Project Work Plan Climate Resilient Development Pathways Amendment II

Version #:

Amendment II

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Contents

Contents2
Amendment II
OVI Table4
Amendment I6
Project Overview9
Project Background9
Stakeholder Engagement14
Theory of Change15
Climate Change Considerations17
Political Economy Considerations
Scope of Work
Project OVIs25
Project Timeline
Risk Rating
Project Contribution to CRIDF+ Logical Framework
Annex 1: Project plan31

Amendment II.

Reason for the Amendment

The reason for this amendment is to reflect changes to the Project OVIs in the original ToR. In amendment I the four OVIs were broken down into 10 payable deliverables.

Amended Sections

Scope of work

No changes applicable.

Project OVIs

The project OVI table for this Activity have been revised to reflect the above. This activity will now be invoiced based on individual deliverables outlined in the latest OVI table below. There are now nine deliverables from ten following the merging of the two deliverables. Amounts to be invoiced have now been allocated to each deliverable

<u>Staffing</u>

No changes applicable.

OVI Table

Date	Activity	Output	Indicator	Deliverables	Amount (£)
02/12/2016	Collaborative Development of CRDP approach	 A review of other similar approaches and best practice from around the world and current CRIDF tools Development of a draft CRDP approach for discussion with stakeholders 	OVI 1 Draft CRDP approach circulated to key stakeholders	D01: Literature Review Summary D02: Climate index workshop papers and final report D03: OKACOM Kick off meeting note D04: First Draft CRDP Approach, ready for stakeholder engagement	11 856.25 11 856.25 11 856.25 11 856.25 11 856.25
06/01/2017		 Engagement conducted with OKACOM, MSIOA team and other relevant stakeholders Finalisation of draft approach for testing 	OVI 2 Engagement with key stakeholders. Approach endorsed. Approach revised to take into account key stakeholder comments	D05: Final Draft CRDP Approach, suitable for use in the Pilot	47 425.00
17/02/2017	Pilot the approach	 Data collected CRDP assessment conducted Report with options for integrating climate resilience into MSIOA development pathways produced 	OVI 3 Report circulated to key stakeholders and endorsed	D06: Evidence base D07: Workshop design and delivery D08: Final CRDP Pilot Report	12 646.66 12 646.66 26 646.66
10/03/2017	Develop a full CRDP	A final CRDP approach and	OVI 4 A final CRDP approach and	D09: Final CRDP Guidance Report	18 970.00

		approach	guidance document produced and placed on the CRIDF website	guidance document circulated to key stakeholders as well as on CRIDF website	D09: Website article, evidence of dissemination	4 970.00			
F	Remaining 10% of budget to be paid upon approval of deliverables.								
٦	Total Project budget:								

Amendment I

The reason for this amendment is to reflect changes to the four Project OVIs in the original ToR which have now been broken down into an increased number of payable deliverables. In the original ToR payment terms were based on the OVIs which we have revised following a Project Management Meeting on the 9th of November 2016. This meeting resolved that OVIs which are made up of more than one deliverable be broken down into standalone deliverables which can be invoiced to avoid delays as OVIs cannot be invoiced if they include incomplete deliverables.

Project OVIs

The OVIs for this Activity have been revised to reflect the above. This activity will now be invoiced based on individual deliverables as opposed to OVIs with many deliverables as per the original ToR. Amounts to be invoiced have now been allocated to each deliverable.

Reason for the Amendment

The Project Management meeting on the 9th of November 2016 resolved that OVIs with more than one deliverable be broken down into standalone deliverables to be invoiced to DFID. This will minimise delays that are associated with OVIs as they cannot be invoiced if they are incomplete. The decision is meant to ensure that CRDIF will meet its forecast to DFID.

Amended Sections

Scope of work

No changes applicable.

Project OVIs

The Project OVIs for the Activity have been revised to reflect the required changes outlined above. Please see table below

<u>Staffing</u>

No changes applicable.

Date	Activity	Output	Indicator	Deliverables	Amount (£)
02/12/2016	Collaborative Development of CRDP approach	 A review of other similar approaches and best practice from around the world and current CRIDF tools Development of a draft CRDP approach for discussion with stakeholders 	OVI 1 Draft CRDP approach circulated to key stakeholders	D01: Literature Review Summary D02: Climate index workshop papers and final report D03: OKACOM Kick off meeting note D04: First Draft CRDP Approach, ready for stakeholder engagement	11 856.25 11 856.25 11 856.25 11 856.25 11 856.25
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17/02/2017	Pilot the approach	 Data collected CRDP assessment conducted Report with options for integrating 	OVI 3 Report circulated to key stakeholders and endorsed	D06: Evidence base D07: Workshop design and delivery	12 646.66 12 646.66
10/03/2017	Develop a full CRDP	climate resilience into MSIOA development pathways produced • A final CRDP approach and	OVI 4 A final CRDP approach and	D08: Pilot Report D09: Final CRDP Guidance	12 646.66 18 970.00

	approach	guidance document produced and placed on the CRIDF website	guidance document circulated to key stakeholders as well as on CRIDF website	D10: Website article, evidence of dissemination	18 970.00			
Remaining	10% of budget to be pa	aid upon approval of deliverables.			£18 970.00			
Total Project budget:								

Project Overview

Project Background

Climate change is expected to have an effect on the availability and predictability of water resources, especially in the arid and semi-arid zones of SADC. These arid and semi-arid areas have always had dramatic variations in both seasonal and inter-annual rainfall, with associated effects on runoff and rivers. Climate scenarios predict increased variability, increased temperatures and more intense periods of both droughts and floods. Increasing variability under climate change is likely to make investment in productive water infrastructure even less attractive in the future. The consideration of nexus-style trade-offs are therefore likely to be among different basins (inter-basin and inter-region) rather than within a single basin. The dynamic and ever expanding need for water infrastructure in the SADC region means there is a need to take account of future climate scenarios and consider how climate resilience can become a contributing factor in the planning, conceptualisation, implementation, operations and maintenance of sustainable water infrastructure. How climate change will impact on nexus style trade-offs including natural capital, food, energy and water supply should also be a critical consideration.

In some cases, where water infrastructure is being planned in relatively undeveloped transboundary river basins, there is a unique opportunity to start off with a systematic climate resilience appraisal to help countries and their River Basin Organisations analyse and select - against pre-established climate resilience and other developmental criteria - multiple investment options. The Okavango basin is one such case. Clearly, where basins have developed hydraulic infrastructure and are already either partially or fully developed, the opportunity to 'start with a blank sheet' has passed. Nonetheless, it would still be appropriate to conduct a climate resilience assessment, though the focus will be on exploring options to re-purpose existing infrastructure, on operating the infrastructure in different ways in order to respond to the impacts of climate change/variability and/or on opportunities to re-allocate water from current uses to uses that offer more climate-resilient development futures.

In a number of specific cases, countries and river basins in the Southern Africa region are entering the 'options analysis' phase for developing the economies of river basis and in turn their investment planning for water infrastructure, so there is opportunity for CRIDF to support the development of future options for climate resilient development. In addition, this stage of the planning process presents an opportunity to enhance these investment plans by considering appropriate policies and institutional arrangements that will support adaptive infrastructure planning and promote capacity to both plan for and react to climate change.

The Okavango river basin represents a useful case in which to apply this approach as it is currently undergoing a transboundary planning process led by the World Bank known as MSIOA (Multi Sector Investment Opportunity Analysis) which the CRDP process can use and add value to. The Okavango basin, and the Permanent Okavango River Basin Water Commission, (OKACOM) will be the focus of this initiative as the case study to test the emerging guidance on CRDP. The Commission acts as the technical adviser to the governments of the Okavango basin to assist in their management of the basin. The work will respond to the need for OKACOM to ensure that climate change is factored into the decisions on potential development options at the same time as other (conventional) decision criteria are being applied. CRIDF will use the Okavango experience to pilot the Climate Resilient Development Pathways (CRDP) approach.

CRIDF will also use the initiative to develop approaches that are appropriate for other SADC transboundary basins, exploring options for both implementing new as well as re-purposing and/or changing the operation of existing hydraulic infrastructure, and also for re-allocation of water to different economic uses. CRIDF also plans to consider the climate resilience implications related to inter-basin interactions, including (but not limited to) physical inter-basin water transfer infrastructure schemes in SADC will also be considered.

The Climate Resilient Development Pathways (CRDP) concept

Climate resilient development aims to proactively link "*resilience to climate change (the adaptation side of climate change policy) and economic and social development*"¹ This is achieved by considering development options against a set of climate resilience criteria at the point where development scenarios are being selected by infrastructure decision makers at national and basin scales. The CRDP process is expected to be both a deliberative and an inclusive process which would make good use of both **quantitative** and **qualitative** methods to prepare an evidence base for the CRDP process. This evidence base would help to inform key stakeholder participation as well as to help the assessment options themselves through key stakeholder participation.

This process of identifying climate resilient development pathways is expected to inform National and Basin-wide decision-making processes, and aims to result in the consideration of climate resilience (amongst other, traditional criteria such as economic, social, hydrological, environmental etc.) in the selection of development options. At best, development options will be proactively selected on the basis of climate resilient futures. At worst, development options will be selected against scenarios that are most vulnerable to climate variability and change.

CRIDF's relevant current work

CRIDF currently has a number of instruments that allow for:

¹ IIED briefing: Low-carbon resilient development in the Least Developed Countries, 2013; available at http://pubs.iied.org/pdfs/17177IIED.pdf

- the mapping of climate vulnerability,
- assessment of climate risk and
- supporting decision making for infrastructure.

These tools are appropriate for application to various forms of water infrastructure where the decisions on the nature, the location and the use of the infrastructure has either been decided (through existing priority lists, National or Regional processes) or the infrastructure has already been installed.

However the CRIDF tools do not currently cover the potential to support planning decisions at the regional, national or subnational stage, <u>before</u> development commences, to determine the optimum mix and typology of wider development and its supporting water infrastructure that leads to enhanced future climate resilience.

What is required is an approach to assist countries or river basin organisations to make decisions that take into account climate change and support their ability to plan the development of water infrastructure that will allow them to manage the trade-offs between multiple, water dependent sectors. Figure 1 below describes the current approaches that CRIDF has developed and demonstrates how the CRDP approach would be used within the plan and project preparation cycle.



Figure 1: CRIDF project preparation cycle

Demand identified

CRIDF was requested by the OKACOM Secretariat to support OKACOM and its Member States in advancing the options analysis phase of their 'equitable and sustainable climate resilient investment programme'. The main activity related to this phase is the Multi Sector Investment Options Analysis (MSIOA) process. The MSIOA is a World Bank managed project, which is being delivered in collaboration with OKACOM. The MSIOA process seeks to provide decision makers with a range of hydro-economic, environmental and climate analytics to use as tools to assist in evidence-based water infrastructure decision making. CRIDF has been tasked with providing an assessment approach or a process that can help to develop the "climate resilience" analytics and support decision-making.

Aside from in the Okavango Basin, there are also other river basins where such an approach to understand potential climate resilient development pathways could be applied. Two other SADC river basins where there is significant transboundary water infrastructure development potential are the Ruvuma and Zambezi. The Ruvuma has no hydraulic infrastructure at all. The Zambezi has two large water impoundments, primarily operated for hydropower, and a number of other hydropower infrastructure investments in place; but the allocation of water to productive uses is only a fraction of the total potential. However, neither of these two basins are currently being subject to either a national or transboundary planning process such as MSIOA. Furthermore, as mentioned above the CRDP approach that CRIDF envisages will also be flexible enough to be applied in other river basins in the SADC region where water infrastructure planning is at more advanced stages. Pungwe, Buzi, Save, Cuvelai and Cunene are examples of basins which are partially developed and allocated, and Orange-Senqu, Limpopo, Inkomati, Mbuluzi and Maputo are examples of basins that are close to being closed or are effectively closed.

Many established RBOs already have ownership, buy-in and legitimacy as platforms for an emerging transboundary discourse on a number of key climate and equity-related issues. Some of the more established RBOs like OKACOM are increasingly being tasked by their Member States to expand their mandates to include more aspects of regional integration such as planning and investment in infrastructure. CRIDF is able to link the dynamics of OKACOM as an evolving transboundary delivery platform to the promotion of pro-poor, climate resilient transboundary water infrastructure for improved regional co-operation i.e. the CRIDF mandate. This includes the opportunity to enrich and inform the discourse on climate resilient development pathways as the Okavango Basin considers its development scenarios.

Overview of the CRDP approach

This assignment aims to develop an approach to climate resilient development pathways to help river basin organisations and SADC member states, both at a national and regional level, to make informed decisions on water infrastructure development and investment planning.

As a result of the identified need and demand for this work, CRIDF will work initially with OKACOM, its Member States and cooperating partners in a participative way, to develop and apply the concept of

CRDP. It is expected that this will support the identification of potential climate resilient scenarios from the options currently proposed as part of the MSIOA process. However, the approach should also be adaptable and able to be applied in other river basins. In addition, this approach will aim to add value to CRIDF's suite of existing climate instruments, such as the vulnerability mapping, vulnerability assessment and Climate Change Risk Assessment (CCRA) tools.

The early stage intervention through a CRDP process and set of associated methodologies would increase the scope for transformational change in the way that water infrastructure is conceived, planned, assessed and packaged. Integrating important sustainability considerations such as climate resilience, the provision of natural capital and associated ecosystem services earlier in the planning process increases the scope and flexibility for a more fundamental discussion on tradeoffs and their reconciliation. CRDP informed analysis would provide evidence for more far reaching and transformative decisions regarding the provision of water infrastructure and role of sustainability and equitable sharing of resources for regional economic growth.

Objective of this work

The overall objective of the assignment is to improve the climate resilience of river basins within SADC. The specific objective is to support the building of climate resilience in the Okavango river basin through the development of a CRDP process and set of methods fit for the region which will be tested on the Okavango river basin. This will be done through better planning of water sector and non-water sector infrastructure. In particular, transboundary water infrastructure planning, construction and operation will be considered in the basin that could ultimately inform river basin planning and management in the whole of the SADC region. The approach is intended to assist key decision makers, both nationally and regionally, to identify options for climate resilient development pathways at a river basin level. This will be at all stages of development, with a particular focus on the early stage in the planning process with OKACOM.

The project will aim to:

- Produce an approach that helps to describe 'climate resilient development pathways' (and the converse less climate-vulnerable development pathways)
- Make the approach available to OKACOM decision makers to enable the application of the analysis to the scenarios developed under the OKACOM visioning and 'options analysis' phase (specifically including the MSIOA process)
- Provide technical assistance to key decision-makers to utilise the approach in OKACOM Member States to analyse and optimise decisions on investments that lead to climate resilient development pathways, initially in their 'options analysis' phase

• Develop a generic approach that can adopted by other interested parties in the region and elsewhere. If appropriate, support them to use the approach in developing their own water infrastructure plans, through an additional phase of the project.

Stakeholder Engagement

The demand for the creation of an approach to assist with decision-making and option prioritisation has come out of the CRIDF/OKACOM partnership and the relationship that both CRIDF and OKACOM have with the World Bank in the region. The CRDP is one of a suite of diagnostic approaches that will provide Member States with a range of metrics that will assist them in assessing competing Basin-level development scenarios. The others include the hydro-economic diagnostic (provided under the CRIDF-supported MSIOA process that is being delivered under DFID/CIWA funding by the World Bank and their consultants) and the analysis and distribution of benefits (provided under the CRIDF-supported and funded activity to assess the benefits of past, current and future co-operation in the Member States portion of the Basin). The demand has been articulated over a number of months in several events and activities that OKACOM, the Member States, the World Bank and CRIDF have participated in.

Other stakeholders that have been identified as needing to take a lead in integrating climate resilience factors to reduce vulnerability against uncertain climate futures are SADC Water (part of the SADC Infrastructure Division) and other SADC RBOs as mentioned above. The inter-basin discourse, including food, water and energy trade-offs, will be important as a SADC priority going forward, and this process should be used to plant some ideas in relation to this discourse.

As indicated above, CRIDF will also seek opportunities to influence the approach in other transboundary water courses, through appropriate SADC and other bodies; this could include stakeholders in the Ruvuma and Zambezi basins and key Member State decision makers in these river basins including RBOS, Finance and Planning ministries, and other key water-consuming sector decision makers.

Through its work with the World Bank and other IFIs, CRIDF will also seek to engage with and influence the way these organisations conceptualise and deliver early-stage development trajectories and pipeline development for water infrastructure planning and financing.

The findings should be disseminated by appropriate regional bodies at key regional conferences and meetings such as the WRTC, WSRG and RBO conferences. CRIDF will also work with partners such as the World Bank and DFID to seek opportunities to disseminate the approach more widely.

Theory of Change

A diagrammatic project-level ToC needs to be developed stating Activities, Outputs, Project Outcomes and CRIDF Outcomes.



SP15-002 Work Plan AMENDMENT II

Assumptions

- The political and economic stability of the Member States allows the project activities to proceed as planned from start to finish on this initiative.
- The commitment of Member States to deliver their stated development and growth programmes is not eroded by current or future global or local economic conditions (such as, but not limited to commodity price variations, macro-economic growth etc.)
- The evolving relationship between SADC and its Member States, the RBO and their Member States allows for decisions on development scenarios to be i) considered at the sub-regional (basin) level platform and ii) delivered through the RBO and its Member States.

Climate Change Considerations

Climate change is recognised as one of the major threats to ecological and social wellbeing in the Cubano-Okavango River Basin (CORB)². As discussed above, climate change is expected to lead to greater climate variability and more intense floods and droughts.

Improved climate resilience for vulnerable SADC citizens is an urgent priority for SADC River Basin Organisation (RBO) and SADC Member States. Across the SADC region there are expected to be spatial and temporal shifts in water resources as a result of climate change. These changes will not occur just within national boundaries, or within whole river basins, but across all SADC, and will affect total water demand and availability. As a result, measures to plan and manage water more effectively (through policy and infrastructure) may need to be considered at the basin and inter-basin rather than only at national level.

Building resilience across transboundary river basins is complicated; at the moment, no comprehensive basin-level strategy currently exists to guide climate adaptation activities or programmes. Countries' ability to adapt is hindered by a number of factors such as inadequate financing, lack of infrastructure, poor capacity in relevant institutions, limited information sharing and weak enforcement of laws and regulations.³

It is expected that the approach developed during this project will help RBOs and member states to assess future development options, investments and project pipelines and determine development scenarios which will help to improve the climate resilience.

² Cubano-Okavango River Basin Climate Change Vulnerability Assessment, 2014, USAID
³ Ibid

Political Economy Considerations

Regional integration

Regional economic integration is a key Pan-African objective, and SADC plays an important leadership role as southern Africa's Regional Economic Community. The goal of regional economic integration drives the regional infrastructure agenda, underpinned by commitment from Member States to their sub-regional bodies (including RBO's) and SADC. CRIDF derives its mandate from the needs that are articulated through the regional integration agenda as expressed by SADC.

The delivery of benefits to SADC citizens, based on regional economic integration and subsequent growth, has been below the expectations of all levels of organisation, including that of Member States. The failure to translate Member States 'collective political will' for regional integration and growth into practical outcomes has focussed a bright spotlight on SADC. This has in turn led to a re-examination of the roles and responsibilities that Member States have bestowed on SADC and its sub-regional bodies. This re-examination of the roles and responsibilities is underway, between Member States, their RBOs and SADC.

OKACOM and other RBOs are therefore being challenged to deliver from below (by their Member States) and from above (by SADC). The shape of the final settlement is at this stage unclear, but change is inevitable. SADC and its' Member States need to decide on institutional arrangements for the transition from planning to implementation, including the optimum configuration for the regional roles of policy-maker, regulator, implementer and adviser.

Member States have direct interests in empowering sub-regional bodies (who plan and deliver infrastructure) and appear to be inclined to delegate a more 'delivery-oriented' mandate to RBOs. They also appear to be signalling that their SADC membership is important, but more oriented to Pan-African solidarity, co-operation and political capital than to delivery.

CRIDF therefore needs to be i) aware of the evolving dynamics related to changing mandates and ii) to be sensitive to the incentives that arise from resource deployment into Member States, OKACOM and OKASEC to ensure that unintended consequences are minimised.

Enabling Environment

While there is a strong political mandate for this initiative at the regional level, the translation from political intent to action is not always optimal. The enabling environment – various SADC Protocols, through subsequent Policies and Strategies, often supplemented by guidelines – is considered to be more than adequate. For the record, the following instruments are recorded:

 Environment is a key area for regional integration under the 1992 SADC Treaty and climate change is covered under Article 12 of the 2014 Environmental and Sustainable Development Protocol which requires member states to align national legislature and systems to the protocol.

- The 2013 SADC Climate Change Program sets the priorities and generic approaches for climate change response actions within the SADC region and include a SADC Technical Cross Sectorial Working Group.
- There is a 2012 SADC Climate Change Policy and a SADC Climate Change Response Strategy developed in 2014 along with various Vulnerability Assessments that provide a mandate for planning and investment in activities that promote resilience.

In the OKACOM countries climate change remains a priority, although the level of preparedness is mixed. Namibia has a National Policy on Climate Change; Botswana is in the process of developing national policies and strategies; whilst Angola has not yet started a comprehensive strategic process, but has been mainstreaming climate change into its broader national planning. The three OKACOM countries have all developed Intended Nationally Determined Contributions (INDCs), all of which place a priority on managing water in their respective countries.

The CRDP process should also look to develop a resiliency baseline and a clear rationale of how proposed plans, policies and strategies will increase future resilience so as to provide evidence for future climate finance applications by countries and/or regions.

Scope of Work

This project will be divided into four work-streams as follows:

- 1. Project preparation and alignment activities
- 2. Collaborative development of a generic CRDP approach
- 3. Piloting of the approach in the Cubango/Okavango River Basin
- 4. Refinement and assessment of future approaches

The scope of work is described in further detail below and contains the detailed tasks for each of the work streams.

Project preparation and alignment activities

The team will review the current literature on the topic to understand other approaches which CRIDF could learn from and understand the niche for this approach.

A number of specific tasks will be carried out in order to prepare the work, with constant stakeholder engagement throughout the process:

- 1. Initial literature review and network scan to review any other similar approaches;
- 2. Refinement of methodological approach based on feedback and initial review.

Task 1: Collaborative Development of CRDP approach

It is intended that the CRDP is developed in collaboration with OKACOM in order to ensure that the approach is fit for purpose and meets the needs of the secretariat. Following the preliminary stakeholder engagement and the refinement of the project methodology, the CRIDF team will work with the OKACOM secretariat to refine and agree the CRDP approach.

This phase of the work will focus on developing an approach which can be used by OKACOM in the first instance, but also applied to other river basins, should the opportunity arise to do so.

Task 1.1 Review of existing approaches and CRIDF tools

A number of tools and approaches have been produced, including in other sectors to assess climate resilient and green growth pathways, but, none have been developed that focus on the development of climate resilient infrastructure in a transboundary river basin. Despite this, important lessons can be learnt from existing approaches. The team will carry out a brief literature review to assess and glean lessons from other existing approaches.

RIDF has also developed a number of tools and approaches, such as the CCRA and climate vulnerability assessment, that could be adapted to the national and regional level. The team will review the tools to understand how they could best be utilised in the assignment as part of an integrated and holistic approach to decision-making.

Task 1.2 Development of the CRDP approach

This task will involve the development of the CRDP approach, in close collaboration with the OKACOM secretariat.

It is intended that the CRDP takes the form of an easy to use step-by-step guide with which RBOs or other water institutions can adapt and use for their own purposes. At each step in the approach different methodologies and tools will be used to:

- Develop an evidence base and understand the resilience challenges/baseline in a river basin
- Progressively analyse and assess the various development pathways available to the river basin.
- Help to better understand various options for climate resilient development, and
- Assist in the decision making process.

The steps in the approach will be defined during the project. However, it is envisaged that the approach could include the following steps:

- Integration: linking the CRDP process to a proposed policy/planning strategy process in a transboundary basin. Either a national process with transboundary implications or a genuinely transboundary process
- Visioning: setting what climate resilient development means for the basin. In the case of OKACOM this will have already been done through the Visioning work that CRIDF was previously involved in.
- **Criteria and indicators:** develop a set of assessment criteria and indicators based on the vision for climate resilience in that basin that can be used to assess the development pathway options. This will include economic, social, environmental, policy and institutional indicators.
- Baseline: Setting the current development pathways and baseline/evidence base for current climate resilience including assessing the historic and future climate change and vulnerability (including projections for water allocations and water availability). This will include assessing current levels of climate resilience against the indicators including carrying adaptive capacity analysis. In the case of OKACOM current development pathways will be defined by the MSIOA process. This may involve the use of Self organising maps to develop a series of climate scenarios to help manage the inherent uncertainty associated with projections.
- Opportunity analysis: using the defined development scenarios identify risks and potential opportunities/mitigation. This could involve an assessment of both projects and policies and may include a macro and sectoral level analysis use the criteria and indicators previously defined. This should be done in a workshop setting with stakeholders to understand their perceptions of risks and opportunities. DFID will also be invited to this workshop with Stakeholders.
- **Prioritisation:** assess the feasibility of priority project and policy opportunities. This may include a wide ranging analysis of the impacts of different scenarios evaluating economic growth, social development and ecosystem service / natural capital.
- **Options for climate development pathways:** use the results of the feasibility assessment to set out the options for climate development pathways.

During the project these steps will be further defined based on the needs of OKACOM and the specific profile of the river basin.

The output of this workstream will be a draft CRDP approach, defined in a guidance document and will be specific to the needs of OKACOM, but which can also be refined for other river basins should demand be identified. This approach will then be piloted using the scenarios defined in the MSIOA process.

Task 1 Output: Draft CRDP approach and guidance document

Task 1: Collaborative Development of CRDP approach activities					
Task 1.1 Review of existing approaches and CRIDF tools					
a. Literature review of existing approaches relevant to CRDP					
b. Review of CRIDF tools to assess flexibility to be included in CRDP					
Decision Point					
Task 1.2 Development of the CRDP approach					
a. Define the approach and tools to be utilised in the CRDP					
b. Draft the approach and accompanying guidance document					
Task 1 Output: Draft CRDP approach and guidance document					

Task 2: Pilot the approach

In this workstream we will pilot the approach with OKACOM to ensure that the approach is fit for purpose. The CRIDF team will work with the OKACOM secretariat and the MSIOA team to assess the potential opportunities to define climate resilient pathways from the current development options emerging from the MSIOA process.

Task 2.1: Define scenarios and collect data

The first step of this process will be to collect the relevant data needed to define the baseline scenarios and screen the development pathways for climate resilient opportunities. The development pathways will have already been defined during the MSIOA process which is expected to reach a conclusion in November. Should the scenarios not be fully defined at the time of development, then we will use the draft scenarios and data already defined by the World Bank team, so as not to delay the process.

Task 2.2: Conduct CRDP assessment pilot

Using the steps defined in the CRDP approach above, an assessment of the MSIOA development pathways will then be undertaken. This will be conducted in a workshop setting with the OKACOM secretariat.

Work will be conducted before and after the workshop to facilitate the workshop discussions. Depending on the approach defined in the above task, this may include preparing a baseline, assessment of the risks and opportunities for climate resilience in each of the scenarios, assessing the feasibility of various options and developing climate resilient development options within the MSIOA.

Task 2.3: Develop a report detailing inputs into the OKACOM decision making process

From the above assessment a short report will be produced outlining the options for climate resilient development in the Okavango basin.

Task 2 Output: OKACOM climate resilient development pathway options which have been assessed by stakeholders, with the wider risks, costs and benefits highlighted

Task 2: Pilot the approach activities
Task 2.1: Define scenarios and collect data
a. Identify and define the MSIOA scenarios
b. Collect the relevant data from MSIOA process to be utilised for the CRDP
Task 2.2: Conduct CRDP assessment pilot
a. Initial assessment of the MSIOA development scenarios
b. Prepare results to be presented in OKACOM workshop
c. Conduct workshop with OKACOM
d. Finalise CRDP assessment to determine potential climate resilient options in the MSIOA
Task 2.3: Develop a report or inputs into the MSIOA OKACOM decision making process
a. Draft a short report will be produced outlining the options for climate resilient development in the MSIOA OKACOM development pathways.
b. Share report with OKACOM for review and comments
c. Refine and finalise report

c. Refine and finalise report

Task 2 Output: OKACOM climate resilient development pathway options highlighted. Options have assessed by stakeholders and the wider risks, costs and benefits are included

Task 3: Develop a full CRDP approach

In this task the CRIDF team will use the findings of Task 2 to refine the CRDP approach and develop a guidance document to be used as appropriate in SADC institutions.

Task 3.1: Develop a guidance document on the CRDP approach

In this step, the CRIDF team will use the feedback from the OKACOM and the piloting process to refine the approach. This will involve taking lessons learnt from the pilot and consultations and ongoing engagement with OKACOM to update the tool.

The CRIDF team will then develop a guidance document which can be used by SADC Institutions and other interested parties. The guidance document will outline the approach, as well as make further

suggestions for the development and use of the CRDP including how it can be adapted to other contexts, such as basins which are already highly developed.

The guidance document will be placed on the CRIDF website. During CRIDF 2, the CRIDF team will also seek opportunities with SADC bodies to utilise the approach with others in the region that are currently developing long term development pathways, both nationally and regionally.

Task 3 Output: A final CRDP approach and guidance document

Task 3: Develop a full CRDP approach activities
Task 3.1: Develop a guidance document on the CRDP approach
a. Refine the CRDP approach and guidance document
b. Share report with OKACOM for review and comments
c. Finalise approach and guidance document
Task 3 Output: A final CRDP approach and guidance document

Project OVIs

Date	Activity	Output	Indicator	% of Total	Amount (£)
02/12/2016	Collaborative Development of CRDP approach	 A review of other similar approaches and best practice from around the world and current CRIDF tools Development of a draft CRDP approach for discussion with stakeholders 	OVI 1 Draft CRDP approach circulated to key stakeholders	25	47,425
06/01/2017		 Engagement conducted with OKACOM, MSIOA team and other relevant stakeholders Finalisation of draft approach for testing 	OVI 2 Engagement with key stakeholders. Approach endorsed. Approach revised to take into account key stakeholder comments	25	47,425
17/02/2017	Pilot the approach	 Data collected CRDP assessment conducted Report with options for integrating climate resilience into MSIOA development pathways produced 	OVI 3 Report circulated to key stakeholders and endorsed	20	37,940
10/03/2017	Develop a full CRDP approach	A final CRDP approach and guidance document produced and placed on the CRIDF website	OVI 4 A final CRDP approach and guidance document circulated to key stakeholders as well as on CRIDF website	20	37,940

Remaining 10% of budget (£18,970) to be paid upon approval of deliverables. Total Project budget: £189,700

Project Timeline

The project is expected to start in mid-September and last 25 weeks, including a 2-week break over the Christmas holiday. The Project plan is shown in Annex 1 and provides the proposed dates assuming the risks below aren't realised and the assumptions are met. The timelines may shift depending on the progress in the development of the MSIOA development pathways and the availability of the OKACOM secretariat.

Risk Rating

Gross Risk			Net Risk		
Risk Before Mitigation	Impact	Likelihood	Proposed Mitigation (if any)	Impact	Likelihood
The CRIDF team are not able to access the MSIOA technical information (economic, environment and social)	3	1	CRIDF are already in contact with the MSIOA team and have been provided access to initial outputs of the MSIOA work. The MSIOA team have already committed to provide data to facilitate the CRDP.	1	1
Delay in finalising the results of the MSIOA process	4	3	The MSIOA process has already carried out analysis and has some initial results that can be used to pilot the CRDP. Should the final results not be available the draft results will be used to pilot the approach.	1	2
The CRDP approach or the results of the CRDP study are not endorsed by OKACOM or OKACOM member states	3	2	The development of the CRDP and the use of the approach will be carried out in close collaboration with OKACOM. Results of both processes will be shared with them to ensure their buy in.	2	1
Assumption (outside of CRIDF's control)			·		
The MSIOA options are not fully endorsed by OKACOM members	by Should the results of the MSIOA not be confirmed, then the initial results mentioned above will be used to pilot the approach. The CRDP should then be available to be used by OKACOM in the future, once the final results have been confirmed.				

Gross Risk			Net Risk		
Risk Before Mitigation	Impact	Likelihood	Proposed Mitigation (if any)	Impact	Likelihood
The OKACOM secretariat is not receptive to further participative events	3	2	CRIDF will manage the process and ensure it is aligned with other ongoing OKACOM engagement to limit the number of events taking place with OKACOM involvement	1	2
The approach is not endorsed or supportive to other RBOs objectives and SADC	2	2	During the preparation activities and the development of the approach other RBOs and the SADC Secretariat will identified and engaged to understand the appetite and needs from such an approach.	1	2
The management of timelines difficult to achieve due to end of CRIDF			Tasks and meetings will be carefully managed and planned as effectively as possible. Break points upon submission of each OVI will be included during the project with which to make decisions about whether or not to continue the project.	2	1
Duplication of the CRDP with other existing approaches	2	1	During the initial preparation for the project and the first task a literature review will be carried out to identify other similar approaches. The team will build on these, but avoid duplicating.	1	1

Project Contribution to CRIDF+ Logical Framework

Indicator ID and Summary	Direct or indirect	Explanation	Weighting				
Output 3: Stakeholders engaged and supported around inclusive water infrastructure development processes							
Indicator 3.2							
Quality and demand for CRIDF support to appropriate existing (or new) institutions in SADC i) numbers supported by CRIDF ii) % where innovative new thinking is introduced by CRIDF and iii) level of client satisfaction with the quality of support delivered (1-10)	Direct	The development of the CRDP and the application with OKACOM will directly support an existing RBO and introduce new innovative thinking that will support their future decision making and encourage the integration of climate resilience into future planning processes.	50%				
Output 4: Transformational, and ea out and stakeholders are engaged	rly stage infra	structure projects are identified, suppo	ort is scoped				
Indicator 4.1							
No of knowledge products produced and disseminated to relevant stakeholders.	Direct	The project will result in the development of a guidance document which will be available to other RBOs and national water institutions to be applied in their decision making when planning infrastructure development.	50%				

Annex 1: Project plan

Key Milestones		and the second of the second sec																								
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	the Sear	week.																					o e ex			
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activity.	26 Sentember 2016	03 October 2016 1	10 October 2016	17 October 2016	24 October 2016	31 October 2016	07 November 2016	3 14 November 2016	21 November 2016	28 November 2016	05 December 2016	12 December 2016	19 December 2016	26 December 2016	1 02.1anuary 2017	09. Januari 2017	16 January 2017	23 January 2017	30 January 2017	06 February 2017	13 February 2017	20 February 2017	27 February 2017	08 Match 2017	13 March 2017	
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roject preparation and alignment activities	1998								10	70	4			10		10		6 <u>.</u>	(2)	6		<u>.</u>			4	
roject preparation and alignment activities																					-					
. Preliminary stakeholder consultation to develop specific timelines and activities;					<i>y</i>	-	1		-	1				1				-	1				1		1	
ask 1: Collaborative Development of CRDP approach																		0							-	
ask 1.1 Review of existing approaches and CRIDF tools	10 IS					2	8	10	2		ŭ.	0 V		1		10		5		1		1				
. Literature review of existing approaches relevant to CRDP																								'		
. Review of CRIDF tools to assess flexibility to be included in CRDP	1	(8	<i>U</i>	2	2	0			2		4			2				1	/	4	
Decision Point					0	-		10	-						-	-		-	x							
ask 1.2 Development of the CRDP approach																										
Define the approach and tools to be utilised in the CRDP	2	1			l.					2						2. 2.	Ś.	8	2.				2	/	2	
Draft the approach and accompanying guidance document																			-					'		
ask 1 Output : Draft CRDP approach and guidance document			2		2						<			3	-								-			
ask 2: Pilot the tool																										
sk 2.1: Define scenarios and collect data	-N 6						8	10		-	2			2		10	2	6	2	1			1			
Identify and define the MSIOA scenarios																								′		
Collect the relevant data from MSIOA process to be utilised for the CRDP					2	-	-		5			8 4		2	-	8	-	2	2				2		2	
ask 2.2: Conduct CRDP assessment pilot																-										
Initial assessment of the MSIOA development scenarios Prepare results to be presented in OKACOMworkshop	- D - C - C - C - C - C - C - C - C - C				2	-	6	4		2				1		1 m							2		-	
Conductworkshop with OKACOM	-				1	-					2				-	ě.									6	
Finalise CRDP assessment to determine potential climate resilient options in the MSIC	14				20	-	P							E												
		e.	-		-			2		-				5		2		-							2	
ask 2.3: Develop a report or inputs into the MSIOA OKACOM decision making							-									-							-			
. Draft a short report will be produced outlining the options for climate resilient																										
evelopment in the MSIOA OKACOM development pathways. Share report with OKACOM for review and comments								6		-	1.			2		6			2						6	
Share report with UKACUM for review and comments Refine and finalise report					2		<u></u>	8.		2		6		-		-		-	1			(-	
	-					+				-				2					1						1	
ask 2 output: OKACOM climate resilient development pathway options which hav	-																						17	<u></u>		
sessed by stakeholder and the wider risks costs and benefits highlighted ask 3: Develop a full CRDP approach	6					-				-				-		0									1	
ask 3: Develop a duidance document on the CRDP approach								6.			0	e				0										
ask 3.1: Develop a guidance document on the CRUP approach Refine the CRDP approach and guidance document		-			1	-		10		-	6 7				-	10									-	
. Kerine the CRDP approach and guidance document . Share report with OKACOM for review and comments	2 2				6	-		54.		2	0	6 A		8		2									2	
Finalise approach and guidance document						1	<u>0</u>	1	2							-	1						-		6	
I make approach and guidance document or k 2 O tout : Afters CRDR processes and quidance document					6						5			2	1				8			1				
Task 3 Output : Afinal CRDP approach and guidance document		6				1	2	2	8																	