guidelines provided by the Adaptation Fund Board (AFB).

Through this process, two Project Concepts were selected for further development and submission to the AFB for support. These Project Concepts were approved by the AFB in June 2013. The second of these will be a Small Grants Facility (SGF) project that will contract interface agencies to work with vulnerable communities and support them to develop small projects (~USD 100,000 each) in two diverse target areas, i.e. Mopani District Municipality in Limpopo Province and Namakwa District Municipality in the Northern Cape. SouthSouthNorth Trust (SSN) has been identified as the Executing Entity (EE) for the SGF project and the Facilitating Agency (FA) in Namakwa will be Conservation South Africa (CSA). The FA for Mopani is still to be selected. The amount requested for the SGF project is USD 2,442,682.

The overall goal of the project is to ensure that local communities in the project target areas have reduced vulnerability and increased resilience to the anticipated impacts of climate variability and change. The objective is to incorporate climate change adaptation response strategies into local practices so that assets, livelihoods and ecosystem services are protected from climate induced risks associated with expected droughts, seasonal shifts and storm-related disaster events. To do so, the project will seek to increase climate resilience in productive landscapes and socio-economic systems in communities in two district municipalities in South Africa, by working directly with local stakeholders and anticipated beneficiaries through a SGF.

In addition to delivering direct and tangible benefits through the implementation of the small grants themselves, the project will seek to pilot and develop an understanding of small grant development and implementation in the context of climate finance, with a view to scaling up and replicating this model as appropriate. This approach responds directly to calls from civil society to bring the principle of 'direct access' closer to vulnerable communities, thus empowering them to determine how climate finance will be used, and to build the institutional capacity for the implementation of adaptation efforts at the local level.

It is believed that one of the most important success factors for the SGF project will be its processes of project identification, development, review and learning along with the processes that are to be put in place to build local capacity and support project implementation. With this in mind, the SGF project will comprise three components as follows:

- Component 1: Small grants – Small grants to vulnerable communities deliver tangible and sustainable benefits.
- Component 2: Institutional capacity – Local institutions empowered to identify and implement adaptation response measures.
- Component 3: Lessons learnt – Lessons learnt facilitate future up-scaling and replication of small grant-financing approaches.

Component 1: Small grants – Small grants to vulnerable communities deliver tangible and sustainable benefits

This component will support planning and implementation of adaptation responses by vulnerable communities in the Mopani and Namakwa District Municipalities. This will be achieved through a suite of interventions that are supported through at least 12 small grants to local level civil society organisations. Each small grant will be approximately USD 100,000. The small grants may be phased and will be disbursed in tranches to ensure sound implementation processes and effective integration of project-level monitoring and evaluation. All small grants will deliver tangible and measurable benefits that reduce the vulnerabilities of local communities to existing and anticipated impacts of climate change through strengthened livelihood strategies, increased adaptive capacity and ecosystem resilience. The SGF project will encourage and facilitate the sharing of knowledge on best practices from the local to the national level.

Component 2: Institutional capacity – Local institutions empowered to identify and implement adaptation response measures

This component will focus on supporting local institutions to identify, develop and implement small grants projects in the context of climate change adaptation at all stages of the project cycle. Under this component, the FAs will work with small grant recipients to facilitate sound project identification, development and implementation support processes including local level project administration, reporting and financial management. These processes will be guided by a set of principles that ensure that projects clearly respond to experienced or anticipated climate induced stresses, and meet the criteria of the SGF, NIE and AF.

Component 3: Lessons learnt – Lessons learnt facilitate future up-scaling and replication of small grant-financing approaches

To facilitate the proposed learning and reflection approach successfully, the SGF project will ensure that local organisations play an effective role in supporting project development and implementation. Additionally, it will be imperative to document the process to ensure that the lessons learnt inform the compilation of a methodology that identifies effective strategies and policy recommendations for scaling up and replication. In support of this, the SGF project will support innovative participatory approaches, including a practitioners' forum to discuss effective approaches of community empowerment and challenges, and a community forum, to discuss climate change adaptation challenges and possible integrated adaptation strategies. It will also seek to build local knowledge sharing mechanisms that create opportunities for reflection and learning within Districts and between Districts. These mechanisms will link into the relevant national adaptation processes with a view to developing insights that are relevant beyond the project intervention sites themselves. Independent learning processes will be conducted to reflect on implementation successes and challenges, and to develop insights. Learning outputs from the small grants projects will align with and support national and local government climate change response strategies, and will look to inform Provincial adaptation plans where possible. Where relevant, policy recommendations will be developed to inform the development of local level climate finance instruments in South Africa, with a view to creating a long term small grant facility for supporting climate change adaptation in vulnerable communities.

2. SMALL GRANTS FACILITY INVESTMENT WINDOWS

The SGF project will invest in climate change adaptation interventions that fall within prioritised Investment Windows that were derived from local level climate projections (Section 2.1) and the findings of Vulnerability Assessments (Section 2.2) that were undertaken in each of the project target areas. This process supported the identification of impacts and risks to sectors, based on stakeholder input and contextualisation of climate-driven changes. Possible adaptation responses to the identified risks, proposed by local level stakeholders, were suggested over the course of the Vulnerability Assessment development and are noted in Section 4. The risks to the highlighted sectors and adaptation responses were then collated and informed the identification of the SGF Project Investment Windows (Section 2.3). The process of Investment Window identification is shown in Figure 1.

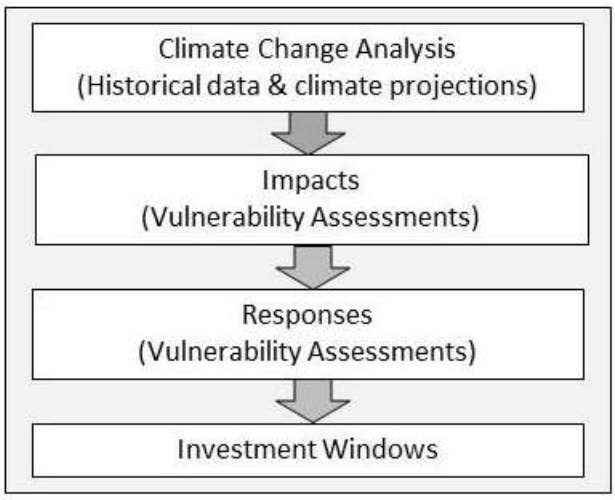

Figure 1: The identification of the Investment Windows was based on climate projections and Vulnerability Assessment findings.

2.1 Climate change analysis based on observed data and climate change projections

The climate analysis is based on the latest climate change projections, prepared under South Africa's Long Term Adaptation Scenarios (LTAS) Flagship Research Programme[14] Phase 1 process[15]. The LTAS data analysis includes historical trends, as well as statistically and dynamically downscaled projections for South Africa. In order to get a good understanding of the local scale projections for the two project target areas, a study was commissioned for a spatially specific analysis of data from the downscaled projections produced under the LTAS[16]. A full analysis report, currently being developed by the African Climate and Development Initiative (ACDI) at the University of Cape Town, and will be included in the appendix of the final SGF project proposal.

Results from a South African trend analysis, conducted under South Africa's LTAS Phase 1 process[17], provide up to date insight into historical temperature and rainfall trends for the two target areas (Mopani and Namakwa) extending to the year 2010. These analyses confirm and extend several previous published analyses summarised in South Africa's 2nd National Communication to the United Nations Framework Convention on Climate Change (UNFCCC) that extended to the year 2000. Based on zonal analysis for the country, both the zone within which Mopani is based and the zone within which Namakwa is based show a steady increase in annual maximum temperatures for the historical period 1960 to 2010. Additionally, the analysis shows a steady increase in the number of extremely warm days, particularly in Mopani. In terms of rainfall, the zonal analysis shows that while there has only been a slight decrease in the annual average rainfall for the Mopani area there has been a steady decrease in the number of rain days. This indicates that while the overall precipitation is more or less the same, rainfall events have become less frequent and more intense, and with longer dry spell duration in-between, exacerbated by higher air temperatures. In the Namakwa area on the other hand, the trend analysis shows no significant trends in either the number of rain days or in annual average rainfall, thus indicating that overall precipitation has remained unchanged, though water availability would have been reduced through increased temperature effects.

According to the local scale analysis for the Mopani District, both annual average maximum and minimum temperatures are projected to increase into the future, thus continuing the warming trend

[14] The Long-Term Adaptation Scenarios (LTAS) Flagship Research Programme (2012-2014) is a multi-sectoral research programme, mandated by the South African National Climate Change Response White Paper. The LTAS aims to develop national and sub-national adaptation scenarios for South Africa under plausible climate conditions and development pathways. During its first Phase (completed in June 2013), fundamental climate modelling and related sector-based impacts and adaptation scoping were conducted and synthesised.
[15] Department of Environmental Affairs, 2013. Long-Term Adaptation Scenarios (LTAS) Research Programme for South Africa. Climate Trends and Scenarios for South Africa. Pretoria, South Africa.
[16] Same as above
[17] Same as above

that is currently reflected in historical records. Projected increases in minimum and maximum temperatures are in the range of one to two degrees in the near future (2020s), and in the range of two to five degrees in the distant future (2080s), relative to the period 1971-2005. Again, the projections for rainfall are less clear. In the near future (2020s) a weak annual wetting trend, relative to the period 1971-2005, is detected in the projections, particularly so in autumn. In summer and winter, however, projections display weak drying trends. For the 2050s there is no appreciable annual trend for precipitation. In autumn, a moderate wetting trend is projected, whereas in spring, there is a weak drying trend. A weak annual drying trend is indicated for the distant future (2080s), with winter set to dry moderately, with low variability between the datasets.

For the Namakwa District the temperature projections are similar to those of Mopani, and thus also indicate a continuation of the warming trend that is currently reflected in historical records. Projected increases are in the range of one to two degrees in the near future (2020s), and in the range of two to five degrees in the distant future (2080s), relative to the period 1971-2005. In terms of precipitation,the projections are more variable within and between the different datasets. In the near future (2020s) a weak wetting trend is projected on an annual basis, and in autumn in particular. In summer, rainfall is set to decrease moderately. For the 2050s, a very weak wetting annual trend is projected, particularly in autumn. In spring and summer, however, it is set to dry weakly and moderately, respectively, with low variability between the datasets. In the distant future (2080s) there is no appreciable trend in annual precipitation, but in autumn and spring, however, weak wetting is projected, relative to the period 1971-2005.

2.2 Vulnerability Assessments

Vulnerability Assessments were undertaken in the two project target areas, the Mopani and Namakwa Districts, to provide the foundation for selecting priority sectors for climate change adaptation responses with concrete, tangible benefits for the most vulnerable groups. The findings will be used to ensure that the adaptation responses selected for funding through the SGF are based on a sound understanding of the local dynamics and needs, as identified by local stakeholders.

The two Vulnerability Assessments used different methodologies. The Namakwa assessment built on earlier studies focused on identifying priority areas in the Namakwa District for ecosystem-based adaptation to climate change. Consultations for the SGF project were thus able to build on the relationships and capacity developed through previous engagements, and focus discussions on prioritising sectors and interventions that deliver concrete, tangible benefits for vulnerable communities. In Mopani, the engagements were not able to build on a previous base and stakeholders' understanding of climate change, and this necessitated the use of different methods to Namakwa. The Mopani approach was specifically developed to engage local stakeholders in the process, and thereby develop local capacity and to collectively identify climate change vulnerabilities. The Mopani assessment focused on two of their five local municipalities, Greater Letaba Local Municipality (Letaba) and Greater Giyani Local Municipality (Giyani), as per the request from the Mopani District to specifically focus the SGF project on these areas, as supported by a national assessment of the South African local municipalities most vulnerable to climate change[18].

The stakeholder engagement processes in both target areas highlighted the need for capacity building to develop a thorough understanding of climate change and related adaptation interventions. The design of the project has been cognisant of this need, and capacity building activities have been included to support the development of project ideas and the implementation of project interventions.

Mopani Vulnerability Assessment

The description of the methods and findings below is drawn from the detailed Letaba and Giyani Vulnerability Assessment, which can be accessed on request.

[18] Turpie, J and Visser, M, 2012. *Chapter 4: The impact of climate change on South Africa's rural areas.* Technical Report: Submission for the 2013/14 Division of Revenue. Published by the Financial and Fiscal Commission. Accessed at http://www.ffc.co.za/index.php/reports/technical-reports [20 March 2014].

Methods:

The aim of the Letaba and Giyani Vulnerability Assessment was to create an understanding of the local dynamics shaping livelihoods and sectors in Letaba and Giyani, and how climate change might impact these livelihoods and sectors. A participatory approach was followed, through which six workshops were held in April and May 2014 with Letaba and Giyani stakeholders. A seventh workshop was held in June 2014 where the findings of the Vulnerability Assessment were presented to the relevant stakeholders. The approach was informed by earlier consultations with various departmental heads of the Mopani District Municipality who also assisted with stakeholder identification and logistics.

Two different methodological approaches were adopted for these workshops i.e. a livelihoods and a sectoral approach. The livelihoods approach was used to identify the main livelihood activities of the communities within Letaba and Giyani, the challenges facing those activities, the underlying causes and possible solutions to those challenges. The sectoral approach made use of a step-by step method to identify sector-specific stressors (climatic and non-climatic), impacts, sensitivities, adaptive capacity and possible adaptation responses.

Livelihoods approach
A workshop in each of the local municipalities, Letaba and Giyania, was held with Community Development Workers from each target area. Each workshop had three principal objectives:

- to outline the key activities from which people in Letaba and Giyani currently make a living, and rate them in terms of importance (number of people making a living from that activity);
- to create an understanding of the key stressors and challenges that people currently face in conducting the outlined key activities, the underlying causes of / possible solutions to these key stressors and challenges; and
- to explore how climate change might impact the key activities through which people make a living.

Sectoral approach
Four workshops were held, one with each of the following sets of participants from Letaba and Giyani: i) agricultural extension officers; ii) water supply and waste management practitioners; iii) environmental health practitioners; and iv) municipal officials working in disaster management. Each workshop had three principal objectives:

- to assess sector vulnerability to current climate and non-climate driven stressors;
- to assess sector vulnerability to future climate driven stressors, based on an understanding of climate change projections for the Mopani area; and
- to identify possible climate change adaptation responses, based on the identified current and future vulnerabilities.

Findings:

With historical climate trends and climate change projections indicating increasing average temperatures and increase in the number of extremely warm days, as well as increase in the intensity of heavy rainfall events, the participatory vulnerability assessment highlighted expected challenges with the availability of clean water and with general agricultural production. The potential challenges to the viability of a range of small businesses, from which a large number of people make a living, was also emphasised. This was particularly relevant to the challenges faced by traders (locally known as “hawkers”), whose foods would spoil more rapidly due to higher temperatures. With malaria already featuring in parts of the municipality, further spread of malaria with increasing temperatures, as well as other heat related health impacts and the subsequent impacts on people’s ability to work, were highlighted. Infrastructure damage from heavy rainfall, is another concern emphasised both in the context of local livelihoods and by municipal officials working in disaster management.

Whilst the need for awareness raising and education was consistently noted, priority risks to be addressed through investments in climate change adaptation interventions through the SGF, as informed by local stakeholders, are seen to be:

- **Insufficient access to clean water:** This is a climate change related concern in Mopani. Increase in average temperatures and increase in extreme temperatures will lead to increase in water demand, with people, plants and animals all requiring more water. Yet a subsequent

increase in evaporation due to higher temperatures will decrease water supply. Water supply may be put under further pressure due to an increase in the intensity of heavy rainfall events, as infrastructure is unable to deal with the increase in volumes and turbidity, leading to mixing of water and sewage and foreign materials entering the water supply system.

- **Reduced food security:** Mopani's agricultural productivity and quality, in terms of both livestock and crops, is at risk in the face of projected climate change. Increase in average temperatures and the number of days with extreme temperatures, coupled with a shift towards rainfall falling in shorter and more intense events, can lead to heat stress, water scarcity as well as flooding and erosion. This may result in decreased grazing capacity and subsequent livestock mortality, as well as wilting and death of crops. At the same time, high intensity rainfall events can lead to soil erosion, as well as water logging of crops and grazing areas. Increasing temperatures may also lead to the introduction of or increased spread of pests, such as chilo, a moth that causes damage to fruits.

- **Additional health challenges:** Climate change may put people's health under stress, due to both direct and indirect impacts of increasing average temperatures and increase in days with extreme temperatures. Direct exposure to heat can lead to high blood pressure and diarrhoea associated with dehydration and fatigue. Increasing temperatures can also lead to the spread of disease, through for example the spread of mosquitos carrying malaria into areas that were previously too cold for transmission.

- **Economic losses for small businesses & traders:** The running of small businesses and traders might become increasingly challenging in the face of climate change, as increasing temperatures impacts products for which there is insufficient cooling storage. Sales of food that has gone off due to lack of access to appropriate cooling storage is already a problem in the present, and increasing temperatures will compound this problem. The health of traders without proper stalls or outlets may also be impacted by the heat.

- **Damage to infrastructure:** Communities in Mopani are set to be put under further stress as infrastructure damage from high intensity rainfall events wash away roads and bridges, cutting communities off from economic hubs and service delivery. There is also the potential for damage to housing and in the worst cases drowning.

Over the course of the stakeholder engagement conducted in developing the Vulnerability Assessment, a number of possible adaptation interventions per target risk were identified by the stakeholders. These are listed below in Box 1. (It is noted, and was noted throughout the process, that these are indicative and that the projects that will be supported through the SGF will be determined through the SGF project application process).

Box 1: Adaptation interventions suggested by stakeholders for the Mopani District.

Insufficient access to clean water:

- Water harvesting, such as water tanks.
- Water storage facilities, such as reservoirs.
- Increase water use efficiency through, for example, drip irrigation.

Reduced food security:

- Introduce agroforestry, which among other things stabilises the soil and reduces nutrient and soil runoff.
- Plant pastures for supplementary feeding for livestock.
- Shift towards an increased use of Nguni breeds, a resilient breed of cattle.
- Construction of more drinking troughs for livestock.
- Encourage stock owners to keep livestock at minimal numbers to ensure sufficient grazing.
- Soil conservation structures, such as gabion baskets, to prevent erosion.
- Contour ploughing to prevent erosion.

Additional health challenges:

- Shifting working hours to avoid the warmest times of the day.
- Provision of sufficient water, clothing and shelter for workers.
- In the case of disease, ensure timely access to treatment.
- Provision of mosquito nets to prevent malaria infections.

Economic losses for small businesses & traders:

- Development of modernised stalls/ shops that protect customers and sales people from the direct sun and the heat.
- Provision of proper storage facilities for perishable foods.
- Enabling traders and other sales people to sell products that correspond with temperatures and seasons, i.e. gem tomatoes in winter and cold drinks in summer.

Damage to infrastructure:

- Construction of climate resilient roads and bridges.
- Construction of gabions on the side of the road to prevent landslides across the roads.
- Grow grass to avoid erosion.

Namakwa Vulnerability Assessment

The description of the methods and findings below is drawn from the detailed Namakwa Vulnerability Assessment, which can be accessed on request.

Methods:

As mentioned above, the Vulnerability Assessment for the Namakwa District built on the findings of a 2012 Climate Change Vulnerability Assessment undertaken by CSA, with the support of the Namakwa District Municipality, for the same area[19]. The focus of the 2012 assessment was to identify priority areas for ecosystem-based adaptation and develop an index of vulnerability for the Namakwa District. The 2012 assessment used socio-economic data from a disaster management survey conducted with all 52 settlements in the District to identify climate disaster prone areas and prioritise activities related to ecosystem-based adaptation.

To broaden the scope of the 2012 assessment beyond ecosystem-based adaptation, CSA began an intensive stakeholder engagement process in 2013. This began with nine workshops with local government – two at the District Municipality level and seven at the Local Municipality level – based

[19] Bourne A, Donatti C, Holness S, and Midgley G. 2012. Climate Change Vulnerability Assessment for the Namakwa District Municipality. Cape Town: Conservation South Africa.

on the Let's Respond Toolkit[20]. These sessions were focused on integrating climate change risks and opportunities into municipal planning through strategic integration of the topic into the Integrated Development Plans for each municipality.

Later in 2013 and in early 2014, in direct response to the requirements of SGF project development phase, CSA and SANBI began to engage directly with affected community groups, local NGOs and CBOs, relevant government departments and research and development institutions active in the Namakwa District. This stakeholder engagement has included two sessions: one in Cape Town at the Annual General Meeting of the Northern Cape Regional Network, a network of NGOs and CBOs working in the Northern Cape including the Namakwa District; and one in Springbok and attended by 61 representatives of 38 locally active institutions. The goal of these engagements was to develop an understanding of climate change impacts at the local level, and priority sectors for and examples of possible community-based adaptation responses. A stakeholder mapping exercise was also undertaken, to identify relevant organisations involved in climate change adaptation and related human development projects.

In addition to the two meetings held in late 2013 and early 2014, many more organisations, institutions, research / implementation partners and community groups were contacted over the telephone and via email. Their inputs are captured in this summary document.

Findings:

Stakeholder input confirmed that drought and extreme heat in the summer months are current climate-related challenges. These challenges, as indicated by the local level climate projections developed for this project, are likely to be exacerbated by climate variability and change. An increase in overall aridity in an area where surface and groundwater supplies are limited and increasingly over-utilised can contribute to unemployment, severe water scarcity and reduced agricultural productivity due to heat and water stress. In addition, climate change induced sea level rise and associated storm surges threaten coastal infrastructure, aquifers and sensitive ecological environments that deliver ecosystem services to sustain rural livelihoods.

At the 2013 meetings with local government stakeholders, some strategic priority areas for climate change responses emerged. The need for environmentally friendly approaches and awareness raising/capacity building on climate change were noted as over-arching concerns. The strategic priorities were seen to be the following sectors: i) water; ii) infrastructure; iii) disaster risk reduction; and iv) livelihoods. These priority sectors have been refined over the course of the subsequent stakeholder engagement sessions, culminating in those identified specifically for the purposes of the SGF project. Whilst the need for awareness raising and education was consistently noted, priority risks to be addressed through investments in climate change adaptation interventions through the SGF, as informed by local stakeholders, are seen to be:

- **Reduced viability of agricultural livelihoods (including fisheries):** Most (95%) land in the Namakwa District is actively utilised for agriculture, mostly small livestock farming (sheep and goats). A large percentage of the population is engaged in farming and directly dependent on related activities for their livelihoods. Agriculture is likely to be affected by drought, heat stress in plants and animals, and a reduction in water availability and water quality for livestock and crops. Increases in evaporation and evapotranspiration will decrease fodder production and grazing production for livestock, potentially resulting in reduced conception, birthing, and weaning rates, poor livestock condition, livestock mortality, and, ultimately, reduced viability of current farming practices. This could result in unemployment and reduced household income, ultimately reducing food security and the sustainability of current livelihood practices.

- **Damage to infrastructure/human settlements:** There are 52 rural human settlements in the Namakwa District. Typically human settlements are clustered around a water source, but are isolated. Human settlements are likely to be affected by heat stress in people (particularly the very young, elderly, and ill, as well as farm and mine labourers) and water stress both in terms of drinking water quality and availability. Additionally, human settlements, access roads, and

[20] (Department of Environmental Affairs, Department of Cooperative Governance, and the South African Local Government Association). 2012. *Let's Respond: A toolkit to integrating climate change risk and opportunities into municipal planning.* Pretoria, South Africa.

irrigation infrastructure are vulnerable to flash-flooding after periods of droughts. Coastal settlements and infrastructure (notably fishing and diamond dredging facilities) may be increasingly at risk from storm surge, while inundation of coastal aquifers threatens fresh water supplies.

- **Increased reliance on Disaster Risk Reduction services:** The low density of people and isolation of settlements in the Namakwa District places a strain on municipal disaster risk reduction services. However, an increase in frequency and intensity of climate extremes, particularly drought, will necessitate an increase in the provision of these services, focused on the agriculture sector and human settlements. Community-led disaster risk reduction interventions can safe-guard livelihoods and infrastructure, thus reducing the stress on municipal services and increasing resilience to the impacts of climate variability and change.

- **Degradation of Ecological Infrastructure:** Functioning ecosystems in the Namakwa District currently deliver valuable ecosystem services to rural, vulnerable communities, such as grazing areas for livestock and the provision of clean water for drinking and household use. However, this provision of ecosystem services is threatened by increasing aridity, coupled with over-utilisation of natural resources because of reduced food security and loss of household income. Investing in ecological infrastructure will facilitate community-based management, maintenance and potentially restoration of ecosystems functions and services that support climate resilient livelihoods.

A number of possible adaptation interventions per target area for the Namakwa District were identified by the stakeholders during consultations. These are listed below in Box 2. (As in the case of Mopani, it is noted, and was noted throughout the process, that these are indicative and that the projects that will be supported through the SGF will be determined through the SGF project application process).

Box 2: Adaptation interventions suggested by stakeholders for the Namakwa District.

Reduced viability of agricultural livelihoods:
- Introduction/increased use of heat-tolerant livestock.
- Construction of shade structures for livestock.
- Use of drought-resilient crops.
- Use of micro/drip-irrigation systems.
- Support to currently practiced, alternative livelihoods such as temperature controlled abalone farming.

Damage to infrastructure/human settlements:
- Rainwater harvesting at the household level.
- Grey water recycling systems.
- Insulation of houses to reduce impacts of extreme temperatures.
- Planting of drought-resilient trees around human settlements.
- Small-scale coastal protection infrastructure, such as gabions infrastructure.

Increased reliance on Disaster Risk Reduction services:
- Support to community-based fire management strategies.
- Small-scale early warning systems, particularly for drought.

Degradation of Ecological Infrastructure:
- Clearing of alien vegetation, particularly along waterways, to improve surface water flow for agricultural and household use.
- Wetland rehabilitation.
- Improved land/livestock management.

2.3 Investment Windows

The SGF project will invest in climate change adaptation interventions that fall into prioritised Investment Windows, as shown in Figure 2 and described below. The Investment Windows are informed by local level climate change projections and the Vulnerability Assessments that were undertaken in the two project target areas. All small grants projects will deliver concrete, tangible benefits to local communities, and may deliver cross-cutting benefits in more than one Investment Window.

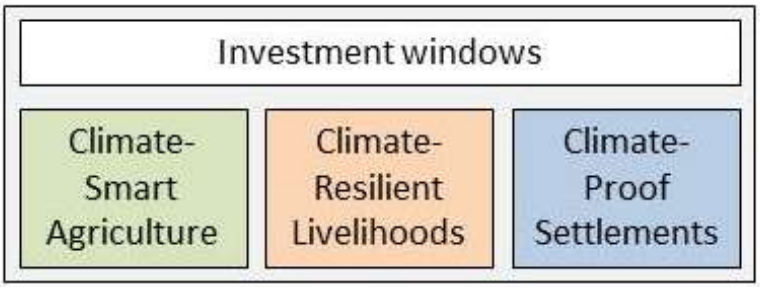

Figure 2: SGF project Investment Windows.

Climate-Smart Agriculture[21]

Based on the climate change risks determined by the two Vulnerability Assessments, as outlined above, **climate-smart agriculture** has been identified as one of the three Investment Windows for the SGF project. Projects that fall within in the climate-smart agriculture Investment Window will address the direct or indirect impacts of climate change on agricultural production, and could target livestock and/or crop production. Climate-smart agriculture projects will focus on responses that feature shifts towards new resilient farming techniques, as well as technological improvements. This could include the use of drought-resilient crops in the face of projected drying, tree planting or the construction of shade structures and more drinking troughs for livestock in the face of increasing temperatures. The implementation of 'no-regrets farming techniques' (practices that address climate projections yet that have general benefits whatever the extent of future climate change) is preferential. This could for example be the introduction of mulching to retain soil moisture in the face of warming and drying, which at the same time works to improve the general fertility and health of the soil.

Development of climate-smart agriculture projects can entail the incorporation of cross-sectoral aspects such as ecological infrastructure, as healthy, functioning ecosystems that play an important role in preventing erosion, attenuating floods and ensuring that there is sufficient water and grazing. The issue of water-security can also be addressed in the agricultural projects, as ensuring sufficient yet sustainable water availability in the face of increasing temperatures and shifting rainfall patterns is key in order to create resilient farming systems. Climate-smart agriculture projects can also incorporate disaster risk reduction components, through precautionary measures and plans that reduce the impacts of projected shifts in both slow (i.e. drought) and rapid (i.e. thunderstorms) onset extreme events on agriculture.

As for all the small grants projects, climate-smart agriculture projects need to focus on ensuring tangible benefits for the most vulnerable communities.

Climate-Resilient Livelihoods

Based on the climate change risks determined by the two Vulnerability Assessments, as outlined above, **climate-resilient livelihoods** has been identified as one of the three Investment Windows for the SGF project. In this context "livelihoods" is defined as the capabilities, assets and activities required to make a living[22]. Assets comprise a wide array of aspects that people require for their livelihoods, including: human assets (skills, knowledge, health, ability to work, etc.); natural assets

[21] Note that while the FAO definition of Climate-smart agriculture comprises sustainably increasing agricultural productivity and incomes, adaptation to climate change and climate change mitigation, small grants projects that fall within this Investment Window will focus on climate change adaptation. If small grants projects also speak to sustainability and mitigation these will be co-benefits, yet not prerequisites.

[22] Chambers, R. and Conway, G.R. (1992) 'Sustainable Rural Livelihoods: Practical Concepts for the 21st Century', Discussion Paper 296. Brighton, UK: Institute of Development Studies.

(land, water, wildlife, etc.); financial assets (financial resources that people use, i.e. savings, credit, pensions); physical assets (transport, energy, etc.); and social assets (networks, groups, access to institutions).

Climate-resilient livelihoods projects will work to increase the resilience of income generating activities and associated assets in the face of a changing climate. This could include aspects that affect people directly, such as heat stress experienced by traders without access to proper stalls, or aspects that affect an activity, for example, increasing water requirements for brick making as increasing temperatures leading to drying of the mud used for brick making.

The climate-resilient livelihoods Investment Window provides an opportunity to reflect on climate change impacts on locally specific livelihoods, and aims to foster innovative approaches for responding to these. Importantly, projects must be able to show how the interventions directly address aspects of an income generating activity or associated livelihoods asset that is set to be impacted by projected climate change.

As for all the small grants projects, climate-resilient livelihoods projects need to benefit a wider group of people. Therefore the number of businesses included in the scope of a project will depend on the number of people employed in each of the businesses.

Climate-Proof Settlements

Based on the climate change risks that came out of the two Vulnerability Assessments, as outlined above, **climate-proof settlements** has been identified as one of the three Investment Windows for the SGF project. This Investment Window incorporates projects that address the climate change vulnerability of settlements, the people living in those settlements and the infrastructure on which they depend. This could include ensuring that infrastructure can deliver access to sufficient clean drinking water in the face of increased risk of storm surge and subsequent inundation of coastal aquifers. It could also including ensuring that community members are able to commute to school, to work or to the economic hub as normal if projections indicate an increase in the intensity of heavy rainfall events with which local infrastructure cannot cope.

Development of climate-proof settlements also addresses the need for disaster risk reduction, as climate change in some areas might mean an increase in the frequency and intensity of climate extremes. Disaster risk reduction projects, preferably community-led, that can safe-guard lives, livelihoods and infrastructure, will thus be included. Depending on the climate change projections for the area, such projects could prepare for extremes ranging from droughts to thunderstorms. Ecological infrastructure can in some cases play a role in buffering extremes, and as such be incorporated as part of climate-proof settlement projects. Such interventions need to be linked to projected climate change related impacts on settlements being reduced or prevented as a result of healthy and functioning ecosystems. This could include the restoration or rehabilitation of a wetland that can be shown to provide flood attenuation for a community at risk from flooding due to an increase in the intensity of heavy rainfall events.

Box 3: Aspects to note for project development.

Capacity development & awareness
It should be noted that the SGF will not fund projects that are only focused on awareness and education, only planning, or only research without feeding into an implementation activity, as set out in the criteria in section 3 below.

Locally appropriate and locally driven responses
It should also be noted that it will be important for adaptation responses to be grounded in the local context. Responses should ideally be driven by the beneficiaries themselves, and in the least have the full support of the beneficiaries. It is therefore important to consider the full scope of the local context. For example, considering whether a drought resistant crop is likely to be accepted and used by the local community, or whether the improved housing structures that are developed are aligned with local cultural traditions.

Avoiding maladaptation
Maladaptation refers to when an adaptation action in the end becomes more harmful than helpful. In developing adaptation responses it is important to think of possible negative spin-off effects resulting from the actions, as well as whether the action is robust in the context of the uncertainties related to climate change projections.

3. SELECTION CRITERIA: SMALL GRANT RECIPIENTS AND ADAPTATION PROJECTS

The SGF project will support projects that increase the resilience of vulnerable groups and long-term sustainable livelihoods, with an emphasis on projects that generate tangible adaptation responses in rural areas. Prospective grantees must be able to show that their projects respond to climate risks and in this regard, the integration of scientific and local knowledge is an area of particular interest. Reduced vulnerability of local communities to existing and anticipated impacts of climate change may be achieved through strengthened livelihood strategies, increased adaptive capacity, and building ecosystem resilience, amongst other approaches. Listed below are criteria for the selection of small grant recipients and for the assessment of the climate change adaptation projects they will submit for funding:

Criteria for small grant recipients:

- Grant recipients must be South African institutions with proven relevant implementation experience.
- Preference will be given to grant recipients that are legal entities and have the capacity to receive, manage and audit project funds.
- Preference will be given to projects led by civil society organisations and civil society organisations must be represented on project management structures.
- Organisations will need to show how women are included in their project management structures.
- Grant recipients must have a sound track record of good governance, delivery of grant commitments and financial management.
- Preference will be given to grant recipients with a clean audit record.
- Grant recipients must have previous positive experience receiving a combination of funds in the order of USD 25,000 (R 250,000) per year over a period of at least two years.
- Grant recipients are encouraged to develop implementation partnerships that augment or share their current capacity.
- Preference will be given to grant recipients that have established long-standing relationships with communities in the Namakwa or Mopani District Municipality.
- Grant recipients must have proof of land or asset ownership, and/or land tenure or permission to carry out proposed activity, as relevant.
- Grant recipients must have a clear mandate from project beneficiaries to work in the project target areas on the identified project activities.

- Grant recipients must demonstrate willingness to participate in learning and knowledge development and dissemination processes.
- Grant recipients must not be receiving funds from other sources for the proposed project activities.

Note: Organisations may wish to collaborate in order to meet organisational eligibility requirements. Organisations will be required to furnish documentation to verify recipient eligibility criteria during the application process.

Criteria for project selection:

- The SGF project is looking to fund small grant projects that address a clear climate change related threat and have a clear and demonstrable link to tangible, measurable, visible adaptation for people.
- Projects must clearly demonstrate that they respond to a particular climate change risk that is relevant for the project area, as identified in the project Investment Strategy.
- Projects must support adaptive interventions that clearly respond to current or anticipated local vulnerabilities that deliver concrete, tangible and measurable climate change adaptation benefits.
- Projects must support concrete actions and deliver tangible results that increase resilience to climate variability and change.
- Projects must align with the Community Adaptation SGF Investment Windows, as described above in Section 2.3.
- Projects must be located within the broader development context (provide economic, social, and/or environmental co-benefits) of the area.
- Projects must be supported by anticipated beneficiaries and local stakeholders.
- Where relevant, projects are required to demonstrate sustainable land tenure arrangements.
- Projects must support vulnerable local communities and especially women.
- Projects will beneficiate groups rather than single individuals – i.e. at least 50 direct beneficiaries per project
- Projects must include learning outcomes and inform ways to scale up and replicate approaches in other communities.
- Projects must clearly demonstrate how success will be measured and must have clear indicators.
- Projects must be replicable and/or scalable and sustainable after the SGF funding ends.
- Projects must be cost-effective.
- Projects must be located in rural/ semi-rural areas.
- Projects must be implemented in the Namakwa District Municipality, or Greater Giyani or Greater Letaba in the Mopani District Municipality.

Note: The SGF will not fund:

- Projects that do not align with all of the above criteria.
- Projects that do not result in tangible, measurable adaptation benefits for people – this includes any project that is only awareness and education, only planning, or only research without feeding into an implemented activity.
- Projects that do not show additionality (see Box 4).

Box 4: Additionality: Why development projects are not always adaptation projects.

There is a global recognition that poverty alleviation and development issues of education, health, access to water, gender equity, and economic diversification are challenges for all. Governments, including South Africa, have signed commitments to international agreements to address these poverty and development issues and have set national targets to deliver tangible change in the lives of people. South Africa in particular has a robust political commitment and financial resources dedicated to provide its citizens with access to water, proper sanitation, good infrastructure, and health and education services. In the context of international agreements, and funding sources for this project, these targets are the responsibility of the national government and they will not fund projects that would be seen to be simply filling a delay or failure in delivery of a basic service.

As such, projects submitted for consideration by the SGF **MUST** demonstrate that they are directly responding to a new risk that has emerged as a result of a globally changing climate - this is known globally as **"additionality".** Additionality is showing that the activity is a new input to "business as usual". In the case of agriculture for example, there are the business as usual outcomes associated with agricultural development – e.g. production increases, improved agricultural markets, enhanced food security, empowered farmer organisations, etc. There are policies and industry bodies seeking to do these activities. Then, there are areas where agricultural productivity or food security is anticipated to be directly impacted by climate change and where inputs are required to address this. For example, a drip irrigation scheme to conserve water put in an area where climate vulnerability models are showing a low risk of change in rainfall or even an increase in rainfall and water availability, then this is not "additional". However, if a drip irrigation technique is being put in place because climate change is going to impact water security and the area is already water scarce, then this drip irrigation system is additional and could be potentially funded by the SGF.

Additionality is a key word applied to climate change adaptation interventions and the indicators for your projects will need to show how this climate finance has improved adaptive capacity.

4. ROLES AND RESPONSIBILITIES

National Implementing Entity
SANBI will be the **National Implementing Entity (NIE)** for this project. SANBI will support project implementation by assisting in monitoring project budgets and expenditures and supporting the recruitment and contracting of project personnel and consultant services, including subcontracting. SANBI will also monitor project implementation and the achievement of the project outcomes/outputs and ensure the efficient use of donor funds.

Executing Entity
The project will be administered through SSN, the project's **Executing Entity (EE)**. SSN was identified following a thorough review of potentially suitable existing entities in South Africa and a subsequent process that called for expressions of interest.

SSN will be responsible for receiving and disbursing funds, for contracting the project's FAs, for contracting arrangements with all small grant recipients and for leading the Learning Component of the project, with support from the FAs and other service providers. They will also be responsible for overall project monitoring, evaluation and reporting and will work directly with the NIE to ensure that AF reporting requirements are met.

SSN (the **Executing Entity)** will appoint and designate a **project manager** for the duration of the project. The project manager's primary responsibility will be to ensure that the project produces the results specified in the project document to the required standard of quality and within the specified constraints of time and cost.

Facilitating Agencies
The project's **Facilitating Agencies** (FAs) will provide site based support in each of the project target areas. They will appoint Project Coordination Staff including a **local coordinator** in each region. These local coordinators will support small grant recipients to execute the project activities, including project identification, design and implementation, day-to-day operations of the project, and operational and financial management and reporting.

CSA will act as FA for Namakwa. They have a long history working in this area, and have an excellent track record in community engagement and grant making, including project identification, development, training and management support. The FA for Mopani will be identified through a transparent procurement process that will commence once it is certain that the project will proceed.

Service providers
Service providers will be contracted to provide specialist support as required over the duration of the project. These services will include technical input to proposal development and review, specialist training, writing of case studies and independent project evaluations.

5. OVERSIGHT, GOVERNANCE AND COORDINATION

The proposed governance and implementation arrangements for the project are illustrated in Figure 3 and the envisaged roles and responsibilities that will be assigned to each of these structures is described below.

Project Management Team
The day to day management of the project will be supported by a **Project Management Team** that will comprise the EE (SSN) and the two FAs. As and when required, the Project Management Team may co-opt others such as the NIE or other members of the NIE Steering Committee to join the Project Management Team. Project Management Team meetings will be coordinated by the SSN SGF Project Manager, and will happen at least monthly.

Project Steering Committee
A **Project Steering Committee** will be set up to provide project oversight and to consider recommendations regarding the approval of the small grants that are the subject of this project.

The Project Steering Committee will comprise two members of the NIE Steering Committee, one of which will be the Department of Environment Affairs, the NIE and technical climate change adaptation experts who are drawn from National Academic Institutions and target area sector departments. The EE will act as Secretariat for this committee, and both the EE and the FAs will take guidance from the Project Steering Committee processes. The Project Steering Committee will meet quarterly.

Local Reference Groups
Local reference groups will be set up at project inception. They will support the FAs to ensure that projects are locally contextualised, consider local and indigenous knowledge, integrated and coordinated into ongoing local programmes of work, technically robust and sustainable. In some cases they may also be able to attest to the credibility of the prospective small grant recipients.

It is envisaged that members of these groups will include amongst others the District Municipality, relevant provincial and national sector departments, and experts from tertiary institutions. Prospective small grant recipients will not be able to be members of these groups.

These local reference groups will play an important role in concept screening during the first stage of the project development process, in detailed application development and in project implementation, learning, monitoring and reporting processes.

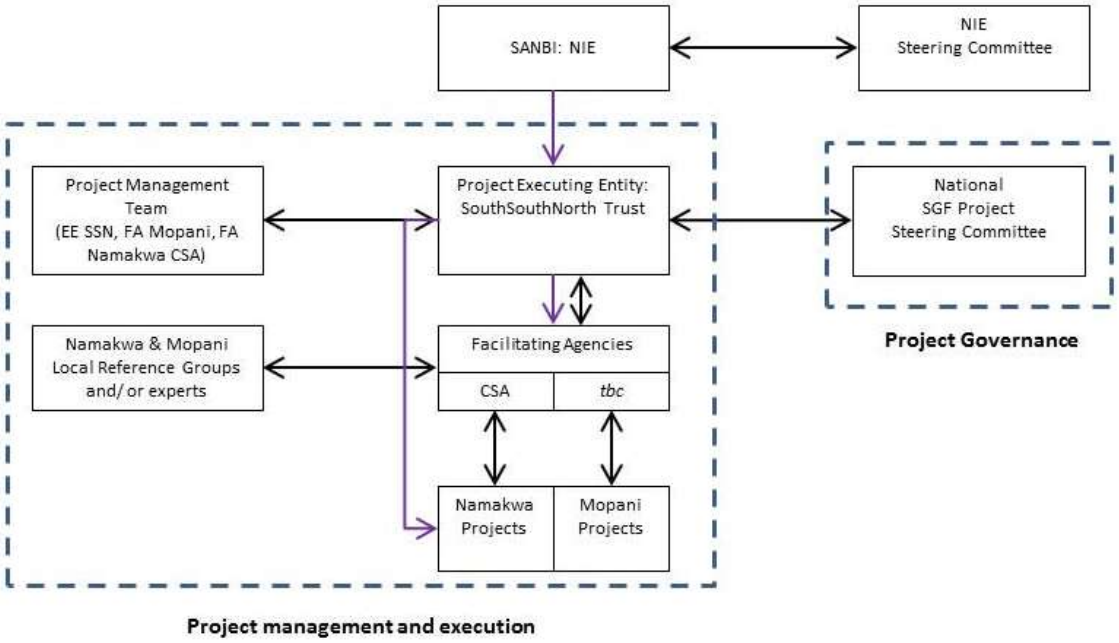

Figure 3: Institutional Arrangements for the SGF project. The black arrows indicate the relationships between the different project partners and committees. The purple arrows indicate the flow of funds. Abbreviations: Executing Entity (EE); SouthSouthNorth (SSN); Facilitating Agency (FA); and Conservation South Africa (CSA).

6. PROJECT IDENTIFICATION, APPROVAL AND CONTRACTING PROCESSES

The process to support prospective small grant recipients to identify project concepts, and to develop these ideas into applications that could be approved and ultimately contracted by the SGF, are set out in Figure 4.

Five stages are envisaged and these are described below. It is acknowledged that there is a great need to develop local capacity in order to empower local stakeholders who are anticipated grant recipients to apply for project support. In support of this, capacity building and learning opportunities will be created throughout the lifetime of the project. These will be based on the outcomes of training of grants recipients and capacity building needs analysis that will be conducted by the FAs, with support of the EE, on an ongoing basis.

Figure 4: The five "Taking Adaptation to the Ground" project stages.

Stage 1: From an idea to a concept proposal

In this first stage, prospective small grant recipients will be required to submit short project concepts to the FAs.

In support of this stage, the FAs will issue a call for concept proposals. This call will use appropriate local communication channels such as local radio stations and community newspapers. The call will be supported by briefing sessions that will be convened in each of the project target areas. These

sessions will provide an opportunity for potential small grant recipients to meet the FAs, learn more about the granting opportunity and to obtain some initial input around their project ideas.

Project concepts will be screened by the FAs with the support of Local Reference Groups, against a basic set of criteria that will be made known to applicants before they apply. These criteria are set out in Section 3 of this proposal. The recommendations of this screening process will be submitted to the EE, who will table them at a Project Steering Committee meeting for a final decision. Projects that meet the specified criteria and are approved by the Project Steering Committee will be entered into Stage Two.

Project development assistance will be offered to project proponents whose concepts are believed to have merit, but do not quite meet the SGF criteria. Such proponents will be afforded another opportunity to submit their revised concepts, possibly at the time of the next call for concept proposals.

The call for proposals will be issued on a six-monthly basis until such time as all project funds are allocated and all small grant recipients contracted. It is envisaged that two to three calls will be needed.

Detailed steps for Stage 1:

- Issue call for proposals (EE, FAs)
- Convene briefing sessions (FA)
- Submit project concepts (Prospective small grant recipients)
- Review and Screen Concepts (FAs, Local Reference Groups)
- Make recommendations regarding next steps (FAs)
- Table recommendations at Project Steering Committee meeting (EE)
- Notify FAs of outcomes (EE)
- Notify prospective small grant recipients of outcomes (FAs) (concept approved; concept requires additional work; concept not approved)

Stage 2: From an approved concept to a detailed proposal

For all approved concepts, the FAs will support prospective small grant recipients to further develop and refine the project concepts into application that meet the criteria and requirements of the SGF. As part of this process, the FAs will invite input from local experts who will work alongside prospective small grant recipients to refine their proposals. This will include the incorporation of relevant material such as the Vulnerability Assessments for each area and a review of the environmental and social safeguards to make sure that they align with Adaptation Fund checklist.

Prospective small grant recipients will submit fully developed applications to the EE via the FAs with a letter of endorsement from the FAs. The EE will note the submission of the documentation, review it for completeness, and acknowledge receipt.

Applications will then be reviewed by three external reviewers, one of which will be the EE. The other two will be selected on the basis of their technical expertise in the project content area. Reviewers will evaluate applications against the agreed project and institutional criteria. The EE will then compile the reviewers' comments into an integrated review, and make recommendations to the Project Steering Committee as to whether to approve, not to approve or call for additional work on the application. All reviews – possibly with the reviewer names removed – will be made available to proponents.

The Project Steering Committee will then decide whether to approve the application, reject the application, or refer it back to the prospective small grant recipients for further modifications. The record of the Project Steering Committee meeting will capture the Project Steering Committee's recommendations and the reasoning behind the decision. In the cases of conditional approval, the meeting record would detail the conditions that need to be met for approval.

The EE will notify prospective small grant recipients and the FAs of the recommendations of the Project Steering Committee. Applications that are approved will enter the contracting stage. Projects

that are referred back to proponents for further modification will have an opportunity to resubmit during the next call for proposals.

Detailed steps for Stage 2:

- Convene application development sessions with prospective small grant recipients (FAs, experts)
- Work with prospective small grant recipients to improve application (FAs, experts)
- Complete applications (Prospective small grant recipients)
- Submit completed applications to FAs to check for completeness (Prospective small grant recipients)
- Submit to the EE with endorsement (FAs)
- Acknowledge receipt (EE)
- Review completed proposals – technical and due diligence (Experts, EE)
- Table recommendations at Project Steering Committee meeting (EE)
- Notify FAs of outcomes (EE)
- Notify prospective Small grant recipients of outcomes (FAs) (application approved; application requires additional work; application not approved)

Stage 3: Contracting

Once approved by the Project Steering Committee, the EE will prepare and enter into contracts with small grant recipients.

The legal agreements between the EE and the prospective small grant recipients will be negotiated and finalized based on the nature of the activity and of the anticipated funding flows. This process will include internal processing as well as compliance and due diligence screening. The agreements will contain all relevant details regarding the terms and conditions of the Fund's financing and may include terms and conditions applicable to the relationship between the EE, FAs and small grant recipients.

Contracts will specify the annual project work plan and associated budgets, deliverables and disbursement schedules. They will also specify monitoring, evaluation and reporting requirements. Baselines will need to be established within the first 3 months of project inception. When required, the FAs will assist with this process.

This stage will conclude with the signing of legal agreements between the EE and the new small grant recipient and the payment of the first instalment into the small grant recipient's bank account.

Detailed steps for Stage 3:

- Preparation of draft terms and conditions (EE)
- Negotiation and finalization of draft legal documents (EE, FAs, small grant recipient)
- Signature of legal documents
- Award grant

Stage 4: Implementation, monitoring and reporting

Small grant recipients will be expected to implement their projects according to the schedules and deliverables that are set out in their contracts. All small grant recipients will be expected to participate in and contribute to the project's knowledge management and capacity building processes.

The FAs will support small grant recipients in this process by visiting each project at least once each quarter, and supporting reporting and monitoring processes. The FAs will be responsible for advising the EE on small grant recipient project progress and making recommendations to the EE for the disbursement of funds. The EE will undertake the necessary internal procedures to validate and complete the contracted payments. Any requests to deviate from the disbursement schedule agreed in small grant recipient contracts will need to be approved by the SGF Project Steering Committee and provided in writing.

In addition to the quarterly site visits, small grant recipients will be engaged in the SGF Project mid-term and terminal evaluations conducted by external reviewers. The FAs will support processes for small grant recipients to be meaningfully engaged by the external monitoring and evaluation consultants during these evaluations.

Throughout the SGF project, opportunities will be created from small grant recipients to meet and share lessons and experiences with each other, and with other local and national stakeholders. Should the opportunity arise, small grant recipients may also be requested to share their experience with the international community. In support of this, annual small grant recipients meetings will be organised in each focal area. At least two of these will bring small grant recipients from the two areas together.

Detailed steps for Stage 4:

- Project becomes effective
- Transfer of first installment to small grant recipient according to contract disbursement schedule (EE
- Quarterly reporting (Small grant recipient)
- Quarterly site visits to each project by FAs (FAs)
- Annual visits to project areas by EE (EE)
- Ongoing participation in knowledge and leaning activities (Small grant recipient)
- Mid-term review – led by external independent consultants, includes local ref groups and Project Steering Committee (EE, FAs, small grant recipients)
- Terminal review – led by external independent consultants, includes local ref groups and Project Steering Committee (EE, FAs, small grant recipients)

Stage 5: Closure

At project closure, all small grant recipients will be expected to submit final financial and performance reports which will need to include a project sustainability plan.

Annex VI: Community Adaptation Small Grants Facility Project Review, Oversight and Environmental and Social Risk Management Plan

1. The Small Grant Making Process

The process to support prospective Small Grant Recipients to identify project concepts, and to develop these ideas into applications that could be approved and ultimately contracted by the Community Adaptation SGF, has five stages (see Figure 1). These are summarized in Table 1 and described below. The roles and responsibilities that have been assigned to the various project partners throughout the small grant making process are set out in the Institutional Arrangements section below. Draft project concept and detailed project proposal application forms have been developed by the EE, and will be finalized in a consultative process leading up to the Inception Workshop.

It is acknowledged that there is a great need to develop local capacity in order to empower local community members and stakeholders who are anticipated Small Grant Recipients to apply for Community Adaptation SGF assistance. In support of this, capacity building and learning opportunities will be created throughout the lifetime of the project. These will be informed by the outcomes of capacity building needs analyses that will be conducted by the Facilitating Agencies, with the support of the EE, on an on-going basis.

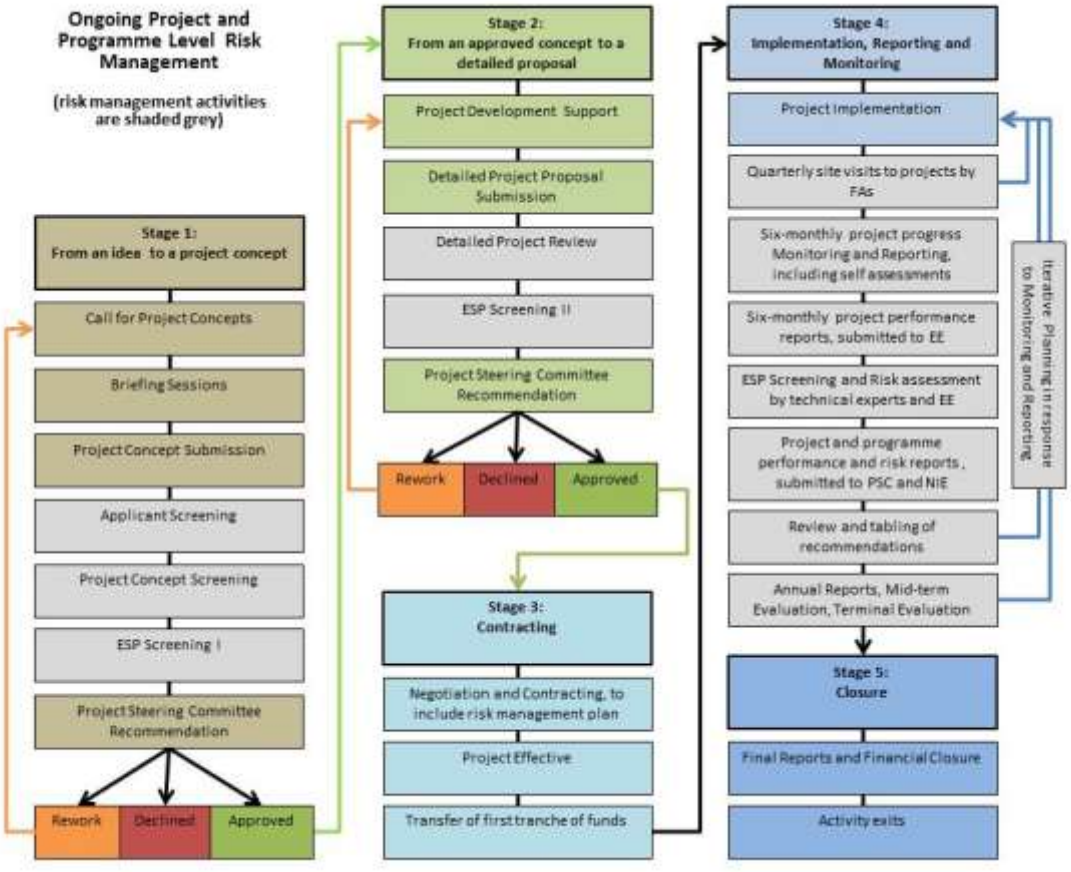

Figure 1: The five Community Adaptation SGF project stages, illustrating where small grant projects and overall programmatic activities will be screened and monitored for potential environmental and social risks in accordance with the Adaptation Fund Environmental and Social Policy (ESP).

Table 1: Indicative Steps Associated with the five stages of the Community Adaptation SGF Small Grant Making Process. The responsible agent(s) is indicated in brackets after each indicative step.

Stage	Indicative Steps
Stage 1: From an idea to a project concept	• Issue call for project concepts (EE, Facilitating Agencies) • Convene briefing sessions (Facilitating Agencies) • Submit project concepts (prospective Small Grant Recipients) • Review and screen project concepts against three sets of criteria (Facilitating Agencies, Local Reference Groups) • Submit to the EE (Facilitating Agencies) • Make recommendations regarding next stages (Facilitating Agencies) • Table recommendations at Project Steering Committee (PSC) meeting (EE) • Notify Facilitating Agencies of outcomes (EE) • Notify prospective Small Grant Recipients of outcomes (Facilitating Agencies) (project concept approved; project concept requires additional work; project concept not approved)
Stage 2: From an approved project concept to a detailed project proposal	• Convene detailed project proposal development sessions with prospective Small Grant Recipients (Facilitating Agencies, Experts) • Work with prospective Small Grant Recipients to improve detailed project proposal (Facilitating Agencies, Experts) • Complete detailed project proposal (prospective Small Grant Recipients) • Submit completed detailed project proposals to Facilitating Agencies to check for completeness (prospective Small Grant Recipients) • Submit to the EE with endorsement letters (Facilitating Agencies on behalf of Local Reference Groups) • Acknowledge receipt (EE) • Review completed detailed project proposals – technical and due diligence (Experts, EE) • Screen detailed project proposal against AF ESP (Facilitating Agency, EE, NIE) • Table recommendations at PSC meeting (EE) • Notify Facilitating Agencies of outcomes (EE) • Notify prospective Small Grant Recipients of outcomes (Facilitating Agencies) (detailed project proposal approved; detailed project proposal requires additional work; detailed project proposal not approved
Stage 3: Contracting	• Preparation of draft terms and conditions (EE) • Development of a risk management plan (Facilitating Agencies, Small Grant Recipients) • Negotiation and finalization of draft legal documents (EE, Facilitating Agencies, Small Grant Recipients) • Signature of legal documents • Award small grant
Stage 4: Implementation, Monitoring and Reporting	• Small grant project becomes effective • Transfer of first installment to Small Grant Recipient according to contract disbursement schedule (EE) • Quarterly site visits to each project (Facilitating Agencies) • Six-monthly project progress monitoring and reporting, including self-assessment, submitted to Facilitating Agencies (Small Grant Recipient, with support from Facilitating Agencies) • Six-monthly project performance reports submitted to EE (Facilitating Agencies) • ESP screening and risk assessment: Identification of environmental and/ or social risks and development of proposed recommendations for how these are to be addressed in the project risk management plan (Environmental and Social Safeguard Expert, EE) • Six-monthly project and programme performance risk reports submitted to PSC and NIE for review (EE) • Review and tabling of recommendations for implementation, in response to monitoring reporting outcomes (EE, PSC, NIE) • Iterative planning and activity design based on monitoring, reporting and risk assessment (Facilitating Agencies and Small Grant Recipients) • Annual visits to small grant project areas by EE (EE) • Periodic training and capacity building (Facilitating Agencies, consultants) • Ongoing participation in knowledge and leaning activities (Small Grant Recipient) • Participation in Mid-term review – led by external independent consultants, includes Local Reference Groups and PSC (EE, Facilitating Agencies, Small Grant Recipients) • Participation in Terminal review – led by external independent consultants, includes Local Reference Groups and PSC (EE, Facilitating Agencies, Small Grant Recipients)

Stage 5: Closure	• Submit final financial and performance reports • Submit small grant project sustainability plan • Participation in close out event

Stage 1: From an idea to a project concept
In this first stage, prospective Small Grant Recipients will be required to submit short project concepts outlining their proposed adaptation activities to the Facilitating Agencies.

Central to the approach will be processes to empower communities to identify best practice adaptation responses themselves, and in so doing to locate these in local socio-economic and institutional contexts that will see that these are integrated in on-going livelihood and development practices. Related to this will be the intention to identify responses that are synergistic and multi-sectoral so that, for example, agriculture and ecological infrastructure benefits, or built environment and health benefits, are derived simultaneously.

In support of this stage, the Facilitating Agencies will issue a call for project concepts. This call will use appropriate local communication channels such as local radio stations and community newspapers. The call will be supported by briefing sessions that will be convened in each of the project target areas. These sessions will provide an opportunity for potential Small Grant Recipients, including members of local communities, to meet the Facilitating Agencies, be exposed to the VAs and response strategies for their regions, learn more about the small granting opportunity and to obtain some initial support to develop appropriate local level responses within these frameworks and input around their project ideas. These sessions will form a unique opportunity to integrate scientific and local knowledge, and to develop a base of proposed responses from which small grant projects can be identified and developed.

The capacity building and project development process has been designed to support local level adaptation responses that are identified by local community members themselves. Small Grant Recipients will be local institutions who are from or who represent these local communities and several screening criteria have been specifically designed to ensure local level empowerment and beneficiation.

Project concepts will be screened by the Facilitating Agencies, with the support of Local Reference Groups, against the three sets of review criteria, as follows:

- Screening of the Small Grant Recipients against a set of predetermined criteria;
- Screening of the small grant projects, to ensure they align with the objectives of the Community Adaptation SGF; and,
- Screening of the small grant projects against the criteria of the AF ESP to ensure that there are no significant project risks or that any minor risks that can be mitigated.

These criteria will be made known to applicants before they apply. This will empower stakeholders and give the process the transparency and local grounding that will be important for project success and sustainability.

During the Community Adaptation SGF inception phase, the NIE will engage directly with the EE and Facilitating Agencies on operating procedures that will apply to the management of the SGF, and that will be necessary to ensure compliance with SANBI and AF policies and procedures. Particular focus will be placed on the AF ESP, and a dedicated capacity building session will help to ensure that both the EE and Facilitating Agencies are able to competently screen small grant project ideas, concepts and proposals for environmental and social risks, and to detect these in future project monitoring, evaluation and reporting processes.

The recommendations of this screening process will be submitted to the EE, who will table them at a PSC meeting for a final decision. Project concepts that meet the specified criteria and are approved by the PSC will be entered into Stage 2. This conditional approval will allow the small grant projects to enter Stage 2, and to qualify for capacity building and project development support. This conditional approval will not entail the disbursement of funds to Small Grant Recipients. Where such a need arises, and as determined by the Facilitating Agencies and EE, direct travel costs associated with potential Small Grant Recipients attending capacity building events may be covered.

Project development assistance will be offered to potential Small Grant Recipients whose project concepts are believed to have merit, but do not quite meet the Community Adaptation SGF criteria. Such potential Small Grant Recipients will be afforded another opportunity to submit their revised project concepts, possibly at the time of the next call for project concepts.

The call for proposals will be issued on a six-monthly basis until such time as all project funds are allocated and all Small Grant Recipients contracted. It is envisaged that two to three calls will be needed.

Stage 2: From an approved project concept to a detailed project proposal
For all approved project concepts, the Facilitating Agencies will support prospective Small Grant Recipients to further develop and refine the project concepts into detailed project proposals that meet the criteria and requirements of the Community Adaptation SGF. As part of this process, the Facilitating Agencies will invite input from local experts who will work alongside prospective Small Grant Recipients to refine their detailed project proposals. This will include the incorporation of relevant material such as the VAs for each area and a review of the environmental and social safeguards to make sure that detailed project proposals meet the requirements for a project with no significant risks in terms of the AF ESP, or a project with minor risks that can be mitigated. Specialist safeguard expertise has been provided for in the budget and will be available if necessary.

Prospective Small Grant Recipients will submit detailed project proposals to the EE via the Facilitating Agencies with a letter of endorsement from the Local Reference Groups. The EE will note the submission of the documentation, review it for completeness, and acknowledge receipt.

Detailed project proposals will then be reviewed by three reviewers, one of which will be the EE. The other two will be selected on the basis of their technical expertise in the project content area. Reviewers will evaluate detailed project proposals against the agreed project and institutional criteria.

The Facilitation Agency will also undertake a comprehensive screening of the detailed project proposals against the AF ESP for a second time, to ensure that no additional issues that could pose risks have emerged during the detailed design process. If any such minor risks have emerged, the potential Small Grant Recipients will need to include a mitigation plan in the detailed project proposals. The EE will review this assessment, and the NIE will provide oversight over this aspect of the process to ensure overall compliance with the AF ESP.

The EE will then compile the reviewers' comments into an integrated review, and make recommendations to the PSC as to whether to approve, not to approve or call for additional work on the detailed project proposal. All reviews – possibly with the reviewer names removed – will be made available to proponents[23].

The PSC will then decide whether to approve the detailed project proposal, reject it, or refer it back to the prospective Small Grant Recipients for further modifications. The record of the PSC meeting will capture the PSC's recommendations and the reasoning behind the decision. In the cases of conditional approval, the meeting record would detail the conditions that need to be met for approval.

The EE will notify prospective Small Grant Recipients and the Facilitating Agencies of the recommendations of the PSC. Applications that are approved will enter the contracting stage. Projects that are referred back to proponents for further modification will have an opportunity to resubmit during the next call for proposals.

Stage 3: Contracting
Once approved by the PSC, the EE will prepare and enter into contracts with Small Grant Recipients.

The legal agreements between the EE and the Small Grant Recipients will be negotiated and finalized based on the nature of the activity and of the anticipated funding flows. This process will include internal processing as well as compliance and due diligence screening. The agreements will contain all relevant details regarding the terms and conditions of the Community Adaptation SGF financing

[23] This review process is based on a previous review process that was successfully implemented for the Critical Ecosystem Partnership Fund's investment in the Cape Floristic Region and Succulent Karoo hotspots between 2004 and 2009.

and may include terms and conditions applicable to the relationship between the EE, Facilitating Agencies and the Small Grant Recipient.

Contracts will specify the annual project work plan and associated budgets, deliverables and disbursement schedules. They will also specify monitoring, evaluation and reporting requirements. Baselines will need to be established within the first three months of small grant project inception. When required, the Facilitating Agencies will assist with this process.

This stage will conclude with the signing of legal agreements between the EE and the Small Grant Recipient and the payment of the first installment into the Small Grant Recipient's bank account.

Stage 4: Implementation, monitoring and reporting
Small Grant Recipients will be expected to implement their small grant projects according to the schedules and deliverables that are set out in their contracts. The Facilitating Agencies will support Small Grant Recipients in this process by visiting each project at least once each quarter, and supporting reporting and monitoring processes. The Facilitating Agencies will be responsible for advising the EE on Small Grant Recipient project progress, making recommendations to the EE for the disbursement of funds and in the event of any requests for deviations from the agreed project plan.

Particular attention will be given to the monitoring and mitigation of any minor risks identified through Stages 1-3, and of any unanticipated environmental and social risks that may arise during implementation through the:

- Facilitating Agency quarterly site visits to all project sites, in which the capacity of Small Grant Recipients will be developed to allow the detection and mitigation of environmental and social risks;
- Six-monthly project progress reports submitted by Small Grant Recipients to the Facilitating Agencies, including self-assessments;
- Six-monthly project performance reports submitted by the Facilitating Agencies to the EE, that summarise project progress and risk management related activities;
- Six-monthly ESP screening and risk assessment by an Environmental and Social Safeguard Expert (budgeted for in Component 1), based on the reports received from the Facilitating Agencies and the annual site visits of the EE. Through this process, environmental and/ or social risks will be identified and a set of recommendations for how these should be addressed in the project's risk management plan will be developed;
- Six-monthly project and programme performance and risk reports submitted by the EE to the PSC and NIE, in which the risks and recommendations that arise from the ESP screening and risk assessment process are presented;
- PSC and NIE feedback to the EE in response to monitoring reporting outcomes, including recommendations for corrective action (EE, PSC, NIE). The Facilitating Agencies will be responsible for working with Small Grant Recipients to ensure that these recommendations are integrated into the relevant project risk management plan, and into future implementation activities; and,
- Monitoring of the iterative management actions that arise from the recommendations of the PSC and NIE (EE, PSC, NIE).

Where risks are detected, the PSC may propose the redirection of project funds to risk management activities, or the withholding of the next tranche of payment until satisfactory risk management actions are determined and agreed. In this regard it is noted that every effort will be made to support Small Grant Recipients to positively respond to and manage unanticipated risks.

The EE will undertake the necessary internal procedures to validate and complete the contracted payments. Any requests to deviate from the disbursement schedule agreed in Small Grant Recipient contracts will need to be approved by the PSC and provided in writing.

In addition to the quarterly site visits and learning opportunities, Small Grant Recipients will be engaged in the Community Adaptation SGF Mid-term and Terminal evaluations conducted by external reviewers. The Facilitating Agencies will support processes for Small Grant Recipients to be meaningfully engaged by the external M&E consultants during these evaluations.

Throughout the Community Adaptation SGF, opportunities will be created for Small Grant Recipients to meet and share lessons and experiences with each other, and with other local and national stakeholders. Should the opportunity arise, Small Grant Recipients may also be requested to share their experience with the international community. In support of this, annual Small Grant Recipients meetings will be organised in each project target area. At least two of these will bring Small Grant Recipients from the two project target areas together. Stakeholders from neighbouring and other districts and municipalities will be invited to these fora, with a view to extending the project benefits beyond the project target sites, to stimulate the scaling up of the Community Adaptation SGF.

Stage 5: Closure
At project closure, all Small Grant Recipients will be expected to submit final financial and performance reports which will need to include a project sustainability plan.

As part of the Terminal review, a close out event will also be convened for the project team and Small Grant Recipients to reflect on the outcomes of the Community Adaptation SGF.

2. Project Screening and Review

The project development and review mechanisms of the Community Adaptation SGF will be guided by criteria that ensure that small grant projects clearly respond to experienced or anticipated climate induced stresses, and meet the objectives of the Community Adaptation SGF, the NIE and the Adaptation Fund (AF). As part of this, the screening processes will also ensure that all small grant projects meet the requirements for a project with no significant risks in terms of the AF ESP, or a project with minor risks that can be mitigated.

This Community Adaptation SGF has been designed to pilot an enhanced direct access mechanism, and in order to be able to retain a focus on this, it has been agreed that small grant projects with significant AF ESP risks, or risks that cannot be mitigated, will be excluded. This position is further informed by the relatively small size of the grants, which would make detailed specialist investigations into the identification and mitigation of significant risks unaffordable.

It should be noted that the Community Adaptation SGF will not fund:
- Small grant projects that do not align with all of the prescribed criteria;
- Small grant projects that do not result in tangible, measurable adaptation benefits for vulnerable communities – this includes any project that is only awareness- and/or education-based, only relevant to planning or research, without feeding into an implemented activity;
- Small grant projects that require a Basic Assessment or full Environmental Impact Assessment (EIA) as per the national EIA regulations (see Section II.E), due to administrative costs and potential delays;
- Small grant projects that do not show additionality; and,
- Small grant projects that pose significant or unmitigatable risks in terms of the AF ESP.

Institutions (Small Grant Recipients) and small grant projects will be carefully screened against a set of criteria that were developed as part of the process to conceptualise the Community Adaptation SGF.

The Screening Process will have three steps, as follows:
- Screening of the Small Grant Recipients against a set of predetermined criteria;
- Screening of the small grant projects, to ensure they align with the objectives of the Community Adaptation SGF; and
- Screening of the small grant projects against the criteria of the AF ESP to ensure that they are no significant project risks, or that any minor risks that can be mitigated.

Small Grant Project proposals that do not meet the requirement for a project with no significant risks in terms of the AF ESP, or a project with minor risks that can be mitigated, will be excluded.

These criteria were designed to ensure consistency with the aspirations of project target communities, alignment with the NIE Investment Framework and compliance with the standards and criteria of the

AF, including the Environmental and Social Policy. They were designed in consultation with project stakeholders as part of the Community Adaptation SGF detailed design phase.

A participatory and inclusive approach is essential to sustainability. It creates a sense of ownership and buy-in, involves all sectors of the community, enables integration with on-going activities, provides access to local knowledge and ideas, facilitates consensus and increases the credibility of the project. Although participatory processes are not uncommon in South Africa, there is sometimes a tendency for project management to become expert-driven and top-down in its approach. The Community Adaptation SGF will actively promote a participatory, gender-sensitive approach. To foster the participation of women in project activities, gender concerns have been factored into project criteria, indicators and targets. These will ensure that there is equitable representation of women as project beneficiaries, in training and capacity-building programmes, and in project decision-making structures at all levels.

2.1 Criteria for Small Grant Recipients

- Small Grant Recipients must be South African institutions with proven relevant implementation experience.
- Preference will be given to Small Grant Recipients that are legal entities and have the capacity to receive, manage and audit project funds.
- Preference will be given to small grant projects led by civil society organisations, and civil society organisations must be represented on management structures of all small grant projects.
- Organisations will need to show how women are included in their project management structures.
- Small Grant Recipients must have a sound track record of good governance, delivery of grant commitments and financial management.
- Preference will be given to grant recipients with a clean audit record.
- Small Grant Recipients must have previous positive experience receiving a combination of funds in the order of USD 25,000 (R 250,000) per year over a period of at least two years.
- Small Grant Recipients are encouraged to develop implementation partnerships that augment or share their current capacity.
- Preference will be given to Small Grant Recipients that have established long-standing relationships with communities in the Namakwa or Mopani District Municipality.
- Small Grant Recipients must have proof of land or asset ownership, and/or land tenure or permission to carry out proposed activity, as relevant.
- Small Grant Recipients must have a clear mandate from project community beneficiaries to work in the project target areas on the identified project activities.
- Small Grant Recipients must demonstrate willingness to participate in learning and knowledge development and dissemination processes.
- Small Grant Recipients must not be receiving funds from other sources for the proposed small grant project activities.
- Small Grant Recipients may only receive one small grant from the Community Adaptation SGF.

Note: Organisations may wish to collaborate in order to meet organisational eligibility requirements. Organisations will be required to furnish documentation to verify recipient eligibility criteria during the application process.

2.2 Criteria for Small Grant Projects

- The Community Adaptation SGF will fund small grant projects that address a clear climate change related threat and have a clear and demonstrable link to tangible, measurable and visible adaptation benefits for vulnerable communities.
- Small grant projects must clearly demonstrate that they respond to a particular climate change risk that is relevant for the project area, as identified in the project VAs (see Annex II).
- Small grant projects must support adaptive interventions that clearly respond to current or anticipated local vulnerabilities that deliver concrete, tangible and measurable climate change adaptation benefits.
- Small grant projects must support concrete actions and deliver tangible results that increase resilience to climate variability and change.

- Small grant projects must be able to show no significant risks in terms of the AF ESP, or minor risks that can be mitigated.
- Small grant projects must align with the Community Adaptation SGF Investment Windows, as described above in Box 3.
- Small grant projects must be located within the broader development context (provide economic, social, and/or environmental co-benefits) of the area.
- Small grant projects must be supported by anticipated beneficiaries and local community stakeholders.
- Where relevant, small grant projects are required to demonstrate sustainable land tenure arrangements.
- Small grant projects must support vulnerable, local communities and especially women.
- Small grant projects will beneficiate community groups rather than single individuals i.e. at least 50 direct community beneficiaries per project.
- Small grant projects must include learning outcomes and inform ways to scale up and replicate approaches in other communities.
- Small grant projects must clearly demonstrate how success will be measured and must have clear indicators.
- Small grant projects must be replicable and/or scalable.
- Small grant projects must be sustainable after the Community Adaptation SGF funding ends.
- Small grant projects must be cost-effective.
- Small grant projects must be located in rural/semi-rural areas.
- Small grant projects must be implemented in the Namakwa District Municipality, or Greater Giyani or Greater Letaba in the Mopani District Municipality.

2.3 Environmental and Social Risk Screening

All small grant projects will be screened against the AF ESP, and potential Small Grant Recipients will be required to complete Table 2. Any small grant project that does not meet the requirements for a project with no significant risks in terms of the AF ESP, or minor risks that can be mitigated, will be excluded.

Particular attention will be given to ensuring that small grant projects do not impact adversely on any priority biodiversity areas or ecosystem support areas, and that there are no negative impacts on local communities, including vulnerable groups and indigenous people.

As mentioned above, small grant projects that require a Basic Assessment or full Environmental Impact Assessment (EIA) as per the national EIA regulations (see Section II.E) will not be supported, due to administrative costs and potential delays. Activities that are listed in the EIA regulations will only be approved where provincial authorisations can be obtained as part of South Africa's Working for Wetlands Programme. These provincial authorisations apply to riparian zone activities (such as rehabilitation or restoration of wetlands, rehabilitation and restoration of river banks including erosion control and the construction of low river crossings) and littoral zone activities (such as small-scale coastal storm protection structures). Such provincial authorisations will need to be provided in writing before any grants that entail these proposed activities are awarded.

2.4 Environmental and Social Risk Monitoring

Implementation monitoring and reporting processes will be designed to have explicit focus on the monitoring of the identified minor risks, as well as any unintended environmental and social risks. These processes are broadly outlined in Stage 4 (Implementation, monitoring and reporting) in Section 1. These will apply to the individual small grant projects, as outlined in Figure 1, as well as to the programme as a whole via the six-monthly reports that are compiled by the EE and the Environmental and Social Safeguard Expert, for submission to the PSC and NIE.

Mid-term and Final Evaluations will also have a specific focus on compliance with the AF ESP and national Environmental Impact Assessment standards and regulations.

Table 2: Checklist of environmental and social principles.

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
Compliance with the Law		
Access and Equity		
Marginalised and Vulnerable Groups		
Human Rights		
Gender Equity and Women's Empowerment		
Core Labour Rights		
Indigenous Peoples		
Involuntary Resettlement		
Protection of Natural Habitats		
Conservation of Biological Diversity		
Climate Change		
Pollution Prevention and Resource Efficiency		
Public Health		
Physical and Cultural Heritage		
Lands and Soil Conservation		

3. Institutional Arrangements

National Implementing Entity
SANBI will be the **National Implementing Entity** for the Community Adaptation SGF. SANBI will support project implementation by assisting in monitoring project budgets and expenditures and supporting the recruitment and contracting of project personnel and consultant services, including subcontracting. SANBI will also monitor project implementation and the achievement of the project outcomes/outputs and ensure the efficient use of donor funds.

Executing Entity
The Community Adaptation SGF will be administered through SouthSouthNorth (SSN) Trust, the project's **Executing Entity**. The SSN Trust was identified following a thorough review of potentially suitable existing entities in South Africa and a subsequent process that called for expressions of interest. See Box 7 for further details.

SSN Trust will be responsible for receiving and disbursing funds, for contracting the project's Facilitating Agencies and other service providers, and for contracting arrangements with all Small Grant Recipients. They will also be responsible for overall project monitoring, evaluation and reporting and will work directly with the NIE to ensure that AF reporting requirements are met.

SSN Trust will appoint and designate a **Project Manager** (PM) for the duration of the project. The PM's primary responsibility will be to ensure that the project produces the results specified in the project document to the required standard of quality and within the specified constraints of time and cost.

Facilitating Agencies
The project's **Facilitating Agencies** will provide site-based support in each of the project target areas. They will appoint Project Coordination Staff including a **local coordinator** in each region. These local coordinators will support Small Grant Recipients to execute the project activities, including project identification, design and implementation, day-to-day operations of the project, and operational and financial management and reporting.

The Facilitating Agencies will invite two officials from each of the District Municipalities to work alongside them in the project development process so as to build local capacity in this area, and to ensure optimal alignment between the project development process and related municipal activities such as Local Economic Development and Integrated Development Planning.

CSA will act as Facilitating Agency for Namakwa. They have a long history working in this area, and have an excellent track record in community engagement and grant making, including project identification, development, training and management support. They also have an established long-standing relationship with the District Municipality. The Facilitating Agency for Mopani will be identified through a transparent procurement process that will commence once it is certain that the project will proceed.

During the Community Adaptation SGF inception phase, the NIE will engage directly with the EE and Facilitating Agencies on operating procedures that will apply to the management of the SGF, and that will be necessary to ensure compliance with SANBI and AF policies and procedures. Particular focus will be placed on the AF ESP, and a dedicated capacity building session will help to ensure that both the EE and Facilitating Agencies are able to competently screen small grant project ideas, concepts and proposals for environmental and social risks, and to detect these in future project monitoring, evaluation and reporting processes.

Service providers
Service providers will be contracted to provide specialist support as required over the duration of the project. These services will include technical input to proposal development and review, specialist training, writing of case studies and independent project evaluations.

Oversight, Governance and Coordination
The proposed governance and implementation arrangements for the project are illustrated in Figure 2 and the envisaged roles and responsibilities that will be assigned to each of these structures is described below.

Strategic and operational oversight, and in particular oversight over compliance with the AF ESP, will be ensured by the NIE.

The NIE is governed by the NIE Steering Committee, which includes SANBI as the accredited National Implementing Entity for South Africa, DEA as the Designated Authority, National Treasury, the NPC and the Adaptation Network. The Steering Committee is chaired by SANBI with DEA as Deputy Chair.

The Steering Committee has the following functions:
- Providing overall project governance
- Supporting SANBI to ensure overall compliance with the spirit, policies and procedures of the Adaptation Fund.
- Monitoring AF ESP risks, and oversight of corrective action that may need to be taken.
- Supporting the NIE to build a coordinated adaptation response that delivers tangible outcomes.
- Guiding the development of and endorse the NIE investment strategy, ensuring optimal linkages with the policy environment and that projects are driven by country needs
- Setting up and oversee the project review process, including guiding the development of terms of reference for reviewers, setting up the review panel, and considering the recommendations of reviewers.
- Endorsing projects for submission to the Adaptation Fund, ensuring appropriate linkages with Adaptation Fund criteria and facilitating appropriate consultation with and, where necessary, endorsement from relevant spheres of government. From time to time this may involve promoting

agreement on the roles of relevant institutions in implementing AF projects and facilitate the resolution of disputes among project partners.
- Promoting cooperation between relevant South African Institutions and funding agencies to enhance synergy and avoid duplication between adaptation efforts, to leverage additional resources where appropriate, and to support information management and flows between and feedback between the NIE and the NCCC and IGCCC and contribute towards climate finance and climate change adaptation policy development.

One of the main objectives of the NIE is to draw lessons and experiences from the NIE project development and implementation processes. This will support climate change adaptation planning, decision making and monitoring and evaluation with a view to enhancing the benefits of adaptation responses both nationally and internationally. This process will be supported by both DEA and SANBI.

Project Management Team
The day to day management of the project will be supported by a **Project Management Team** that will comprise SSN Trust and the two Facilitating Agencies. As and when required, the Project Management Team may co-opt others such as the NIE or other members of the NIE Steering Committee to join the Project Management Team. Project Management Team meetings will be coordinated by the EE's Community Adaptation SGF Project Manager, and will happen at least monthly.

Project Steering Committee
A **PSC** will be set up to provide overall governance and project oversight and to consider recommendations regarding the approval of the small grants that are the subject of this project.

The PSC will comprise:
- The National Department of Environmental Affairs;
- The Adaptation Network, which is a network whose membership includes a broad spectrum of NGOs, academia, government and business organisations with a shared interest in adaptation strategies for the negative impacts of climate change. The Adaptation Network represents Civil Society on the NIE Steering Committee and is well placed to do the same on the Community Adaptation SGF PSC;
- Representatives of the Mopani and Namakwa District Municipalities;
- The NIE; and
- Technical climate change adaptation experts who are drawn from National Academic Institutions and target area government departments.

The EE will convene and act as Secretariat for this committee, and both the EE and the Facilitating Agencies will take guidance from the PSC processes. The PSC will meet quarterly.

Local Reference Groups
Local Reference Groups will be set up at project inception. They will support the Facilitating Agencies to ensure that projects are locally contextualised, consider local and indigenous knowledge, integrated and coordinated into on-going local programmes of work, technically robust and sustainable. In some cases they may also be able to attest to the credibility of the prospective Small Grant Recipients.

It is envisaged that members of these groups will include the officials from the democratically elected Mopani and Namakwa local government District Municipalities, relevant Local Municipalities and relevant provincial departments, including the Limpopo Department of Agriculture, LEDET and the Northern Cape Department of Environment and Nature Conservation.The members will also include relevant national sector departments and experts from tertiary institutions and research institutions, including the University of Limpopo, the Risk and Vulnerability Science Centre at the University of Limpopo and the Agricultural Research Council. Amongst others, prospective Small Grant Recipients will not be able to be members of these groups.

These Local Reference Groups will play an important role in concept screening during the first stage of the project development process, in detailed application development and in project implementation, learning, monitoring and reporting processes.

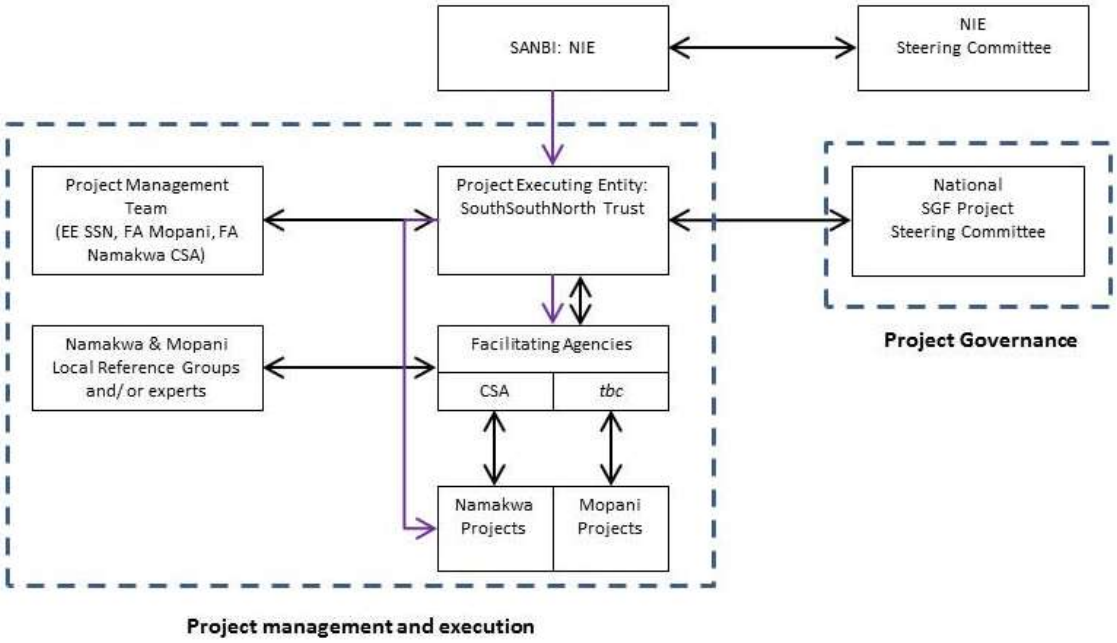

Figure 2: Institutional Arrangements for the Community Adaptation SGF project. The black arrows indicate the relationships between the different project partners and committees. The purple arrows indicate the flow of funds. Abbreviations: Executing Entity (EE); SouthSouthNorth (SSN) Trust; Facilitating Agency (FA); and Conservation South Africa (CSA).

Annex VII: Other supporting documents

Annex VII.1 Technical Note

TECHNICAL NOTE:
DRAFT PROPOSAL FOR THE IDENTIFICATION OF THE EXECUTING ENTITY FOR THE SMALL GRANT FACILITY (SGF)

PURPOSE
To inform the process for the identification of the Executing Entity of the Small Grants Facility developed under the National Implementing Entity for the Adaptation Fund.

INTRODUCTION
The need for a SGF for Climate Change Adaptation was identified during the NIE's early engagement processes with stakeholders. During these engagements, stakeholders commented that, in order for vulnerable groups to be empowered to take local action, they needed to have direct access to Climate Change Adaptation resources, The SGF concept was presented to the Adaptation Board in July 2013. It was received with much enthusiasm. The Board is expecting SANBI to submit a fully developed proposal by July 2014 that, among other things, elucidates how the SGF will function.
SANBI will need to demonstrate that the mechanism that supports the SGF meets the following objectives:

- Cost effective – Need to demonstrate that the overall return on investment in Climate Change Adaptation at least matches that of other financing instruments
- Transparent and well governed – Processes for the identification, review and approval of projects need to be transparent and fair
- Technically sound – The SGF must be able to mobilise capacity and project development support for the communities that are envisaged to be beneficiaries of the SGF
- Accountable - Sound financial, monitoring, evaluation, reporting and auditing capabilities
- Sustainable – The SGF must be set up in such a way that it is possible to recapitalise the fund with additional resources once the AF investment is exhausted

In order to support the above, and recognising that it would be difficult to identify an Executing Entity with both financial management and project development capabilities and that it may in fact be desirable to separate these in order to support good governance, a governance and oversight process was conceptualised. This is presented in Figure 1 below. The process and supporting proposal to the Adaptation Fund Board proposed that Gender cc and CSA would function as facilitating agencies for the project, bringing much needed project development and technical support into the local beneficiary communities. It was noted that the institution that would function as the Executing agency would still be determined.

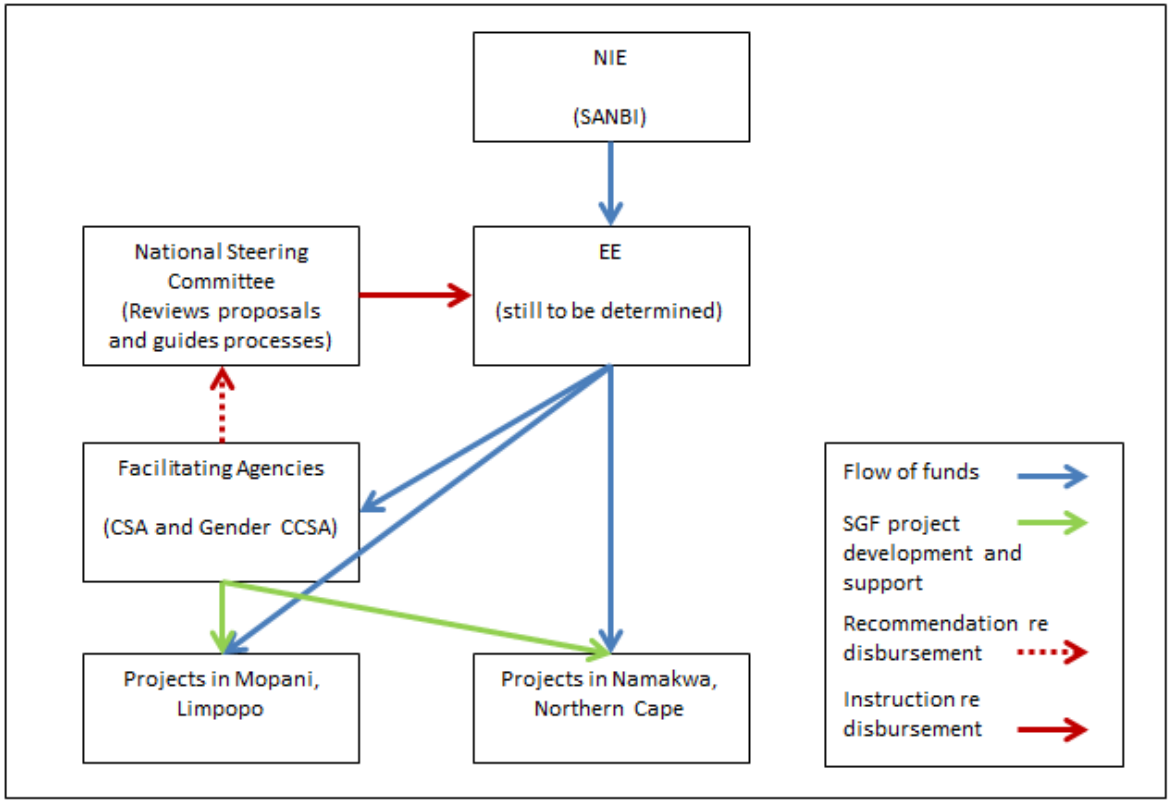

Figure 1: Proposed Governance and Oversight processes for the SGF

BACKGROUND

As discussed, the work under the National Implementing Entity has culminated in the approval of the Small Grants Facility by the Adaptation Fund Board. The principles of direct access and enhanced direct access which aims to ensure linkages between the available funding and potential beneficiaries of the fund are entrenched in the SGF concept. This would also generate very clear and tangible outcomes with respect to climate adaptation on the ground and help to inform key lessons and strategies going forward.

To facilitate the implementation of the SGF special financing mechanism, it is vitally important that a capable Executing Entity (ies) is identified and appointed as the primary executing entity for the mechanism.

In this regard, it is recognised that the SGF could:

- Piggyback on the administration, governance and institutional structures of one of these entities; OR
- Based on the review and evaluation of the different financing mechanisms, a new governance and institutional structure could be proposed for the SGF

Based on discussions between the National Treasury and the NIE team, several existing small grant and climate adaptation related mechanisms were identified for further consideration by the NIE Steering Committee. These are:

- National LandCare Programme: Small Community Grants Component
- Expanded Public Works Programme: Environmental and Culture Sector
- Global Environment Facility: Small Grants Programme (SGP)
- Drylands Fund
- Green Fund
- NGO Small Grant Facilities.

It is also evident that climate finance efforts in South Africa are currently quite fragmented and the potential for double dipping is very high. Therefore, there is a need for developing a national vision or strategic context for micro finance focusing on the SGF to support small scale adaptation efforts and to consider the role of the SGF in addressing some of the financial gaps associated with adaptation.

Accordingly, this note seeks to review the current financing mechanisms based on the scope, objectives, governance structure and institutional arrangements of the respective instruments. This assessment will form the basis for recommendations to inform the appointment of the executing entity for the SGF.

OVERVIEW OF CURRENT DEDICATED CLIMATE ADAPTATION RELATED FINANCING INSTRUMENTS

Table 1 below provides a preliminary discussion and comparison of the different environmental financing instruments that are connected to DEA, drawing on desktop research and information that was readily available.
Information about NGO-managed small grant facilities was not accessed at this time.

Table 1: Summary of Current Dedicated Climate Adaptation Related Financing Instruments

	National Land Care Programme: Small Community Grants	Expanded Public Work Programme	Global Environmental Facility: Small Grants Programme	Drylands Fund	Green Fund
Objective	To develop and implement integrated approaches to natural resource management in South Africa that are efficient, sustainable, equitable and consistent with the principles of ecologically sustainable development. Facilitate the implementation of the National LandCare Programme. Grants available for projects, amongst others, that: • Improve the ability of land-users to manage land, water and related vegetation in a sustainable and self-reliant manner; • Promote integrated approaches to local catchment areas and regional planning • Demonstrate innovative approaches to natural resource management	The EPWP Environmental and Culture Sector Programme aims to: • Integrate sustainable rural development and urban renewal • Crate land-based livelihoods • Promote community based natural resource management (sustainable management and efficient use of natural agricultural resources and production inputs) • Rehabilitate natural resources and protect biodiversity • Promote tourism	Programme aims to support the overall objectives and focal areas of the GEF. Grants are provided by the GEF to developing countries for projects related to biodiversity, climate change, international waters, land degradation, ozone layer and persistent organic pollutants.	Aims to scale up efforts to address environmental degradation, climate change and rural poverty in South Africa. Support pro-poor initiatives that restore and sustain healthy ecosystems, building partnerships around regenerative processes, and adapting and mitigate climate change.	Provide an evidence base for the transition to a low carbon, green economy.
Scope	Focus on small, catalytic projects that bring community expertise together in the following areas: • Funding provided for works which are cost-effective and an integral part of a widely based natural resource management strategy. • Planning and implementation of plans for sustainable agricultural natural resources management and agriculture, especially at local catchment and regional level. • Investigations, trials and demonstration activities that encompass approaches to the sustainable management, rehabilitation, and conservation of	The programme is focused on job creation and poverty alleviation. The incentive for the environment and culture sector is designed to channel additional resources to performing sector programmes. Sector departments that create jobs are rewarded by reimbursing the relevant department a portion of the wage costs.	Programme responds to the demand from local communities and NGOs for grants in GEF focal areas. Supports the community-based approach for addressing local and global environmental challenges. The programme empowers communities to act and participate in their own development and supports a direct connection between sustainable and local and global livelihoods.	Fund is primarily a pro-poor rural development fund supporting the United Nations Convention to Combat Desertification. Serves as a financial vehicle that could seek to address financial gaps in environmental finance. Create financial mechanisms and develop markets to support biodiversity conservation and management; water; carbon emissions reductions and other environmental financial mechanisms. The Drylands funding mechanism could have a role in administering these mechanisms and serving as mechanism	Provide financial support in the form of grants and / or loan financing for projects in three priority windows: • Natural Resource Management • Green Cities and Windows • Low Carbon Economy

	National Land Care Programme: Small Community Grants	Expanded Public Work Programme	Global Environmental Facility: Small Grants Programme	Drylands Fund	Green Fund
	natural resources. • Funding to encourage the development and adoption of enhanced sustainable practices, which address causes rather than symptoms of resource degradation.			for channeling environmental finance.	
Responsible institution government department / other	Department of Agriculture, Forestry and Fisheries and provincial departments of agriculture in collaboration with the Department of Environmental Affairs.	National Department of Public Works, Department of Environmental Affairs and other sector departments.	Global Environmental Facility	Department of Environmental Affairs	Department of Environmental Affairs
Links with other initiatives	Projects should be aligned with national objectives as outlined in various strategies and policies. Applicants should seek funding from other sources as deemed appropriate. For example, the Working for Water, Farmers Support Initiatives and programmes implemented by the NGO sector. Such funding and projects should complement the small grant initiatives.	N/A	SGP projects need to meet the GEF criteria and the needs of communities. The SGP will need to mobilise additional resources to assist with, among others, providing co-financing, technical assistance and capacity building.	N/A	As part of the project selection criteria, applicants need to disclose information on other sources of funding.
Organisational Structure	Structure establishes linkages between national and provincial departments of agriculture, NGOs, and civil society. DEA is responsible for coordinating the implementation of international conventions. The organisational structure comprises the following: • MINMEC Agriculture: • Intergovernmental Technical Committee on Agriculture • Interprovincial LandCare Working Group • Provincial LandCare Working Group • Provincial LandCare Advisory Forum	The EPWP E&C sector programme is coordinated by the Public Works Department. The organisational structure includes: • Environment and Culture Sector Programme Management Team (comprising National Treasury, Department of Tourism, Department of Agriculture, Forestry and Fisheries, Water Affairs, Environmental Affairs and Arts and Culture). • Secretariat: Public Works • National EPWP Coordinating Committee: Technical Committee and representation by the sectoral coordinating national departments, 9 provincial	The Small programme structure includes representation of a global team for the GEF and country level representation. The Central Global Management Team are responsible for regional coordination and support country programmes on technical matters related to focal areas and thematic directions, capacity and partnership development, knowledge management and monitoring and evaluation. The Small Grants Programme operates through country programme teams comprising the following at a national level:	The main elements of the mechanism are: • Development of an Agency Programme: DEA and the Development Bank of South Africa • Steering Committee: oversight function comprising government, NGOs and business • Project implementation unit (management and operations of the fund): DBSA • Partnership forums: Donor community and investors • Project development	The Green Fund is established as an on budget programme of the Department of Environmental Affairs. The structure of the financing mechanism can be summarised as follows: • Management Committee of the Green Fund comprising DEA, National Treasury, and the DBSA) • Government Advisory Panel: Usually led by DEA Implementing Agency: DBSA • Project Management and Technical Advisory Project Support: DBSA and Management Committee

	National Land Care Programme: Small Community Grants	Expanded Public Work Programme	Global Environmental Facility: Small Grants Programme	Drylands Fund	Green Fund
	• LandCare Secretariat: Department of Agriculture, Forestry and Fisheries	coordinators and permanent nominated representatives from the key implementing national and provincial departments.	• National coordinator • Programme assistant • National Steering Committee in participating country • Hosted mostly by UNDP country offices in South Africa		
Eligible applicants	Local community or combination of groups seeking to manage or conserve specific areas of land, water, vegetation or biodiversity. Community groups should be registered. Two or more community groups working on a shared project can make a joint application. Local government working with one or more community groups. Project should demonstrate high community involvement and leadership of the project.	Implementing agents that serve as the intermediary for potential beneficiaries.	Provides grants to civil society organisations especially NGOs, community based organisations and indigenous peoples organisations. Community based groups that are not formally registered can work with the United Nations Office for Project Services (UNOPs) and develop memorandum of agreements which allows grants to be awarded to them. These groups do not need to go through an intermediary NGO.	Possibly private sector, NGOs, and academia.	Government, private sector, NGOs, and academia.
Project application and Assessment process	Assessment panels are formed in regions or catchments and are responsible for assessing the applications in line with the selection criteria. The assessment panel submits project recommendations to the Provincial Endorsement Panel comprising Provincial Forum members to ensure that projects meet provincial priorities. Recommended projects from the region are submitted to the National Department of Agriculture and a national panel is convened to fully assess all projects based on national priorities and merits.	N/A	The Small Grant Programme country programme prepares and issues an SGP programme announcement on completion of the Country Programme Strategy and any revisions to the strategy. Projects concepts are screened by the National Coordinator or jointly with the National Steering Committee. The project concept selection is conducted on the basis of established eligibility and selection criteria. Once project concepts have been selected and approved, qualifying organisations are notified and requested to develop complete project proposals.	Predefined project selection criteria.	Predefined project selection criteria.

	National Land Care Programme: Small Community Grants	Expanded Public Work Programme	Global Environmental Facility: Small Grants Programme	Drylands Fund	Green Fund
			Additional assistance may be provided for proposal development to the CSO / CBO by the NC. A local consultant may be hired to help the CSO/CBO and the SGP planning grant may be used. At project level, project proposal guidelines have been developed for the SGP. This requires information on: • project rationale and approach • description of project activities • implementation plan and timeframe • plan to ensure community participation • knowledge management • project monitoring, evaluation plan and indicators • project budgetary requirements project funding summary including sources of funding		
Administrative arrangements	Successful applicants are expected to sign a project management agreement. This sets out the conditions for funding including the recipient's responsibility to maintain accounting records for spending of grant funds, and reporting requirements on the progress and results from the project.	Clear contracting arrangements with the Project Implementing Agents to ensure implementation of the incentive. Sector departments need to ensure that new targets, key performance indicators, porting times and audit requirements are incorporated into the project agreements. They also have to ensure that the implementing agents have the necessary administration and financial systems to maintain the information / records required for the incentive.	N/A	N/A	N/A
Financial arrangements					

	National Land Care Programme: Small Community Grants	Expanded Public Work Programme	Global Environmental Facility: Small Grants Programme	Drylands Fund	Green Fund
Funding	Funding is allocated to projects on an annual basis. On-going projects are subject to progress review and report. R 100 000 (maximum) Project funding is provided for a maximum of three years to allow funds to be directed to new emerging priorities.	As per the quantified incentive.	US $ 50 000 maximum grant amount per project. This complements the medium and large sized GEF project funding. In special cases funding will be provided at a maximum of US$ 150 000 for strategic projects that involve several communities and CSOs. Grants are disbursed directly to CBOs and NGOs. SGP projects are funded for a period of between one and three years. The first disbursement should not exceed 50 per cent of the total project grant amount.	N/A	Funding of R1.1 billion has been made available from the fiscus. There does not seem to be a cap on the maximum grant that can be awarded. However, requirements for co-financing are built into the project assessment process.
Reporting, monitoring and evaluation requirements					
Reporting requirements	Project performance information needs to be submitted as part of the annual review and to comply with audit requirements. Quarterly progress reports and financial reports also need to be completed for the Department of Agriculture, Forestry and Fisheries. A final report needs to be compiled by project managers on completion of the project evaluating the successes and failures (learning's) of the project in achieving its objectives.	Specific agreed reporting processes and information requirements aim to ensure and record progress on projects. The implementing agent at project level needs to record certain data and information including: • Site information • Payment information • Beneficiary / worker information This data enables proper project reporting. Sector departments are responsible for ensuring that the implementing agents are aware of the information requirements. Monthly reporting is also required and the implementing agent must provide this information to the sector department's project manager. The sector department will report their	The National Coordinator reports on: • Technical and substantive matters to the Central Programme Management Team and to the UNOPs portfolio manager on administrative and financial issues. The NC keeps the UNDP Country Office informed of progress in programme implementation	N/A	N/A

	National Land Care Programme: Small Community Grants	Expanded Public Work Programme	Global Environmental Facility: Small Grants Programme	Drylands Fund	Green Fund
		programme data to the National treasury on a monthly basis. Reporting of project information on a monthly basis by the sector department to the National Department of Public Works including performance and basic financial information. The monthly report from the sector department will be used as the basis to calculate the incentive amounts earned at the end of the quarter.			
Monitoring and evaluation, and audit requirements	The Department of Agriculture, Forestry and Fisheries may undertake periodic, ad hoc inspections of projects to ensure that programme objectives and financial accountability requirements are adequately met.	Programme auditing will be undertaken by the NDPW on an annual basis. The required information must be provided internal audit units of the sector departments. Programme evaluation will be undertaken by the EPWP programme unit to assess the impact and effectiveness of the programme.	Depending on the success of the project, additional funding can be applied for on a case by case basis. The National Coordinator should report on technical and substantive project and programme progress through the annual country programme report. Audits of SGP country programmes will be conducted in line with internationally accepted auditing standards, and applicable financial rules and regulations. Audits cover management; financial and administrative issues as they related to the country programme as a whole, and do not include requirements for project-level inspection.	Monitoring and evaluation framework is in terms of the overall national framework for monitoring and implementation of the United National Convention to Combat Desertification and the national Action Plan to Combat Desertification and Poverty. Impacts of the fund will be reviewed periodically by independent monitoring and evaluation teams. Fund is independently audited on an annual basis.	N/A
Continuing projects	Project managers will need to provide progress reports when applying for continued, additional funding. This should take into account resources to measure the impacts of the project relatives to its stated aims, benefits to the environment and possible social, economic and educational benefits to the community. As a guide, it is recommended that 2 to 4 per cent of the total budget for the project is allocated for monitoring and				

	National Land Care Programme: Small Community Grants	Expanded Public Work Programme	Global Environmental Facility: Small Grants Programme	Drylands Fund	Green Fund
	evaluation.				
Ineligible activities	Funding will not be provided for activities that are not aligned with national priorities and strategies, and will not duplicate funding from other sources (double dipping). Funding for treating symptoms inappropriate past management (eg. reclamation of degraded land or removal of invasive weeds and plants). Also, funding does not cover basic operating expenses, projects generating private benefits, and agricultural production which is not linked to sustainable agricultural and natural resource management.	N/A	N/A	N/A	N/A

REVIEW AND DISCUSSION

The above summary was undertaken primarily to help inform the governance structure and institutional arrangements for the SGF and specifically, to inform the identification of an Executing Entity for the SGF and to identify synergies between the different programmes. Below are some of the high level conclusions of the different programmes in relation to the SGF.

The National LandCare Programme: Small Community Grants component and the Global Environment Facility Small Grants Programme (SGP). Both these programmes are designed and targeted towards the provision of grants to non-governmental and community based organisations at grassroots level The Landcare programme focuses on natural resource management in the agriculture and land-use sectors whilst the GEF SGP channels funding towards key environmental focal areas including climate change and biodiversity. The LandCare programme represents a domestic initiative whilst the GEF SGP forms part of a global initiative of the United Nations. Furthermore, both these initiatives have developed quite comprehensive governance structures, institutional, monitoring and evaluation arrangements and reporting requirements and could offer useful lessons for the implementation of the SGF.

However, in contrast with these programmes, the SGF is designed to focus exclusively on climate change adaptation activities and should perhaps be viewed as a complementary initiative rather than as part of mainstreaming efforts to include adaptation related criteria into these existing programmes. In addition, important lessons can be learnt from the implementation of the SGF focused solely on adaptation that could also help to inform a medium to longer term strategy on microfinance for climate adaptation.

Expanded Public Works Programme. The EPWP programme is implemented as an incentive programme to promote natural resource management under the Environmental and Culture Sector component which includes the Working for Water Programme. Conceptually, the incentive is performance based and takes the form of a reimbursement to government line departments of a portion of the wage costs for jobs that are created per programme. The incentive is driven mainly by job creation as opposed to environmental criteria. This differs from the SGF which is an upfront grant allocation for projects focused mainly on adapting to the impacts of climate change and the design of the administrative structures and financial arrangements for the EPWP may be unsuitable for the SGF. Thus integrating the SGF into the EPWP programme may not be appropriate and could introduce further complexities into both systems.

Drylands Fund and Green Fund. The Department of Environmental Affairs is the responsible department for both these mechanisms. The Drylands fund seeks to scale up efforts to address environmental degradation, climate change and rural poverty in South Africa while the Green Fund provides financial support in the form of grants and / or loan financing for projects in three priority windows: Natural Resource Management, Green Cities and Windows and Low Carbon Economy. The scope of both these funds seems to have strong climate change adaptation elements;

however, they do not focus exclusively on adaptation and the extent to which micro-finance for community based organisations is prioritised is unclear. The SGF can therefore be viewed as complementary to these initiatives. One of the main features of these mechanisms that may be relevant for the SGF is the appointment of the Development Bank of South Africa as the implementing agency for both these mechanisms. However, consideration should be given to the on-going restructuring of the DBSA and possibly limited technical expertise and capacity of the institution to implement the SGF mechanism.

Overall, there is strong case to establish the SGF as a dedicated micro-finance facility for climate change adaptation initiatives and as complementary to the existing dedicated financing instruments discussed above. Taking cognisance of the existing mechanisms and the complexities of implementing the SGF as part of these programmes, there is a need to identify the executing entity of the SGF independent of these initiatives. The case for SANBI to be appointed as both the NIE and the executing entity therefore requires further consideration.

CONCLUSIONS

Based on the summary and comparison of the different instruments in Table 1, and having considered the proposed model for the SGF (set out in Figure 1), it is concluded that it would be of value to consider SANBI playing the role of EE, much like the UNDP acts as EE for the GEF SGF.
In this regard it is recommended that the NIE Steering Committee:

- Endorses a process whereby the NIE secretariat explores the feasibility and viability of SANBI acting as EE for the NIE SGF, including discussing this approach with the AF Secretariat.
- Agree to continue a strategic discussion on the sustainability of the SGF, and how it relates to other related financing instruments, over the SGF implementation period.

Such a process should examine the operating mechanisms of the above instruments, with a view to adopting appropriate best practice approaches, and compare the administration costs of utilising SANBI vs another agency for this function. Disbursement and procurement implications should also be considered.

Annex VII.2 Call for expression of interest and NIE SC TT recommendation

SANBI
Biodiversity for Life
National Implementing Entity of the Global ADAPTATION FUND

SOUTH AFRICAN
NATIONAL IMPLEMENTING ENTITY
OF THE GLOBAL ADAPTATION FUND

Call for Expressions of Interest:
Partner to lead the Climate Change Adaptation Small Grants Project

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The South African National Biodiversity Institute (SANBI) wishes to identify an EXECUTING ENTITY to partner with it and lead South Africa's Small Grant Facility pilot project for Climate Change Adaptation.

1. Introduction

SANBI is seeking the services of an appropriately qualified and experienced organisation to partner with it in the development and implementation of a Small Grants Facility (SGF) for Climate Change Adaptation. This project will provide valuable insights into direct access climate finance processes, with both local and international relevance. This is an exciting opportunity for an organisation that wishes to continue to establish itself as an innovator in Climate Change Adaptation financing.

The ideal organisation will already be working both nationally and internationally on climate adaptation finance issues, will have practical first-hand experience of small granting processes and will have a good track record in financial management, project monitoring and reporting. The ideal organisation will also be able to integrate this project into ongoing activities and, in so doing, will be able to cofinance some of the strategic elements of the work.

2. Background

The Adaptation Fund was established by the Parties to the Kyoto Protocol of the UNFCCC, as a mechanism to finance concrete adaptation projects and programmes in developing country parties. The fund is capitalised mainly from a percentage of proceeds of the Clean Development Mechanism (CDM). Projects that are designed to implement adaptation responses may be eligible to access project funds via Multilateral Implementing Entities (MIEs) and National Implementing Entities (NIEs). In South Africa, SANBI has been accredited to serve the role of National Implementing Entity (NIE), with the Department of Environmental Affairs (DEA) serving as the Designated Authority.

In late 2012, SANBI issued a call for Climate Change Adaptation concept proposals, and as part of this call, we mentioned that one of the projects might be a Small Grants Facility project, whereby vulnerable communities could directly access projects funds. Since this call, two project concepts were successfully submitted to the Adaptation Fund. Together with its partner institutions, the NIE is currently developing these into fully developed project proposals. These will need to be submitted to the Adaptation Fund for further consideration in June 2014.

One of these projects is for a Small Grants Facility (SGF) for Climate Change Adaptation. Entitled "Taking adaptation to the ground: a small grants facility for enabling local level responses to climate change in South Africa", this will be a SGF that builds resilience in vulnerable communities by supporting the development and implementation of projects that respond to local climate risks. The SGF project will pilot its approach in the Namakwa and Mopani Districts in Northern Cape and Limpopo Provinces respectively. It is envisaged that approximately 6 grants of $100 000 each will be supported in each of these focal Districts.

The SGF project will be led and managed by an Executing Entity that will be responsible for overall project execution, management and coordination. Two Facilitating Agencies will provide direct support to grant recipients in each of the two project focal Districts.

It is envisaged that, if successful, the SGF project could be scaled up to receive funds from sources other than the Adaptation Fund, and be broadened to other areas in South Africa. It is envisaged that, in addition to leading the project, the Executing Entity will partner with the NIE to support this process. This could include sharing lessons learned with the international climate change community, and developing policy positions and practical innovative suggestions that support the scaling up of this work. Ideally, the latter will be aligned with ongoing activities of the preferred Executing Entity, and the Executing Entity will be able to cofinance elements of this accordingly.

3. Objectives of assignment

The Executing Entity will partner with SANBI and the project's Facilitating Agencies to develop the full project proposal for submission to the Adaptation Fund in June 2014. Once the project is approved, the Executing Entity will lead the SGF project for South Africa. In this regard, the Executing Entity will be responsible for overall project delivery.

This will include:

- Receiving all project funds from the NIE and being responsible for all further contracting and disbursement of these funds in accordance with agreed procurement and disbursement procedures
- Managing stringent financial and reporting processes, responding fully to the frameworks and guidelines provided by Adaptation Fund Board requirements
- Developing excellent working relationships with the Facilitating Agencies
- In collaboration with the Facilitating Agencies:

    - Developing project proposal application and reporting forms
    - Establishing project review mechanisms at both national and local levels
    - Coordinating project review processes and compiling and presenting the necessary documentation to support these processes
- Designing and coordinating the learning component of the project, including ensuring that it is coherent and supportive of learning and capacity building processes within and between the project focal areas, and that learning is appropriately objective.
- Supporting processes to communicate and share insights from the project nationally and with the international community
- Providing leadership to activities to grow and sustain the SGF beyond the Adaptation Fund investment if this eventuates

4. Main requirements during the design phase

From April 2014, the Executing Entity will work with SANBI and the project's Facilitating Agencies to develop the full project proposal for submission to the Adaptation Fund in June 2014. This will include developing the detailed project concept, supporting project identification processes, and designing project review, reporting and learning mechanisms that will be applied once the project commences.

During this design phase, with the exception of pre-agreed hard costs, the Executing Entity will not be reimbursed for time spent on project preparation activities.

As indicated above, several activities will be undertaken in collaboration with the Facilitating Agencies and the Executing Entity will need to establish a careful balance so as to ensure overall project delivery, effectiveness and efficiencies while empowering local level responses and decision making.

5. Deliverables and timeframes

Processes to support detailed proposal development will commence immediately, with the full project proposal ready for submission at the end of June 2014. The period over which the service provider will act at project Executing Entity will be dependent on the Adaptation Fund approving the SGF project, and the contracting processes that will follow. At this stage, this is envisaged to be January 2015 – January 2019/2020 (depending on the final project design). As per all Adaptation Fund projects, the budget that is available for the core Executing Entity function is set at a cap of 9.5% of the total project value. The project value is currently just under $ 2 million, but this could be subject to change.

6. Skills and competencies required

In order to fulfill this role, the service provider will require the following skills and competencies:

- Good track record managing and reporting on large donor projects, at least in the order of magnitude of the SGF project ($2 million)
- Adequate internal financial management capabilities
- National footprint, and ability to play a meaningful role linking local level adaptation implementation experience with national, regional and international processes
- Good understanding of Climate Change Adaptation and development issues and an understanding of global climate finance issues
- Ability to align the programme of work with ongoing activities, and to cofinance the project accordingly
- Track record in grant management, including disbursement, monitoring and reporting
- Willingness to capture the insights and lessons of the NIE, and to share these nationally and internationally
- An interest in working with the NIE to grow the SGF from an Adaptation Fund project that focuses on two areas to a facility that can support local level adaptation across South Africa

7. Requirements for proposals and evaluation criteria

Service providers interested in this project should submit a concise proposal setting out their relevant competencies, and motivating why they would be ideally placed to partner with SANBI on this SGF project.

Evidence of excellent fiduciary competency and an understanding of the use of international fiduciary standards as adopted by the Adaptation Fund Board will be essential.

The proposal must include:

- Company profile
- Proposed approach and methodology
- Examples of relevant previous and ongoing work, with an explanation of how this relates to the required skills and competencies that are set out above
- An abbreviated CV for each project team member indicating their relevance to the project, skills profile and experience in carrying out a comparable assignment
- A description of current complementary activities in which the service provider is engaged and that could be aligned with and support the assignment, and that could leverage additional support for the project
- Track record in financial management of large project, and detailed description of the financial and procurement systems and procedures used by the implementer

Proposals will be evaluated by a sub-committee of the NIE Steering Committee as follows:

Criteria for measuring functionality	Weight
Qualifications, competencies and relevant experience of the service provider (skills profile of the organisation and project team, including relevant expertise and project management experience with small grant processes and in Climate Change Adaptation and climate finance both locally and internationally)	35
Current involvement in Climate Change Adaptation research, policy and/ or implementation, including ability to cofinance the programme of work and likely potential to leverage future benefits	30
Approach and methodology including innovation (how the project team will set up and manage the project, how it proposes to interface with stakeholders and beneficiaries, how learning will be captured and shared, and how project outputs will be used to leverage future benefits)	35
TOTAL	**100**

8. Relevant documents

A copy of the NIE Investment Framework and the approved SGF project concept is available on request from info.NIE@sanbi.org.za. It should be noted that this project concept is indicative, and that the detailed design process could entail adjusting and amending many aspects of it in consultation with the anticipated Executing Entity and other partners.

9. Contractual arrangements

A Memorandum of Understanding will be drawn up between SANBI and the service provider, setting out mutual commitments for the project development stage. Contractual arrangements that will apply should the full project be approved by the Adaptation Fund will not be the subject of this assignment, and will be agreed once the project is approved, in line with the requirements of the Adaptation Fund.

10. Submission of expressions of interest

Expressions of interest must be submitted no later than 11:00 on 3 April 2014.

For further information, please contact Gigi Laidler by email (g.laidler@sanbi.org.za) or by telephone (021 799 8766).