**UNDP-GEF Midterm Review**

**Strengthening climate information and early warning systems in Eastern and Southern Africa for climate resilient development and adaptation to climate change – Zambia (PIMS 5091)**

**Mid-Term Review Report – FINAL REPORT**

**Presented by:** Dr. Tamar Ron, the MTR International Consultant

**First draft presented:** 22 March 2016

**Final Report presented:** 23 May 2016

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| --- |
| **Basic Project Information**  **Project Title:** Strengthening climate information and early warning systems in Eastern and Southern Africa for climate resilient development and adaptation to climate change – Zambia  **Country:** Zambia  **Management Arrangement:** NIM (National Implementation) |
| **Executing Entity/Implementing Partner:** Ministry of Transport and Communication (Zambia Meteorological Department) |
| **Implementing Entity/Responsible Partners:** Disaster Management and Mitigation Unit (DMMU), Department of Water Affairs (DWA)/Water Resource Management Authority (WRMA), Ministry of Agriculture and Livestock (MAL), Ministry of Health (MoH), Central Statistics Office (CSO), and Interim National Climate Change Secretariat (INCCS |
| **GEF Focal Area:** Climate Change - LDCF  **Project Start Date (actual):** 26 February 2014  **Project Start Date (planned):** September 2013  **Planned Project Closing Date:** 17 November 2017  **PAC Meeting Date:** 31 July 2013  **Atlas Award ID:** 00074216  **Project ID:** 00086729  **PIMS:** # 5901 |
| **Total Allocated Resources:**  US$ 17,131,947   * GEF/LDCF US$ 3,600,000 * Government (In Kind) US$ 3,746,947 * UNDP (Grant) US$ 600,000 * UNDP (Cash) US$ 400,000 * Other US$ 8,785,000 |
|  |
|  |

**MTR Timeframe**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **Month/Week** | | | | | |
| **Activity** | **Deliverable to be provided by the consultant** | **Dec 15**  **Wk 3** | **Jan 16**  **Wk 3-4** | **Feb 16**  **Wk 2-4** | **Mar 16**  **Wk 1-2** | **Mar 16**  **Wk 3-4** | **May 16** |
| Preparation of MTR Inception Report  **Submitted:** 23 Dec 2015 | Draft Inception Report | X |  |  |  |  |  |
| Finalization and Validation of MTR Inception Report  **Submitted:** 27 Jan 2016 | Final Inception Report |  | X |  |  |  |  |
| MTR Mission  **Realized:** 8-22 Feb 2016 |  |  |  | X |  |  |  |
| Mission wrap-up meeting & presentation of initial findings  **Realized:** 22 Feb 2016 | Presentation of initial findings |  |  | X |  |  |  |
| Preparation of Draft MTR Report  **Submitted:** 22 March 2016 | Draft MTR Report |  |  |  | X | X |  |
| Incorporating audit trail from feedback on draft report and Finalization of MTR report;  Preparation & Issue of Management Response;  Submission of Final MTR Report; Completion of assignment  **Submitted:** 18 May 2016 | Revised and Final MTR Report incorporating the audit trail |  |  |  |  |  | X |
| Concluding Stakeholder Workshop *- if would be requested by the CO (date to be coordinated with the CO)* |  |  |  |  |  |  |  |

**Acknowledgements**

This MTR mission and process was implemented through great team effort and with the participation and close support of the Project team – Mr. Donal Muunga and Mr. Isaac C. Nshimbi; the ZMD Project focal point – Mr. Mukufute M. Mukelabai; and the UNDP CO Environment programme team – Ms. Winnie Musonda and Mr. Chongo Simpasa. Dr. Durton Nanja, ZMD Southern Province Provincial Officer facilitated the implementation of the field visit, organized the meetings with stakeholders and the district and local levels, and provided invaluable advice. Mr. Andson Nsune, UNDP CO M&E Officer provided valuable guidance for planning the MTR. Further useful guidance was provided by Ms. Stephanie Ullrich, UNDP-GEF Evaluation Consultant . Mr. Joseph Sakala provided the UNDP CO administrative support. Ms. Chibesa Pensulo, the former Project Manager, provided the project documentation and very useful insights. Mr. Anderson Banda, the DMMU Focal Point for the project and Mr. Joy Sinyangwe, the MAL Focal Point for the project provided essential information and documentation. Ms. Alice Mwiinga, the District Commissioner of Gwembe District and Mr. Mubita Syimana, the District Commissioner of Sesheke District facilitated meetings with the respective District Disaster Management Committee members. Mr. Innocent Mainza, ZMD Meteorological Officer, hosted the visit to Chipepo Weather Station. All of the interviews with stakeholders at the national, provincial, district and local levels, proved to be useful and insightful. The full list of people interviewed is detailed in Annex IV. Useful information on the regional project contribution was provided by Mr. Benjamin Larroquette, the UNDP-GEF RTA, Ms. Bonizella Biagini, CIRDA Project Manager and Ms. Roxana Manea. Stephanie Ullrich, Winnie Musonda, and Mukufute Mukelabai provided detailed and useful comments and inputs on the draft MTR Report. The MTR consultant is grateful for the great support and useful inputs of all of the participants in the MTR process.

**Acronyms and Abbreviations**

AWS Automatic Weather Stations

CIEWS Climate Information/Early Warning System

CIRDA Climate Information for Resilient Development and Adaptation to

Climate Change in Africa

CO Country Office

COMESA Common Market for Eastern and Southern Africa

CSO Central Statistics Office

DDMC District Disaster Management Committee

DDMU District Disaster Management Unit

DMMU Disaster Management and Mitigation Unit

DWA Department of Water Affairs/

EWS Early Warning System

GEF Global Environment Facility

INCCS Interim National Climate Change Secretariat

IP Implementing Partner

LDCF Least Developed Country Fund

LTA Long Term Agreement

M&E Monitoring and Evaluation

MAL Ministry of Agriculture and Livestock

MoFNP Ministry of Finance and National Planning

MOH Ministry of Health

MTR Mid-Term Review

NAPA National Adaptation Programmes of Action

NCCTC National Climate Change Technical Committee

NGO Non-Governmental Organization

NIM National Implementation Modality

PIR Project Implementation Report

PPCR Pilot Program for Climate Resilience

PPP Public Private Partnership

PRODOC Project Document

RANET Radio and Internet programme

SADC Southern Africa Development Community

SASSCAL Southern Africa Science Service Centre for Climate Change and

Adaptive Land Management

ToC Theory of Change

ToR Terms of Reference

UNDP United Nations Development Programme

UNZA University of Zambia

WRMA Water Resources Management Authority

WFP World Food Programme

ZCCN Zambia Climate Change Network

**Table of Contents**

1. Basic Project Information………………………………………………...2
2. MTR Timeframe…………………………………………………………..3
3. Acknowledgements…………………………………………………….....4
4. Acronyms and Abbreviations……………………………………………..5
5. Table of Contents…………………………………………………………6

1. Executive Summary………………………………………………………………...8

1.1. Project Description (brief)……………………………………………………8

1.2. MTR Ratings & Achievement Summary Table……………………………...9

1.3. Summary of Conclusions……………………………………………….......10

1.4. Recommendations Summary………………………………………………..10

2. Introduction…………………………………………………………………….....13

2.1. Objectives of the MTR……………………………………………………...13

2.2. Scope & Methodology……………………………………………………...13

2.2.1. MTR overall approach and methodology principles………………......13

2.2.2. Data collection methodology…………………………………………..15

2.2.3. Limitations of the MTR methodology………………………………...17

3. Project Description and Context……………………………………………….....18

3.1. Project Description and Strategy…………………………………………....18

3.2. The Regional Context…………………………………………………….....19

3.3. Development Context…………………………………………………….....20

3.4. National Policy Framework…………………………………………………20

3.5. Problems that the Project Sought to Address……………………………….21

3.6. Project Implementation Arrangements……………………………………...22

3.7. Key Project Milestones……………………………………………………...23

3.8. Main Stakeholders List……………………………………………………...23

4. Findings……………………………………………………………………………25

* 1. Project Strategy………………………………………………………………25
     1. Project design………………………………………………………...25
     2. Results Framework/Logframe………………………………………..27
  2. Progress Towards Results…………………………………………………...28
     1. Progress towards Results Matrix……………………………………..28
     2. Progress towards achieving the project objective and outcomes…….32
     3. Remaining barriers to achieving the project objective and outcomes: Risks and challenges identification and adaptive management……...35

4.3 Project Implementation………………………………………………………36

4.3.1. Management arrangements……………………………………………36

4.3.2. Work planning and Workplans implementation………………………38

4.3.3. Finance and co-finance………………………………………………..38

4.3.4. Monitoring and evaluation framework and reporting…………………39

4.3.5. Stakeholders' engagement……………………………………………..40

4.3.6. The regional context…………………………………………………..41

4.3.7. Communication………………………………………………………..42

4.4. Sustainability………………………………………………………………...42

4.4.1. Identification and Management of risks to the sustainability of

Project results…………………………………………………………42

5. Conclusions and Recommendations………………………………………………45

5.1. Conclusions and summary of findings………………………………………45

5.1.1. General summary of conclusions……………………………………...45

5.1.2. Project strategy………………………………………………………45

5.1.3. Progress towards results……………………………………………..46

5.1.4. Project implementation………………………………………………47

5.1.5. Sustainability…………………………………………………………48

5.2. Recommendations…………………………………………………………..49

5.2.1. Recommendations for the Project implementation…………………..49

5.2.2. Specific recommendations for the project's final evaluation………...53

5.2.3. Recommendations for national strengthening of the project results

and sustainability……………………………………………………..54

5.2.4. Systemic recommendations…………………………………………..57

6. Annexes

1. MTR Evaluative Matrix………………………………………………60
2. MTR Mission Itinerary……………………………………………….65
3. List of People Interviewed…………………………………………...67
4. List of Documents Reviewed………………………………………...71
5. Theory of Change Workshop Summary……………………………...73
6. Audit Trail from received comments on Draft MTR Report…………81
7. (Annexed separately): MTR Terms of Reference (in PDF)
8. (Annexed separately): Power Point Presentation of Initial Findings
9. (Annexed separately): UNEG Code of Conduct Form
10. (To be annexed): Signed MTR Final Report Clearance Form……….84

1. **Executive Summary**
   1. **Project Description (brief)**

The project *Strengthening climate information and early warning systems in Eastern and Southern Africa for climate resilient development and adaptation to climate change – Zambia (PIMS5091)* started on 25th February 2015, and it is implemented through the Zambia Meteorological Department (ZMD), at the Ministry of Transport and Communication. It is a Full Size UNDP-GEF Least Developed Country Fund (LDCF) Project. The GEF/LDCF overall budget for the project is US$ 3,600,000 over four years.

The project was designed to strengthen the climate monitoring capabilities, early warning systems and available information for responding to climate shocks and planning adaptation to climate change in Zambia. Thereby, it will increase Zambia's resilience and ability to adapt to the impacts of climate change. This project was designed within the framework of the UNDP-GEF’s Multi-country Support Programme to Strengthen Climate Information for Resilient Development and Adaptation to Climate Change in Africa (CIRDA), comprising 11 country-led projects that focus on strengthening climate information and early warning systems (CIEWS) for climate resilient development and adaptation to climate change in Africa.

The objective of the project is “to strengthen the climate monitoring capabilities, early warning systems and available information for responding to climate shocks and planning adaptation to climate change in Zambia.” The project expected outcomes are: 1. Enhanced capacity of the Zambia Meteorological Department (ZMD) to monitor and forecast extreme weather events and climate change; and 2. Efficient and effective use of hydro-meteorological and environmental information for generating early warnings and informing long-term development plans.

**1.2. MTR Ratings & Achievement Summary Table**

|  |  |
| --- | --- |
| **Aspects of Project performance** | **Rating [[1]](#footnote-1)** |
|  | |
| **Project Strategy** |  |
| Project design: Relevance; National priorities; National ownership | S |
| Results Framework/Logframe: route towards expected results | S |
| **Progress towards Results** |  |
| Progress towards achieving the Project Objective | S |
| Progress towards achieving Outcome 1 | MS |
| Progress towards achieving Outcome 2 | MS |
| Risks and challenges identification and adaptive management | S |
| **Project Implementation** |  |
| Management arrangements | MS |
| Work planning and Workplans implementation | HS |
| Finance and co-financing; financial planning and management | S |
| Monitoring and evaluation framework and reporting | HS |
| Stakeholders' engagement | MS |
| The Regional context | HS |
| Communication | S |
| **Sustainability** |  |
| Identification and Management of risks to the sustainability of  Project results | ML |
| **Overall Rating of Project Performance** | **S** |

**1.3. Summary of Conclusions**

The overall rating of Project performance is satisfactory. The project addresses critical national and local needs. It has a good potential for having significant impact, in supporting resilience of Zambia in general, and of vulnerable populations in the target districts in particular, through improved access to, and use of, climate information and early warnings on climate shocks. Its design is in line with national policies and streamlined with other national and regional initiatives, addressing the same needs. The project is well designed for achieving its expected results, through a simple set of activities. Progress towards results is rather limited, so far, due to a long initial delay in implementation of most key activities, caused by the delay in procurement of the essential infrastructure and equipment. However, the project implementation is now on good track. For enabling the project to achieve its objective and outcomes by project end, an extension will be required, to compensate for the initial delay. Nevertheless, considering that the causes of delay were mitigated, at this stage the potential of the project to achieve its expected results, if an extension would be approved, is very high. Incorporating lessons learned, and stakeholders' considerations, it is also recommended that some adaptive changes would be introduced into implementation, especially as related to strengthening institutional capacity, inter-sectorial coordination, impact forecasting capacity, local stakeholders' sensitization and engagement, and securing sustainability. Sustainability of project results can be achieved, if the identified risks would be timely and effectively mitigated.

**1.4. Recommendations Summary**

***Recommendations for the Project implementation***

**Recommendation 1:** Urgent recruitment of the new Project Manager

**Implementer:** UNDP CO and ZMD

**Suggested timeframe:** Immediate

**Recommendation 2:** No-cost extension of the Project by at least 6 months, and preferably by 12 months

**Implementer:** UNDP CO preparation of proposal for approval by UNDP-GEF Executive Coordinator

**Suggested timeframe:** According to UNDP rules and procedures

**Recommendation 3:** Strengthening consultation with, and engagement of, local level stakeholders, and allocating liaison person/s for the project at the district level

**Implementer:** ZMD to indicate and nominate an on-ground liaison person in each target site, in coordination with MAL and the District officers;

Project team and ZMD to develop detailed ToRs for the site liaison persons operation;

ZMD with UNDP CO and Project team to analyze essential requirements for the operation of the site liaison persons, and to revise the project budget to enable addressing these needs.

**Suggested timeframe:** initiate immediately, finalize nomination of the site liaison people and of creating the basic conditions for their operation by end of the 3rd term of 2016.

**Recommendation 4:** Adding activities for institutional capacity building of key stakeholders, and for strengthening inter-sectorial coordination

**Implementer:** A detailed budgeted proposal to be prepared by the Project team, through consultation with ZMD, UNDP CO and key stakeholders, and submitted to the approval of the Project board.

**Suggested timeframe:** A detailed proposal to be prepared by the end of the 3rd term of 2016, and submitted to the following Project board meeting.

**Recommendation 5:** Continuation and strengthening of the regional cooperation and exchange, through technical support of the CIRDA Project

**Implementer:** CIRDA-Project team-UNDP CO coordination

**Suggested timeframe:** throughout the Project's implementation

**Recommendation 6:** Revision of the indicators

**Implementer:** Project manager with UNDP CO and in consultation with UNDP RTA

**Suggested timeframe:** By the end of the 4th term of 2016

**Recommendation 7:** Accelerating implementation of the communication strategy

**Implementer:** The Project team, ZMD, and UNDP CO to implement the communication plan and the activities specified in the approved communication plan

**Suggested timeframe:** implementation throughout the project duration

***Specific recommendations for the project's final evaluation***

**Recommendation 8:** Include in the final evaluation quantitative data collection among local communities, through simple questionnaires

**Implementer:** Terminal Evaluation team, with UNDP CO guidance

**Suggested timeframe:** to be included in the Terminal Evaluation

**Recommendation 9:** Include in the final evaluation a follow up on the ToC exercise

**Implementer:** Terminal Evaluation team, with UNDP CO guidance

**Suggested timeframe:** to be included in the Terminal Evaluation

***Recommendations for national strengthening of the project results and Sustainability (recommendations for ZMD)***

**Recommendation 10:** Secure CI/EWS financial sustainability through national budgets and other sources

**Implementer:** ZMD

**Suggested timeframe:** ZMD should aim to establish financial sustainability by Project end

**Recommendation 11:** Analyze needs and options for implementing an institutional reform of ZMD, and for institutional capacity building at national, district and community levels

**Implementer:** ZMD

**Suggested timeframe:** ZMD should aim to strengthen institutional sustainability by Project end

**Recommendation 12:** Secure continued engagement of staff trained through this project

**Implementer:** ZMD

**Suggested timeframe:** immediate and on going

**Recommendation 13:** Strengthen ZMD's inter-sectorial and multiple stakeholders' communication and coordination at all levels

**Implementer:** ZMD with key national stakeholders

**Suggested timeframe:** on-going

**Recommendation 14:** Establish impact forecasting capacity, and build ZMD capacity to address sectorial information needs

**Implementer:** ZMD with key national stakeholders

**Suggested timeframe:** immediate and on going

***Systemic recommendations (lessons learned for UNDP)***

**Recommendation 15:** Revisit project management arrangements for improved flow between and within Project team, UNDP and Government counterpart, in order to facilitate implementation

**Implementer:** UNDP CO, with Project team and ZMD, and in consultation with UNDP RTA, to agree on a simple set of facilitated and clear management arrangements and information and approval flows.

**Suggested timeframe:** a simplified proposal to be prepared by end of term 3 of 2016 and submitted for approval in the following Project Board meeting

**Recommendation 16:** Revisit procurement procedures

**Implementer:** UNDP HQ

**Suggested timeframe:** One year, including a 2-3 months consultancy.

**Recommendation 17:** Secure continued engagement of people trained

**Implementer:** UNDPHQ

**Suggested timeframe:** immediate and on-going

**Recommendation 18:** Continue and expand the regional project's technical support

**Implementer:** UNDP CO in coordination with CIRDA. The more general recommendation is for UNDP HQ

**Suggested timeframe:** on-going

1. **Introduction**

This chapter presents the MTR objectives, scope and detailed methodology, as was designed in the MTR Inception Report, and based on the MTR assignment ToRs and on the Guidance for Conducting Midterm Reviews of UNDP-Supported GEF-Financed Projects.

* 1. **Objectives of the MTR**
* Assess progress towards the achievement of the project objective and outcomes, as specified in the Project Document.
* Assess early signs of project success or failure with the goal of identifying the necessary changes to be made in order to set the project on-track to achieve its intended results.
* Review the project’s strategy, and its risks to sustainability.
* Identify challenges and bottlenecks and propose measures for their mitigation and for improved implementation
* Derive lessons learned and provide recommendations to improve capacity of the project to achieve its objective and outcomes.
  1. **Scope & Methodology**
     1. ***MTR overall approach and methodology principles***

The implementation of the Midterm Review was based on the detailed ToRs of the assignment and on the *Guidance for Conducting Midterm Reviews of UNDP-Supported GEF-Financed Projects.*

The MTR aimed to assess progress made toward the achievement of the objective and outcomes, identify challenges and bottlenecks and propose measures for mitigation of challenges and for improved implementation, in order to ensure that the project is on track to maximizing results for achieving the project objectives and outcomes by its completion.

The MTR was aimed to provide evidence based information that is credible, reliable and useful. The main focus of the MTR was to assess the effectiveness, efficiency and timeliness of the project implementation, highlight issues requiring decisions and actions, and present initial lessons learned about project design, implementation and management.

The methodology for data collection was based on a combination of review of the project documentation, review of relevant national and district documentation, consultations with the project team, partners and stakeholder at the national, district and local levels, site visits, inspection of automatic and manual weather stations, and a theory of change (ToC) exercise that was held during a half day workshop with key stakeholders in Lusaka.

The MTR was implemented through a collaborative and participatory approach, ensuring close engagement with UNDP CO, the Project Team, and the main Government counterpart (ZMD), and through consultation with key stakeholders, at the national and local levels.

The following activities were implemented, following review and adoption of the MTR Inception Report by UNDP-Zambia and Project team and partners

1. Review of all Project documentation, provided by UNDP-Zambia and the Project team, and any other documents and sources of information, provided by stakeholders and partners.
2. Implementation of the MTR mission, following detailed planning and preparations, including consultation meetings with stakeholders and field visits, coordinated and supported by UNDP-Zambia, the Project team and the Government counterparts.
3. The mission was terminated with de-briefing/wrap-up and a power-point presentation, followed by team discussion of initial findings, with UNDP-Zambia, Project team and ZMD.
4. The Capacity Assessment Scorecards submitted at CEO endorsement and the ZMD and DMMU Capacity Self-Assessment Scorecards submitted in July 2015, were reviewed and used to assess progress in enhancing national capacity. No other GEF focal area Tracking Tools were prepared at CEO endorsement or later during the Project.
5. The present MTR draft report, was prepared based on the mission results and findings and on the documentation received.
6. The MTR report will be revised in accordance with feedback, incorporating audit trail from feedback on draft report/Finalization of MTR report, preparation and issue of Management Response, and finalization of the full draft to be presented for validation.
7. A concluding stakeholder workshop may be realized by the UNDP CO and ZMD for the validation of the report.
8. An MTR Final Report will be submitted, incorporating feedback, for final clearance and adoption.

Project progress is assessed following the four categories detailed in the *Guidance for Conducting Midterm Reviews of UNDP-Supported GEF-Financed Projects* with the evaluative questions, indicators, sources and methodology, as detailed in the Midterm Review Evaluative Matrix (Annex I)

1. Project strategy: Project design; Results Framework/Logframe;
2. Progress towards results: Progress Towards Outcomes Analysis, including completing the Progress Towards Results Matrix, assessing achievement of outcomes against the End-of-project Targets;
3. Project implementation and adaptive management: management arrangements; work planning; finance and co-finance; Project level monitoring and evaluation systems; stakeholder engagement; reporting; communication;
4. Sustainability: financial risks to sustainability; socio-economic risks to sustainability; institutional frameworks and governance risks to sustainability; environmental risks to sustainability.

The MTR Report includes a section of evidence-based conclusions, in light of the findings, and recommendations for critical interventions that are specific, measurable, achievable, and relevant.

The MTR Report also includes a MTR Ratings & Achievement Summary Table of the Project's results with brief descriptions of the associated achievements. MTR Ratings are provided as follows:

1. Ratings for progress towards results: achievement of the Project objective; achievement of Outcome 1; and achievement of Outcome 2. Rating scales: Highly Satisfactory (HS); Satisfactory (S); Moderately Satisfactory (MS); Moderately Unsatisfactory (HU); Unsatisfactory (U); Highly Unsatisfactory (HU)
2. Ratings for Project implementation and adaptive management. Rating scales: Highly Satisfactory (HS); Satisfactory (S); Moderately Satisfactory (MS); Moderately Unsatisfactory (HU); Unsatisfactory (U); Highly Unsatisfactory (HU)
3. Ratings for sustainability. Rating scales: Likely (L); Moderately Likely (ML); Moderately Unlikely (MU); Unlikely (U).

Evaluative questions, indicators, information sources, and methodology, are detailed in the Midterm Review Evaluative Matrix (Annex I).

* + 1. ***Data collection methodology***

The MTR process was based on a participatory approach, and on consultations with UNDP, the Project team, partners and stakeholders, as well as on document's review, and on a Theory of Change exercise. Consultations were held, during a two weeks (15 days) mission, with project team, partners and stakeholders at the regional, national provincial, district, and local levels. Field visits were undertakento two of the three pilot Districts, and one non-target District, all selected in consultation with the UNDP CO, the project team, and the main Government counterparts, namely the Districts of Gwembe, Sesheke, and Kazangula. Consultations were held by skype and email also with the regional project partners (CIRDA).

The site visits were aimed at assessing on-ground progress of implementation and impact, as well as recommendations for their improvement. They included inspection of a manual weather station rehabilitated by the project (in Chipepo), and the only automatic weather station so far installed by the project (in Munyumbwe), both in Gwembe District, and consultations with stakeholders at the local level. Consultations were held with the District Commissioners and District Disaster Management Committees of Gwembe and Sesheke Districts. Further consultations were held with Sesheke Radio Station Committee, with ZMD on-ground climate information management practitioners, and with community members near manual and automatic weather stations and further away, in both of these districts, as well as in Kazangula District, a non-target District that benefitted from the installation of an AWS by another project. Four community meetings were held in Gwembe District, one near a manual station (Chipepo), one with members of several communities near an automatic station (in Munyumbwe), one around 3.5 Km from the AWS (Lukonde), and one around 11 Km from a weather station (Halubilo). One community (Maka) was visited in Sesheke District, where no station was so far installed by the Project. One meeting was held in Kazangula District (in Namapande) with the beneficiaries of another UNDP Project (with MAL). Both men and women participated in all of the meetings with community members. The detailed mission itinerary is provided in Annex II and a full list and affiliation of people interviewed in Annex III. Further analysis of information was done through documentation review, including project documentation and further supporting documents from stakeholders and partners. A full list of documents reviewed is provided in Annex IV.

While the full list of people interviewed is provided, the rights and confidentiality of persons interviewed are being protected. Feedback and input of stakeholders interviewed remain confidential, and the final MTR report does not indicate the specific source of quotations or information, in order to uphold this confidentiality. Consultations included both interviews with individual stakeholders and group meetings. The consultations with stakeholders were aimed to collect information on the evaluative questions detailed in the MTR Evaluation Matrix (Annex I), with focus on the following aspects

* The relevance and adequacy of the Project strategy
* Progress made toward the achievement of the objective and outcomes and recommendation for improving the achievement of the desired results;
* Progress in the main project indicators for achievement of the objective and outcomes;
* Impact;
* Project implementation, management arrangements and work planning;
* Adaptive management to changing conditions;
* Challenges and bottlenecks in the project implementation and recommendations for improving implementation;
* Measures taken and proposed for mitigation of challenges and for improved implementation;
* Stakeholders' engagement;
* Local communities engagement, participation in decision making, deriving benefits, gender balance in participation and in deriving benefits, and inclusion of indigenous knowledge;
* Key stakeholders' capacity, and capacity building noted through the project;
* Communication, awareness and visibility;
* Sustainability and risks to sustainability

The evaluation methodology included a half day Theory of Change workshop/exercise with key stakeholders. Applying the ToC at this stage of mid-term review of the project strengthens the project's evaluation through a participatory approach, and for collectively guiding its future directions, with the aim of best achieving its pre-defined desired outcomes, by the project end. The exercise was held in two sessions. The first session was based on the project's defined objective and two outcomes and was aimed at evaluating progress made, bottlenecks met, and further recommendations for putting in place the required conditions to mitigate the identified challenges and to achieve the project objective and desired outcomes. The second session was based on the project's defined indicators for the achievement of the objective and outcomes, and was aimed at assessing progress in these indicators as well as in reviewing their adequacy and proposing new additional indicators for measuring progress. A detailed summary of the ToC workshop is provided in Annex V.

**2.2.3. *Limitations of the MTR methodology***

The methodology selected was adapted to the limited MTR evaluation timeframe and is mostly qualitative and based on documentations review and on consultation with stakeholders, as well as on a ToC exercise. The limited timeframe and the distance from Lusaka to the target districts also resulted with that the field visits had to be implemented through a selective approach, and that only a limited number of stakeholders could be interviewed, at the local level, in a few affected and non-affected communities in two of the three target districts and in one non-target district.

While the ToC exercise was very useful in supporting the MTR process, it would have been a more useful and applicable evaluation tool if the ToC would have been applied at the project design phase first. The project's defined indicators for assessing progress in achieving its objective and outcomes, were reviewed through the ToC exercise, their limits were pinpointed, and further indicators were proposed. (See Annex V).

The fact that the centerpiece of the project's implementation, being the installation of automatic weather stations and rehabilitation of manual stations, was not yet implemented, also meant that outside the immediate radius of these two stations, and with the exception of the capacity building that has taken place at national level, the project did not have any notable impact, yet. So far only one AWS was installed and one manual station rehabilitated, through this project, and both only recently. The main training activities are also in process. The main impact of the project is, therefore, not yet measurable.

For the same reason, it was also decided, in consultation with the UNDP CO, Project team and ZMD, not to implement at this stage the planned quantitative data collection exercise among local communities, through questionnaires. This methodology, nevertheless, is being proposed as a recommendation for its implementation towards the project's termination, to support its final evaluation. (See chapter 5.2.2.). The implementation of this quantitative evaluation methodology will depend on help of the relevant district officials with the questionnaires' distribution, explanations, collection and timely delivery for central analysis.

1. **Project Description and Context**

This chapter presents the key elements of the project and is based mostly on the Project Document and on additional project documentation (see Annex IV).

**3.1. Project Description and Strategy**

The project *Strengthening climate information and early warning systems in Eastern and Southern Africa for climate resilient development and adaptation to climate change – Zambia (PIMS5091)* started on 25th February 2015, and it is implemented through the Zambia Meteorological Department (ZMD), at the Ministry of Transport, Works, Supply and Communication. It is a Full Size UNDP-GEF Least Developed Country Fund (LDCF) Project. The GEF/LDCF overall budget for the project is US$ 3,600,000 over four years.

The project was designed to strengthen the climate monitoring capabilities, early warning systems and available information for responding to climate shocks and planning adaptation to climate change in Zambia. Thereby, it will increase Zambia's resilience and ability to adapt to the impacts of climate change. The project aims to strengthen coordinated and complete climate information systems and early warning systems in Zambia. This would improve the effectiveness of long-term development planning and the delivery of timely climate/weather-related warnings to key sectors and communities vulnerable to climate change impacts, such as increase in frequency and intensity of floods and droughts.

The objective of the project is “to strengthen the climate monitoring capabilities, early warning systems and available information for responding to climate shocks and planning adaptation to climate change in Zambia.”

The project expected outcomes are:

1. Enhanced capacity of the Zambia Meteorological Department (ZMD) to monitor and forecast extreme weather events and climate change; and

2. Efficient and effective use of hydro-meteorological and environmental information for generating early warnings and informing long-term development plans.

The project outputs are:

Outcome 1:

Output 1.1: 28 Automatic Weather Stations procured and installed, and 41 existing manual and automatic monitoring stations rehabilitated.

Output 1.2: Weather and climate forecasting systems upgraded, including the installation of the required hardware and software and integration of satellite observations.

Output 1.3: Capacity developed for operating and maintaining the climate observation network and related infrastructure including the training of 10 engineers, 10 technicians and local communities to maintain and repair meteorological equipment, computer infrastructure and telecommunications network.

Output 1.4: Technical capacity of ZMD is developed to improve the production of standard and customized weather and climate forecasts and packaging meteorological data and information into a suitable format for user agencies and local community end-users.

Outcome 2:

Output 2.1: Tailored, sector-specific weather and climate information made accessible to decision makers in government, private sector, civil society, development partners and local communities.

Output 2.2: National capacity developed for assimilating weather and climate information into existing national policies, development plans and disaster management systems.

Output 2.3: Communication channels and procedures for issuing warnings are enabled at a national level, and implemented at a district level through the development of mobile phone-based alert platforms in the priority districts of Chipata, Gwembe and Sesheke. (The target district of Chipata was later replaced by Mambwe).

Output 2.4: Public-private partnership developed for sustainable financing of the operation and maintenance of the installed meteorological observation network.

The target districts of the Project, as selected through consultation with the Government during the design phase, were Gwembe, Sesheke and Chipata. At the initial phase (inception) of the project implementation, the district of Chipata was replaced by a neighboring district, Mambwe, which was identified as a high priority in terms of the climate change impact, as well as for avoiding overlap and increasing synergy with other similar projects and initiatives.

* 1. **The Regional Context**

This project was designed within the framework of the UNDP-GEF’s Multi-country Support Programme to Strengthen Climate Information for Resilient Development and Adaptation to Climate Change in Africa (CIRDA), comprising 11 country-led (NIM implemented) projects that focus on strengthening Climate Information and Early Warning Systems (CI/EWS) for climate resilient development and adaptation to climate change in Africa.

The CIRDA programme was developed in response to a request for assistance from UNDP-GEF by Least Developed Countries (LDCs) in strengthening Climate Information and Early Warning Systems for Climate Resilient Development and Adaptation to Climate Change in Africa. In support of the NIM-implemented country-led projects, the purpose of the multi-country support project is to enable each of the countries to cost-effectively draw on technical assistance for strengthening climate information and early warning systems, as well as benefit from regional coordination and sharing of knowledge and experiences. The technical assistance that is delivered through this project, implemented under the DIM modality, focuses on: meteorological, climate and hydrological observing and forecasting systems, disaster risk management and viable communication systems/processes for disseminating alerts, the use of alternative cost-effective technologies, and engagement with the private sector for the provision of climate services.

A cohort of technical advisors and a Project Manager of the CIRDA Project support each of the national level project teams. In particular they support countries in developing robust adaptation plans and provide technical advice, training and support for accessing, processing and disseminating data for early warning and national/sectorial planning related purposes on a systematic basis. The cost of these project staff has been prorated across all country project budgets.

The regional programme would thus strengthen the ability of decision-makers in each country to understand the likely impacts of climate change in the short and long-term, which is of critical importance when planning strategies for sustainable development. Weather and climate information, based on routinely collected observations and forecast models, allow countries to produce short-term weather forecasts as well as long-term projections of climate change. Combined with information on key vulnerabilities, these forecasts and observations enable the dissemination of warnings of impending disasters, as well as indicating when slow onset climatic shifts may be an impediment to livelihoods and economic growth.

* 1. **Development Context (based on the PRODOC)**

Over the past three decades, floods and droughts have already cost Zambia ~US$ 13.8 billion, equivalent to a 0.4% loss of annual economic growth1. In total, 9 million people have been affected and there have been 71 deaths. The 2007 floods were particularly destructive and affected more than 1.5 million people in 41 out of 72 districts in the 10 Zambian provinces. In several of those districts, it was the first time that they had been affected by flooding. It is estimated that rainfall variability alone could keep an additional 300,000 Zambians below the poverty line and cost Zambia US$ 4.3 billion in lost Gross Domestic Product (GDP) over the next decade, reducing annual GDP growth by 0.9%.

Anthropogenic-induced climate change is expected to exacerbate the effects of floods and droughts because of the predicted increase in frequency and severity of climate hazards. This will increase the vulnerabilities of many sectors, livelihoods and assets within Zambia and the broader region in general. The primary impacts of climate change are expected to be: i) an increase in the mean annual temperature of 1.2-3.4°C by 2060; and ii) a decrease in rainfall during the September to November period and an increase during December to April, along with accompanying increases in high intensity rainfall and 1-5 day total rainfall. These changes are predicted to result in: i) seasonal droughts; ii) dry periods within the rainy season; iii) intense rainfall; iv) heat waves; v) increased temperatures in valleys; vi) floods; vii) flash floods; and viii) changes in growing season (as a result of delayed onset of rainy season or shortened growing period).

A climate information and Early Warning System (EWS) is an important part of adapting to the above mentioned climate change-related impacts, as it increases the resilience to future changes in these climate/weather-related hazards. Whilst components of such a system are operational in Zambia, efforts are fragmented, distributed across numerous institutions, and based on limited climate/weather information.

* 1. **National Policy Framework**

The project responds to priority adaptation needs and actions identified in Zambia’s NAPA, specifically Option 2: “Strengthening of early warning systems to improve services to preparedness and adaptation to climate change”. The objectives as stated in the NAPA are: i) strengthening systematic observations of meteorological and hydrological services, and capacity building, education and public awareness; and ii) developing the use of compatible standards and systems – encompassing relevant data and stations – including remote areas, and use and disseminate modern technology for data collection, transmission and assessment. This includes the need to: i) develop infrastructure for early warning advanced planning purposes; ii) establish a National Climate Centre; iii) collect the required climate, environmental and health data; iv) conduct field surveys in representative localities to identify climatic and non-climatic disease risk factors; v) establish an effective climate data management system; vi) develop human capacity for regular monitoring of climate stations for data quality; and vii) devise an effective information dissemination process to all sectors that may be affected by climate change.

The project design was originally further aligned with the framework of Poverty Reduction Strategy Paper (PRSP 2002-2004), and with the succeeding Fifth and Sixth National Development Plans (FNDP, 2006-2010; SNDP, 2011-2015). A large proportion of the development fostered by these strategies focuses on the development of climate change adaptation programmes.

Other policies of relevance include the National Disaster Management Act (2010), National Disaster Management Policy (NDMP, 2005), the National Meteorological Policy (NMP, 2009) and the National Agricultural Policy (NAP, 2004-2015). The National Environment Policy (NEP, 2004) identifies 11 government ministries involved in environmental affairs. Nine of these ministries have policies that include environmental matters (nineteen policies in total). The draft NEP also highlights current shortfalls in these nineteen policies. Zambia has a Gender Policy which was adopted in 2000. The policies acknowledge that present climatic variability is largely responsible for many challenges faced in Zambia, including food, water and health insecurity. As a result of this acknowledgement, most of the policies emphasize the need for an improved EWS that is effective at a local level. However, most of the relevant national policies lack adequate consideration of climate change impacts, and as a result their mitigation and development strategies are insufficiently effective and potentially maladaptive.

**3.5. Problems that the Project Sought to Address**

The main threat that this project aimed at mitigating was that the current status of climate information and EWSs in Zambia, during baseline phase, combined with climate variability and change, could severely undermine future social and economic development in Zambia. The fundamental problem that this project sought to address, therefore, was the urgent need to establish a coordinated and complete climate information (including weather monitoring and forecasting) and Early Warning System in Zambia. Thereby it aimed to enable effective long-term development planning through delivery of timely climate/weather-related warnings to key sectors and communities vulnerable to climate change impacts, such as an increase in frequency and intensity of floods and droughts. Substantial investment needs were identified for generating climate information – especially for the monitoring and forecasting of climate and extreme weather-related hazards – so that weather and climate monitoring and EWS network in Zambia would function as effectively as possible, for improving the potential resilience of vulnerable sectors and communities.

The identified baseline of ineffective climate information and EWS was due to a lack of infrastructure, hard and soft technologies, and the capacity to utilize those technologies in an appropriate manner. This resulted in: i) limited understanding of current and future weather- and climate-related risks; ii) limited monitoring and forecasting of climate-related hazards; iii) inappropriate communication and packaging of early warnings; iv) restricted responses to impending weather- and climate-induced disasters; and v) constrained planning for slow-onset climate hazards that will require a transformational shift in economic development and risk reduction efforts.

The project was planned to improve coverage of meteorological and hydrological observation stations, and thereby the monitoring of vulnerable regions and populations. The installation of AWS was aimed at establishing a network for efficient transmission of high quality and reliable information. In addition, the project would support the rehabilitation and maintenance of existing manual stations, to strengthen the network. Thereby, it would enable improved capacity for reaching management decisions related to climate change induced disaster risks. Furthermore, the project would address the current limited packaging and inappropriate communication and limited information flow of weather and climate information and warnings for different end-users and sectors. In particular it aimed to improve information flow between the Zambia Meteorological Department (ZMD), Disaster Management and Mitigation Unit (DMMU), Department of Water Affairs (DWA), and Ministry of Agriculture and Livestock (MAL), at the national level, as well as improve transmission of information, with improved interpretation and application for local communities.

Regarding technical capacity and access to Numerical Weather Prediction (NWP) and climate models, staffing shortages were identified at ZMD, restricting the ability to downscale forecasts and apply them to local conditions, and to use weather and climate forecasts on daily to seasonal time scales from neighbouring countries or international centres. This, in turn, limited capacity extended to the operation and maintenance of climate information and early warning equipment and systems in Zambia, including insufficient use of satellite data.

**3.6. Project Implementation Arrangements**

The project was planned to be implemented over a four year period. ZMD functions as the Implementing Partner (IP) for this project, responsible and held accountable for managing the project on a day-to-day basis as per UNDP’s NIM policies and procedures.

The Project Board/Project Steering Committee is responsible for making the management decisions of the project, and guide the Project Manager. The Project Board plays a critical role in monitoring progress of implementation and ensuring that recommendations from annual and mid-term evaluations are adopted for performance improvement, ensuring accountability and adoption of lessons learnt. It ensures that required resources are committed and arbitrates on any conflicts within the project or negotiates a solution to any problems with external bodies. Based on the approved Annual Work Plan, the Project Board is kept informed of progress with the implementation of quarterly plans and also approves any essential deviations from the original plans.

The Project Manager has the authority to run the project on a day-to-day basis within the guidelines provided by the Project Board. The Project Manager’s prime responsibility is 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. The Project Manager is selected by ZMD, the Implementing Partner, in consultation with UNDP CO. The Project Manager is based within ZMD. The Project Manager and project implementation should be supported by teams of Responsible Parties (RPs), including DMMU, DWA/WRMA and MAL/CSO, as well as MoH and INCCS.

As requested by ZMD, UNDP provided support in recruitment of project staff and consultants, identification and facilitation of training activities and procurement of equipment. The recruited Administrative/Financial Assistant and Project Driver, provide support to the project implementation. The UNDP CO provides further Project Support (administration, management and technical support) through a set of support services for the activities of the project. Additionally, UNDP is providing US$ 400,000 as cash co-financing. This funding is used to assist with project coordination by the UNDP CO, including a “Liaison Officer” to assist ZMD with the Implementing Partner role.

* 1. **Key Project Milestones**

|  |  |
| --- | --- |
| Project Start Date | 26 February 2014 |
| Inception Workshop | April 2014 |
| Project Steering Committee/Board meetings (later replaced by the CIEWS National Task Team) | October 2014, April 2015, September 2015 |
| Mid-Term Review | Dec 2015 – March 2016 |
| Terminal Evaluation | To be scheduled for Q3 2017 |
| Planned Project Closing Date | 17 November 2017 |

* 1. **Main Stakeholders List**

|  |  |
| --- | --- |
| **Stakeholder** | **Main role in the Project / contribution** |
| UNDP CO | Executing Agency |
| The Project team | Implementation |
| Zambia Meteorological Department (ZMD) at the Ministry of Transport and Communication | Implementing Agency |
| UNDP RTA | Technical assistance |
| CIRDA Project team | Technical assistance, training, supporting participation in regional activities |
| The Project Board/Steering Committee members | Policy forming and guidance of implementation |
| The GEF Operational Focal Point of Zambia | Policy guidance |
| Disaster Management and Mitigation Unit (DMMU) | Implementation partner, in kind contributions |
| Department of Water Affairs (DWA) - Water Resource Management Authority (WRMA) | Implementation partner and beneficiary |
| Ministry of Agriculture and Livestock (MAL) - Central Statistics Office (CSO) | Implementation partner and beneficiary, in kind contribution, staff time |
| Ministry of Health (MoH) | Implementation partner and beneficiary |
| Ministry of Tourism, Environment and Natural Resources (MTENR) | Implementation partner and beneficiary, in kind contribution |
| Interim National Climate Change Secretariat (INCCS) | Implementation partner, in kind contribution, participation, coordination, leadership |
| The UNFCCC operational focal point | Implementation partner |
| District Commissioners and District Disaster Management Committees of Gwembe, Sesheke, and Mambwe | Implementation partners, key beneficiaries, participation, leadership at district level |
| Local communities and traditional leadership in the pilot districts of Gwembe, Sesheke and Mambwe | Implementation partners, key beneficiaries, participation, leadership and implementation at the local level |
| On-the-ground practitioners of climate information management and disaster risk reduction. | Implementation partners and beneficiaries, participation, staff time |
| Local Radio Stations | Implementation partners and beneficiaries, participation, advocacy and information dissemination at local level |
| World Bank | Partner organization of baseline projects |
| WFP- Disaster Risk Reduction/ Vulnerability Assessment and Mapping Unit | Partner organization of baseline projects |
| GIZ - KFW | Partner organization of baseline projects |
| Zambia Climate Change Network (ZCCN) and other civil society organizations/NGOs | Implementation partners, representing civil society, participation, advocacy |
| Representatives of the academia – University of Zambia (UNZA) | Implementation partners, technical assistance |
| Representatives of the private sector | Implementation partners, beneficiaries, potential partners in securing financial sustainability |

1. **Findings**

This chapter presents the findings of this mid-term review, as based on the MTR assignment ToRs and on the Guidance for Conducting Midterm Reviews of UNDP-Supported GEF-Financed Projects. The detailed evaluation follows the Midterm Review Evaluative Matrix (Annex I). The MTR Ratings & Achievement Summary Table is provided in section 1.3.

* 1. **Project Strategy**

*To what extent is the project strategy relevant to country priorities, country ownership, and the best route towards expected results?*

* + 1. ***Project Design*** *(relevance; national priorities; national ownership)*

*Does the project strategy support achieving national needs and priorities?*

All stakeholders interviewed were of the opinion that the project objective and outcomes are well in line with national priorities and support achieving national needs. Moreover, the defined objective and outcomes are in line with national policies, strategies and programmes. The essence of the project objective and outcomes, in improving climate monitoring and early warning systems as well as information dissemination to end users and the use of the information for response to climate events and for long term climate change adaptation planning, are high priorities for enabling the national climate change adaptation and resilience. As detailed in section 3.4., and as based on the PRODOC, the project responds to priority adaptation needs and actions identified in Zambia’s NAPA. It is further aligned with the Fifth and Sixth National Development Plans (FNDP, 2006-2010; SNDP, 2011-2015), as well as with the National Disaster Management Act (2010), National Disaster Management Policy (NDMP, 2005), the National Meteorological Policy (NMP, 2009) and the National Agricultural Policy (NAP, 2004-2015), and the National Environment Policy (NEP, 2004). The Project further supports the DMMU's function in collecting and disseminating climate information, as defined in the Disaster Management Act, 2010.

*Does the project strategy support achieving needs and priorities of local stakeholders?*

All stakeholders interviewed, at the national, provincial, district and local levels, were of the opinion that the defined project objective and outcomes, support local priorities and addresses essential climate change adaptation and resilience needs of local communities and other stakeholders. The focus at the local level was on the dissemination and adequate packaging of the information for end-user. Most of the abovementioned national policies also emphasize the need for an improved Early Warning System with effective information flow and impact at the local level. The Project further supports the selected Provincial and District Disaster Management Committees' function in collecting and disseminating climate information, at the local level, as defined in the Disaster Management Act, 2010.

*To what extent is the project complementary to government's and partners' initiatives (regional, national and local projects and programmes), addressing the same priorities?*

The project design complements existing and planned national and regional initiatives. The project was designed as part of a broad multi-country programme of national climate information and Early Warning Systems projects in 11 countries in Africa, under the CIRDA Project. The individual country projects, including this project, have been developed through a multi-country approach with a view to aligning regional priorities and identifying opportunities to increase knowledge sharing.

Several projects were identified as baseline co-financing initiatives for the LDCF CI/EWS Project. The Southern Africa Science Service Centre for Climate Change and Adaptive Land Management (SASSCAL) project (2010 – on-going), a regional project involving five South African Development Community (SADC) countries, funded by the German Federal Ministry of Education and Research, with focus on research and capacity development to provide sound science-based solutions for current problems and future risks in particular regarding climate change and the associated land management demands. This project also supports improving the weather forecasting and early warning, including the provision of 10 AWSs and staff training. The World Bank (WB)-led Water Resource Development Project enhances the water resource management capacity of Zambia at national and regional levels, with several activities relevant to the LDCF CI/EWS project include. The Joint GRZ (Government of the Republic of Zambia)/UN Programme on Climate Change and Disaster Risk Reduction, bringing together seven agencies – FAO, UN-HABITAT, UNDP, UNICEF, UNIDO, WFP and the Global Mechanism of the UNCCD, supports developing capacity and increasing investments at national and local levels for an effective multi-sectorial and multi-level response to climate change, through capacity development and climate change response investments. The Gesellschaft für Internationale Zusammenarbeit (GIZ) in collaboration with the German Investment Bank (KFW) is implementing a project to strengthen the management of Zambia’s water sector, aiming to improve collection, processing, management, and utilization of hydrological data in Zambia. The Pilot Programme for Climate Resilience (PPCR), implemented in nine countries, coordinated in Zambia by the Ministry of Finance and National Planning (MoFNP), supports the mainstreaming of climate change into the most vulnerable sectors of the economy, in order to ensure sustainable economic development towards the attainment of the country’s Vision 2030. The GEF-LDCF Agriculture project “Adaptation to the effects of drought and climate change in Agro-ecological Regions I and II”, implemented by UNDP as the Implementing Agency and MAL as the Implementing Partner, aims to reduce the vulnerability of selected target communities to climate change impacts. The ZMD's “Radio and Internet” (RANET) Programme is not listed among the baseline projects for the LDCF CI/EWS project, but its achievements support this project's objectives of improving the delivery of information on weather, forecasted severe events, agriculture, education, health, environment, and other vital developmental information to rural communities, by assisting rural communities to partner with local FM broadcasting stations and establish community broadcasting stations disseminating information in local languages.

The LDCF CI/EWS Project design and implementation were coordinated with the abovementioned projects, resulting with several planning changes made in the implementation of activities, such as in the selection of specific target Districts and AWSs installment locations, to avoid overlap and increase synergy, and overall coordinated support for the joint objectives. However, several stakeholders interviewed have stressed that coordination between the different initiative should have been significantly strengthened, from the design phase, and throughout implementation. It should be noted, though, that the Interim Climate Change Secretariat (ICCS) is now providing the coordination between the various initiatives.

*Do the Project's outputs and management arrangements promote national ownership?*

The Project development involved participation of key stakeholders, both at the national and local levels. The PRODOC and related documentation, as well as later consultancy reports, also demonstrate that a participatory approach was exercised at the project design phase, as well as in later adaptive management planning. However, stakeholders interviewed were divided in their evaluation of their involvement in the project design, and several key stakeholders, especially at the local level, but also at national level, felt left out of this process, with consequences to their further engagement in the project implementation.

The project management arrangements are based on national ownership, with National Implementation Modality (NIM), under the leadership of ZMD as the implementing partner, which also hosts the project in its premises, and with the guidance of further key stakeholders as board members. The project outputs support national and local capacity building, and thereby promote national ownership as well, however this needs to be strengthened. The need for enhancing district and local level ownership is being addressed, but needs significant strengthening.

***Rating for Project strategy – Project design*** ***(Relevance; National priorities; National ownership): Satisfactory (S)***

* + 1. ***Results Framework/Logframe*** *(route towards expected results)*

*Are the Project outputs and activities relevant and feasible for achieving the Project objective and outcomes?*

The project is well designed, through a simple approach with straightforward expected outcomes, and with simple and straightforward outputs and activities that logically lead to achieving the project objective and outcomes. The project also seems to be on good track in mitigating challenges and bottlenecks encountered, following which the indicated outputs and activities should be feasible, even if not within the pre-defined timeframe. Nevertheless, as noted through the MTR process, and as several stakeholders have also commented, the outputs and activities could be better refined and improved. For example, without significant implication on the project timeframe or budget, outputs and activities in Outcome 1 could strengthen: capacity building activities with more focus on the actual institutional (not only technical) capacity of ZMD; activities for building national impact forecasting capacity, through strengthening inter-sectorial coordination; and in Outcome 2: a participatory process at the local level to precede other activities related to planning and implementing the most adequate information dissemination mechanisms to end-users, with flexibility of diversifying these mechanisms, as may be adequate to the specific locations.

*Were risks well identified and mitigation measures well designed to adequately address the risks?*

The relevance of the ten risks indicated in the PRODOC was well verified through further project reporting and documentation, as well as in interviews with most stakeholders. Mitigation measures designed for these risks, as detailed in the PRODOC, were also adequate. However, the identification of risks was only partial, and therefore the effectiveness of the pre-defined mitigation measures is also insufficient. This is, in fact, expected in any project, considering that not all risks, that become apparent during implementation, are easy to identify in advance. Moreover, implementation of the identified mitigation measures was only partially successful, as specified hereby:

Risk 1, adequately refers to the need for improved technical capacity, and well addressed through outputs and activities, however, the need for further institutional capacity is underestimated and not mitigated through the project design; Risk 2, identifies well the need for strengthened inter-sectorial coordination, however the mitigation measures proposed are insufficient; successful mitigation of Risk 3 and Risk 4, referring to the need for increased political will and for mainstreaming into national policies, was evident throughout the mission, however still needs significant further strengthening; Risk 5 referring to synchronization with the baseline projects proved to be correct but reversed, and mitigations was implemented through adaptive change of planned activities (mainly through the change of one of the target districts); Risk 6 regarding the AWSs possible vandalizing was mitigated so far in the one AWS installed; Risk 7 and Risk 10 were not relevant so far, but should be evaluated at the project end, following the AWSs installation; Risk 8 regarding limitations to information transfer was adequately identified, and its mitigation must be strengthened through a participatory approach; Risk 9 regarding delays in the equipment's procurement was well predicted, however, the mitigation effectiveness was insufficient, resulting with significant delays in project implementation.

***Rating for Project strategy – Results Framework/Logframe*** ***(route towards expected results): Satisfactory (S)***

* 1. **Progress Towards Results**
     1. ***Progress Towards Results Matrix (Achievement of outcomes against End-of-project Targets)***

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Project Strategy** | **Indicator (based on Project Results Framework)** | **Baseline Level****(based on the PRODOC)** | **Level in 1st PIR (as self- reported on 30 June, 2015)** | **End-of-project Target (Based on the PRODOC)** | **Midterm Level & Assessment** | **Achievement Rating** | **Justification for Rating** |
| **Objective:** To strengthen the climate monitoring capabilities, early warning systems and available information for responding to climate shocks and planning adaptation to climate change in Zambia. | Indicator 1: Capacity as per capacity assessment scorecard. | Average capacity scorecard rating of 80across men and women | ZMD's capacity score has increased from 80 to 105 out of 171. | Capacity scorecard rating is increased to an average of171for both men and women | Capacity self-assessment Scorecard of ZMD in July 2015 increased to a score of 105 of the total of 171, from the average of 80 at baseline. However, the DMMU score in July 2015 was only 77.  On target to be achieved | **S** | The project objective was not yet achieved and no significant progress or impact can be noted, yet. Achievement of the end of project targets at the time of the MTR evaluation was well under 50%. However, following the recently finalized procurement of the main equipment, and its expected installation in this term, the project is now on good track for enabling significant progress during the first 2 terms of this year. It can be realistically expected that at least 50% of the end of project targets would be achieved by mid-2016, with significant impact to follow. The project is, therefore, expected to achieve its objectives by project end. |
| Indicator 2: Domestic finance committed to ZMD and DMMU to monitor and warn against extreme weather and climate change. | Annual budget of: US$322,680 allocated to ZMD; and US$ 614,057 allocated to DMMU. | There has been a 50% increase in domestic finance allocated to ZMD for early warning systems from a budget of 322,680 USD | 20% increase 32 in annual domestic finance allocated to ZMD and DMMU to monitor and warn against extreme weather and climate change. | According to information received from ZMD, there was only nominal increase in local currency, but not in real terms as reflected in the equivalent USD. DMMU overall implemented budget in 2014 was 13,803,294 Kw (with 593,162 allocated for EWS), 12,107,303 Kw in 2015 (593,162 for EWS), and 1,055,000 Kw so far (Jan-Feb) in 2016 (10,000 for EWS). Domestic finance for CI/EWS is still significantly insufficient for enabling sustainable information collection and dissemination capacity.  On target to be achieved |
| **Outcome 1: Enhanced capacity of Zambia Meteorological Department to monitor and forecast extreme weather and climate change.** | Indicator 1: Percentage of national coverage of climate monitoring network (fully operational) | Automatic: 0% of districts; Manual: 0% of districts | 32 AWS stations have been installed through co-financing of other projects (SASSCAL, COMESA and the UNDP-GEF Climate Change Adaptation project with MAL). Thereby, current % of districts with AWS is 31%, and expected to increase to 58% with the installation of 28 AWS through the CI/EWS project  Manual stations: 18% of the districts | Automatic: 29% of districts;  Manual 37% of districts | The main weakness of the project's implementation is that so far the installment of the AWSs and the rehabilitation of manual stations was delayed, due to delays in the procurement process. At the time of the MTR process only one AWS was installed through this project (in Munyumbwe) and one manual station rehabilitated (in Chipepo), both in Gwembe District, and with rather limited impact, so far. Nevertheless, national coverage was increased to 31% of the districts having AWS, with the baseline number of AWSs increased nationally from the baseline of 2 to 32, through the baseline/co-finance projects.  On target to be achieved | **MS** | Some moderate progress, was made towards achieving Outcome 1. Both national and local CI/EWS capacities were somewhat enhanced, however, due to the implementation limitations specified hereby, progress was slower than anticipated at project design. |
| Indicator 2: Frequency data transmission and reception. | At present, the 2 AWSs transmit data which is sent daily  Majority of manual stations record data at (GMT) 06h00, 09h00, 12h00, 15h00. However, provision to ZMD does not occur daily. | At present, 31out of 32 existing AWSs (from co-financing projects) transmit data every 15 minutes and 19 manual weather stations transmit data daily. | 30 AWSs (28 new, 2 rehabilitated), transmitting continuously  39 rehabilitated manual stations collecting data at the synoptic hours of (GMT) 06h00, 09h00, 12h00, 15h00, 18h00 and 00h00, and sending to ZMD daily. | The target increase in frequency of data transmission was also not yet achieved through this project. However, the support provided through the other projects have resulted with significantly improved frequency of data transmission, through the installed AWSs, providing data at 15-minute intervals, 24 hours per day, and with much improved accuracy of the weather forecasts provided. At national level, forecast is now provided daily, with no failure and radio forecast updates are being provided regularly: daily, weekly, and every 10 days. This progress, however, cannot yet be attributed to the CI/EWS project.  On target to be achieved |
| **Outcome 2: Efficient and effective use of hydro-meteorological and environmental information for making early warnings and long-term development plans.** | Indicator 1: Percentage of population in Chipata (*later replaced with Mambwe*), Gwembe and Sesheke Districts with access to improved climate-related flood and drought warnings (disaggregated by gender). | 0% of men  0 % of women | The CIEWS project has conducted awareness-raising activities. According to preliminary results from a recent national survey conducted by the CIEWS project, approximately 30% of those surveyed, in 30 districts across the country, now apply weather and climate information in planning their livelihood activities, particularly fishing and farming. Information is disseminated through radio, television, print media and the internet. | 100 % of men;  100 % of women. | Percentage of population receiving improved climate information and early warning, through this project, increased so far moderately only in Gwembe district but not yet in Sesheke and Mambwe districts.  On target to be achieved | **MS** | Some moderate progress was made towards achieving Outcome 2. For the same reason that most of the AWSs were not yet installed and most of the manual stations were not yet rehabilitated, through this project, its contribution to increased percentage of the population in the target districts with improved weather information and early warnings, is also very limited and still far from the target. Nevertheless, communities' awareness to the importance of forecasts and early warning for short term and seasonal planning, was increased from the baseline. |
| Indicator 2:  Development frameworks and disaster policies that integrate climate information in the formulation. | The Sixth National Development Plan highlights the need to develop climate change mainstreaming and response strategies, but not the need for improved information to inform the strategies. | The Seventh National Development Plan is under development and its theme will be inclusive green growth, in recognition of the impacts of climate change. Currently, there is training for planners in all vulnerable key sectors on climate change mainstreaming and national adaptation planning. | At least the Seventh National Development Plan to incorporate the availability of climate information into planning for the five year period. | Climate information integration into national development frameworks and disaster policies is under way. Climate change has been mainstreamed in the revised Sixth National Development Plan, and climate information is being integrated into the formulation of the Seventh National Development Plan (expected to be published this year, with planning for 5 years). Climate information is also integrated in the DMMU National Disaster Management Policy, 2015, and is being integrated into the formulation of the National Climate Change Policy and National Adaptation Plan. Early warning information is integrated into the Intended National Determined Contributions. Climate information use is mainstreamed in the Agriculture Policy.  On target to be achieved |
| Indicator 3: Sector-specific, tailored climate information packages that integrate climate risks. | ZMD, in collaboration with the relevant line ministries, produces sector-specific forecasts for agriculture, aviation, water and health. | ZMD is providing tailored information to the aviation sector (daily flight forecasts) and agricultural  sector (10-day crop weather bulletins, available on ZMD website, and distributed to farmers). | Sector-specific, tailored climate information packages produced for agriculture, aviation, water, health36, tourism, construction, road and rail transport, and energy | Sector specific tailored climate information packaging, integrating climate risks, is provided so far only to two sectors: agriculture (10-day crop weather bulletins; agro-meteorological calendar) and aviation (daily flight forecasts). ZMD interface with the agriculture sector and MAL is being improved, mainly through the UNDP-MAL project. Several districts are using information for agriculture and forestry sectorial planning and policies at district level.  On target to be achieved |

**Indicator Assessment Key**

|  |  |  |
| --- | --- | --- |
| Green= Achieved | Yellow= On target to be achieved | Red= Not on target to be achieved |

* + 1. ***Progress towards achieving the project objective and outcomes***

*To what extent have the expected outcomes and objectives of the project been achieved thus far?*

***Progress towards achieving the project Objective*** *- Is the project realistically expected to achieve its objective by project end, within the defined timeline?*

The project objective: “To strengthen the climate monitoring capabilities, early warning systems and available information for responding to climate shocks and planning adaptation to climate change in Zambia”, was not yet achieved and no significant progress or impact can be noted, yet. Achievement of the end of project targets at the time of the MTR evaluation was well under 50%. However, following the recently finalized procurement of the main equipment, and its expected installation in this term, the project is now on good track for enabling significant progress during the first 2 terms of this year. It can be realistically expected that at least 50% of the end of project targets would be achieved by mid-2016, with significant impact to follow. The project is, therefore, expected to achieve its objectives by project end. However, due to the initial delays in implementation, this achievement is conditioned with that an extension of at least 6, and preferably 12 months, would be approved and with some adaptations. Considering actual progress at the time of the MTR process, the rating for progress towards achieving the project objective should have been Moderately Satisfactory or even Moderately Unsatisfactory. This is also reflected in the rating of progress towards achieving the project outcomes, below. Nevertheless, the selected rating for progress towards achieving the objective is Satisfactory, since the main conditions to enable significant progress within this and the next term, are already in place (i.e. the equipment was already procured, and training and other facilitating activities are already in implementation and on-going).

***Rating for Progress towards Results: Progress towards achieving the Project Objective: Satisfactory (S)***

***Progress towards achieving Outcome 1****- Is ZMD's capacity to monitor, forecast and communicate weather and climate information enhanced?*

Some progress, thoughlimited, was made towards achieving Outcome 1: "Enhanced capacity of Zambia Meteorological Department to monitor and forecast extreme weather and climate change." Both national and local CI/EWS capacities were somewhat enhanced, however, due to the implementation limitations specified hereby, progress was slower than anticipated at project design. This is reflected through the indicators defined in the Project Document, as well as through other evaluative indicators, as detailed in the MTR Evaluative Matrix (Annex I).

Capacity self-assessment Scorecard of ZMD in July 2015 increased to a score of 105 of the total of 171, from the average of 80 at baseline. However, the DMMU score in July 2015 was only 77.

Technical capacity building of ZMD and partner agencies' national and local staff, is well under way. 3 people are receiving graduate studies (3 years) in climatology. 12 people are studying for a diploma in meteorology (3 years). 8 MAL officers managing automatic weather stations, have been trained in meteorological observation and interpretation for local farmers (through cooperation with the UNDP-MAL project). 22 ZMD district officers have undergone a refresher course in meteorological codes, compiling of climate information, and packaging of weather and climate information. 20 ZMD district officers were trained as enumerators for the CI/EWS national baseline survey, and thereby also trained to engage with communities on interpretation and application of climate information for end-users. 30 ZMD staff have received training in software applications for improved data management at the weather stations, and were provided with new high-capacity computer hardware. 10 people participated in a 2 days workshop on impact evaluation survey. 24 district meteorological staff participated in a workshop of CLIMAT reporting format. 2 technical advisor missions (of the CIRDA Chief Technical Advisor on Alternative Technologies, and of UNDP RSC Programme Specialist for Disaster Risk Reduction and Climate Change), have supported ZMD's capacity in Early Warning System design, and in assessing the equipment and staffing requirements for data rescue, respectively.

Reported ZMD budget for early warning systems at baseline was equivalent to 322,680 USD. The PIR reports on an increase by 50% in 2015. According to information received from ZMD, there was only nominal increase in local currency, but not in real terms as reflected in the equivalent USD. DMMU overall implemented budget in 2014 was 13,803,294 Kw (with 593,162 allocated for EWS), 12,107,303 Kw in 2015 (593,162 for EWS), and 1,055,000 Kw so far (Jan-Feb) in 2016 (10,000 for EWS). Domestic finance for CI/EWS is still significantly insufficient for enabling sustainable information collection and dissemination capacity. It was commented by key stakeholders and at the ToC workshop that while the national budget can indicate risks to sustainability, it was not an adequate indicator for evaluating this project's progress, as it is impacted by multiple unrelated factors.

The main weakness of the project's implementation is that so far the installment of the AWSs and the rehabilitation of manual stations was delayed, due to delays in the procurement process, resulting with that the main expected results and impact have not been achieved, yet. At the time of the MTR process only one AWS was installed through this project (in Munyumbwe) and one manual station rehabilitated (in Chipepo), both in Gwembe District, and with rather limited impact, so far. Therefore the indicators relating to climate monitoring, and coverage, have not been improved significantly through this project's inputs, so far. Nevertheless, national coverage was increased to 31% of the districts having AWS, with the baseline number of AWSs increased nationally from the baseline of 2 to 32, through support provided by the baseline/co-finance projects and other related initiatives. For the same reason, of delayed procurement and installment of the key equipment, the target increase in frequency of data transmission was also not yet achieved through this project. However, the support provided through the other projects have resulted with significantly improved frequency of data transmission, through the installed AWSs, providing data at 15-minute intervals, 24 hours per day, and with much improved accuracy of the weather forecasts provided. At national level, forecast is now provided daily, with no failure and radio forecast updates are being provided regularly: daily, weekly, and every 10 days. Nevertheless, for the specific objective of evaluating the progress towards achieving outcome 1 of this project, the contribution provided specifically through this project should be considered, and therefore the rating at the time of the MTR process is Moderately Satisfactory.

***Rating for Progress towards Results: Progress towards achieving Outcome 1: Moderately Satisfactory (MS)***

***Progress towards achieving Outcome 2****- Is hydro-meteorological and environmental information used efficiently and effectively for making early warnings and in preparing long-term development plans?*

Some moderate progress, though insufficient, was also made towards achieving Outcome 2: "Efficient and effective use of hydro-meteorological and environmental information for making early warnings and long-term development plans." Again, this is reflected through the indicators defined in the Project Document, as well as through other evaluative indicators, as detailed in the MTR Evaluative Matrix (Annex I).

For the same reasons stated above, that is, since most of the AWSs were not yet installed and most of the manual stations were not yet rehabilitated, through this project, its contribution to increased percentage of the population in the target districts with improved weather information and early warnings, is also very limited and still far from the target. Nevertheless, communities' awareness to the importance of forecasts and early warning for short term and seasonal planning, was increased from the baseline. Preliminary results from a recent national survey conducted by the CI/EWS project has revealed that approximately 30% of those surveyed, in 30 districts across the country, now apply weather and climate information in planning their livelihood activities, particularly fishing and farming. Percentage of population receiving improved climate information and early warning, through this project, increased so far moderately only in Gwembe district but not yet in Sesheke and Mambwe districts.

Interviews with stakeholders at the provincial, district, and local levels have demonstrated that local awareness and engagement in the target districts are growing, but need to be significantly strengthened and expanded. For example, while community members in and near the location of the installed AWS were relatively well informed and engaged in benefitting from the data provided, community members in a distance of less than 4 Km, were not even all aware that this AWS was installed. Most of the communities interviewed are well aware of the importance of receiving weather forecasts and early warnings, and where the information is available it is being used for short term and seasonal planning. Information is disseminated to communities through the MAL extension officers, distribution of the crop weather bulletins, national and local radio stations, television, print media, and the internet, and distributed among them by phone as well as through gatherings and other traditional measures. The DMMU has established a mobile phone-based alert platform on hazards, including climate shocks, and the DMMU Operational Manual provides procedures for disaster response at all levels. Initial negotiations have been held with two mobile network operators (Airtel and Zamtel) to develop a weather information platform.

Climate information integration into national development frameworks and disaster policies is under way. Climate change has been mainstreamed in the revised Sixth National Development Plan, and climate information is being integrated into the formulation of the Seventh National Development Plan (expected to be published this year, with planning for 5 years). Climate information is also integrated in the DMMU National Disaster Management Policy, 2015, and is being integrated into the formulation of the National Climate Change Policy and National Adaptation Plan. Early warning information is integrated into the Intended National Determined Contributions. Climate information use is mainstreamed in the Agriculture Policy.

Sector specific tailored climate information packaging, integrating climate risks, is provided so far only to two sectors: agriculture (10-day crop weather bulletins; agro-meteorological calendar) and aviation (daily flight forecasts). ZMD interface with the agriculture sector and MAL is being improved, mainly through the UNDP-MAL project. Several districts are using information for agriculture and forestry sectorial planning and policies at district level. Further strengthening of ZMD interface with the various sectors that require climate information, for the provision of sector specific tailored information packages, is still needed.

***Rating for Progress towards Results: Progress towards achieving Outcome 2: Moderately Satisfactory (MS)***

* + 1. ***Remaining barriers to achieving the project objective and outcomes: Risks and challenges identification and adaptive management***

The main identified bottleneck and risk for the project implementation was the significant delays in the procurement process of the AWSs and the equipment for the rehabilitation of the manual stations, resulting with delays in progress towards achieving the objective and outcomes, and as also reflected in most of the relevant pre-defined indicators. This bottleneck have been mitigated, with the technical support of the CIRDA with the procurement process through regional LTAs. The equipment was procured and delivered, and installation is planned to be implemented during the first two trimesters of 2016. However, this major delay in implementation have resulted with that for achieving the project objective and outcomes by project end, it would have to be extended by 6-12 months. It should also be noted that long delays in implementation of key activities, resulting with time lapse between initial awareness and consultation activities and the producing of on-ground impact, can have negative and at times irreversible effect on stakeholders' confidence and engagement, at all levels, and in particular at the local level.

While training for improved technical capacity is already under way, the key project partners have identified that it must be accompanied as well by substantial institutional capacity building, including among other activities, leadership and managerial training to ZMD leading staff and other key stakeholders, at both the national and local levels. Project adaptations to address this crucial barrier, were not integrated yet.

Other bottlenecks that were identified and addressed through adaptive management, but still need to be strengthened through further project adaptation, are: the need to strengthen inter-sectorial coordination, specifically as related to this project's implementation (it should be noted though that at the national level, this is done by ICCS on climate change issues and by DMMU on DRR issue); the need for improved coordination and synchronization with the baseline/co-finance project; and the need to strengthen the liaison with, engagement of, and information flow with, local stakeholders and end-users.

Several adaptive management changes, among them the change of one of this project's target districts, were made during implementation, mainly for improved synchronization with the baseline/co-finance projects, and thereby for improved synergy and joint impact. A change of extending the target sectors for PPP development was adopted in the Inception Workshop. It was also decided at the Inception Workshop that the National Climate Change Technical Committee (NCCTC) will act as the Project Board, thereby enhancing national ownership, synergy with other related projects and initiatives, and sustainability.

***Rating for Risks and challenges identification and adaptive management: Satisfactory (S)***

**4.3 Project Implementation**

*Has the project been implemented efficiently, cost-effectively, and been able to adapt to any changing conditions thus far? To what extent do project-level monitoring and evaluation systems, reporting, and project communication support the project’s implementation?*

Note: this section refers to the various aspects of project implementation. The aspects of identification and mitigation of risks and challenges and of project adaptive management, are referred to in section 4.2.2., above.

***4.3.1.* *Management Arrangements***

*Were the project's management arrangement and support of the partner organizations adequate for enabling efficient implementation?*

The Project is implemented under the National Implementation Modality (NIM), with ZMD being the Implementing Partner (IP). The NIM modality is normally the preferred option, since it promotes national ownership and sustainability. However, in this modality, as was the case in this project, any institutional, technical, management or other capacity limitations of the implementing partner, have direct impact on the project implementation.

The National Climate Change Technical Committee (NCCTC), comprised of senior government representatives from all climate-related sectors, functions as the Project Board/Project Steering Committee. The Board is responsible for making the management decisions of the project, and plays a critical role in monitoring progress, accountability and adoption of lessons learnt. Four meetings of the NCCTC/Project Board were recorded, for informing the key stakeholders' on progress and enabling their effective participation in the workplanning.

The Project team is very small, comprised only of the Project Manager, Project Administrative/Financial Assistant and Project Driver, in addition to part-time support of a ZMD Project focal point, who is also engaged at the same time in the on-going tasks of his regular work at ZMD. The small size of the project team also increases the responsibility of ZMD for the Project implementation, and thereby increases ownership and sustainability. However, it also results with that the team is mostly engaged in most urgent administrative, reporting, and other tasks required for enabling the Project smooth flow, in accordance with both the UNDP and Government rules, regulations and procedures. Thus, the percentage of time that the team, and especially the Project Manager, can dedicate to engaging in the technical aspects of the project, to assuring the technical quality of activities' implementation, and to engaging with stakeholders, and mainly at the local level, is rather limited.

This gap should be addressed either by strengthening the project team with the recruitment of local liaison staff, or by strengthening the ZMD local level technical staff, and possibly through increased multi-sectorial coordination (e.g., through engagement of MAL extension officers).

This Project enjoyed the good leadership of a dedicated and capable manager, and the termination of her work at this critical stage of implementation, can have significant negative impact. At the time of the MTR process, the project was in its second month without a manager. The recruitment of a new full-time Project Manager is therefore critical and urgent.

As requested by ZMD, the UNDP CO provides important and effective support in facilitating the project implementation, and especially in reducing the administrative and procedural burden of the project team and ZMD, thus enabling their increased engagement in the technical aspects of implementation. The UNDP CO provides further support and guidance with project coordination, workplanning, recruitments, procurements, and identification and facilitation of training activities and technical consultancies. The UNDP CO support was considered by partners as an effective, efficient and essential contribution.

The PRODOC provides detailed guidance on project management arrangements and a clear Project Organization Structure organogramme. However, several key stakeholders have commented that nevertheless, the delegation of authority and reporting flow between the project team, ZMD, and UNDP CO was not clear and straightforward enough. As an example, it was mentioned that at times the project team received different guidance from the two main partners, and especially that there were difficulties in obtaining timely the required signed authorizations for enabling smooth flow of activities' implementation. It was further mentioned that the combination of the rather complex procedural requirements of UNDP and challenges related to the delegation of authority flow within the ZMD, also acted at times as a barrier to smooth project implementation.

***Rating for Management Arrangements: Moderately Satisfactory (MS)***

***4.3.2. Work planning and Workplans implementation***

*Have the project and individual activities been implemented in line with the defined timeframe and budget, and in accordance with the Annual Workplans and Budgets?*

As evident in the project AWBs and reports, and as reported by all key stakeholders, Annual Workplans and Budgets (AWBs) are well based on the results framework and on the total budget and workplan as defined in the PRODOC. AWBs were further discussed, refined and approved in Project Board meeting, integrating the inputs of key stakeholders. Activities were in general implemented effectively and efficiently, within the timeframe and budgets indicated in the AWBs. The abovementioned delays in implementation of key activities were the result of unforeseen challenges in the procurement process of the main equipment, and of procedural aspects, and should not be attributed to failure in the workplanning or in the efficiency of the workplan implementation.

***Rating for Work planning and Workplans implementation: Highly Satisfactory (HS)***

***4.3.3. Finance and co-finance;*** *financial planning and management*

*Was the project's financial management adequate?*

*Project GEF finance and Co-finance information:*

Total GEF Grant: US$ 4,100,000

Total UNDP CO-financing (cash): US$ 400,000

Total Co-financing (as planned in CEO endorsement request, and including in-kind): US$ 12,563,907.00

*2014 and 2015 planned budget (AWB), funds spent (CDR) and delivery (% spent of planned budget):*

2014: Planned budget (AWB): US$ 914,873; Spent: 402,566.58 (CDR)

Delivery: 44%

2015: Planned budget (AWB): US$ 1,936,672; Spent: 1,322,448.84 (CDR)

Delivery: 68%

Financial information received is limited and doesn't allow for thorough evaluation of the project's financial management. The quarterly and annual reports provide summary financial information, but not detailed expenditure information. An audit was not implemented yet. Delivery in 2014 was only 44% of the planned budget. However, low delivery is typical of most projects' first year of implementation, and in this project it also reflects the delays in the planned procurement of the main project equipment. Delivery in 2015 was 68% of the planned budget, which is considered reasonable, reflecting the implementation of the major procurements and other key activities. On this basis, the financial planning and management is rated here as Satisfactory. However, the planned audit would be a better tool to evaluate the financial management in detail. The co-finance is mostly in-kind of ZMD, but mainly based on the baseline/co-finance projects, as listed in detail in the PRODOC.

***Rating for Finance and co-financing; financial planning and management: Satisfactory (S)***

***4.3.4. Monitoring and evaluation framework and reporting***

*Were the project monitoring and evaluation plans implemented satisfactorily and did they support the project's implementation? Were the project reports submitted timely and satisfactorily and did they support the project's implementation?*

The Project Monitoring and Evaluation plan, as detailed in the PRODOC, is being implemented timely and satisfactorily, and is being used to improve the project's implementation. The Inception Workshop was implemented in April 2014, 2 months after the Project start, as planned. The Inception Report is attached as an Annex to the PRODOC. Several key adaptive management changes were approved at the Inception Workshop to support project implementation and sustainability (further detailed in section in section 4.2.2.). Quarterly reports were elaborated timely, and disseminated to key stakeholders, providing essential information on project progress and the next quarter workplan (Project Trimestral and Annual Progress Reports – 2014 (Q1&Q2, Q3, Annual); 2015 (Q1, Q2, Q3). Annual Workplans and Budgets (AWBs) were elaborated timely by the project team and reviewed and adopted by the Project Board. One APR/PIR was elaborated, approved by the national project partners, the UNDP CO and the UNDP Regional Technical Adviser, and submitted to the GEF on July 2015. The APR/PIR combines UNDP and GEF reporting requirements, in monitoring progress made, risks and mitigation measures, lessons learned and financial information, since project start. Field visits of UNDP staff, of thematic consultants, and of CIRDA experts, were reported in mission and technical reports with detailed recommendations, supporting the project implementation. (Baseline Study for CIEWS Project, October 2015; UNDP-GEF RTA Mission Report, November 2015; CIRDA Project Mission Reports to Zambia, and related Technical Reports, March 2015, July 2015). Reports were also provided on 2 exchange training visits of ZMD staff, through the CIRDA Project. A full list of project reports and documentation is detailed in Annex IV. The MTR mission was implemented in February 2016, and the MTR Evaluation is being reported in this report.

***Rating for Monitoring and Evaluation framework and reporting: Highly Satisfactory (HS)***

***4.3.5. Stakeholders' engagement***

Most key stakeholders were consulted at the project's design phase, as detailed in the Project Document. However, several essential stakeholders at national level and mostly at the local level, have reported that they were not consulted or involved in the project design. Further activities for strengthening stakeholders' engagement and enabling public consultation, were implemented. Especially the installment of the first AWS in Gwembe District was accompanied by awareness activities with the surrounding communities, and their resulted engagement was notable during the MTR field mission. The PRODOC states that "On-going public consultation will be critical for successful implementation of the project." However, as the small project team is mostly engaged in essential activities at the central level for enabling the smooth project implementation, no on-going permanent consultation process with provincial, district and local stakeholder, is taking place. The critical need for re-enforcing local stakeholders' engagement was evident in interviews with communities in Gwembe District that were not in the immediate vicinity of the installed AWS or of weather stations installed through other initiatives. Similarly, the project could benefit significantly in refining activities and methodologies following consultations with local communities, especially as related to information dissemination to end-users. At the national level, the decision at inception that the NCCTC would act as the Project Board, have ensured the informing of key stakeholders on Project progress, and their engagement in decision making re project workplanning. However, it seems that while several sectors are highly engaged, several other key sectors remained uninvolved. The project could certainly benefit from the inclusion of activities aimed at strengthening stakeholder's engagement, at both the national and local levels.

The meeting with community members in Namapande, Kazangula District, was especially revealing. This community has benefitted from access to CI/EWS information, interpreted to local farming needs, through the UNDP-MAL Project. The evident high level of engagement and support demonstrated a target that the CI/EWS project can achieve by project end, through increased local level focus in its continued implementation.

***Gender considerations***

During the MTR mission, and especially in meetings with community members, special attention was given to that both men and women would participate in the consultation meetings and would have the opportunity to express their views. In general, it seems that in communities that have access to information, both men and women access it. However, it seems that in some cases the men have the first access to the information received from ZMD, normally through extension officers or radio, and they disseminate it the women, who then use social gatherings to disseminate it further among them. The timely access of women to information is critical, since they are responsible to most farming activities, however, it seems that the abovementioned information flow within a household or a community is rather effective and quick enough. Gender equality at the district and national levels are beyond the context of this project, however, it was interesting to note, that it seemed that gender equality in occupying senior positions is much better addressed at the district level (in the two districts visited) than at the national level.

As detailed in the PRODOC, the Project design was gender sensitive. The demonstration sites for installing community-based EWSs were selected based on a gender sensitive vulnerability analysis, targeting communities in districts with most vulnerable women populations. The provision of climate data by the Project was expected to be of great benefit especially to women, by providing useful information for agricultural activities. The interviews with community members during the evaluation mission have confirmed that both men and women are recipients of the climate information provided, and both derive useful information for immediate, short-term, and medium-term planning of agricultural activities. It is further suggested that the implementation of the data dissemination component of the Project would include more in-depth analysis of the gender-specific aspects of data dissemination forms, and would secure that information would be timely provided to both men and women. Moreover, gender balance should be integrated among the criteria for the selection of the recipients of training through the Project.

***Rating for Stakeholders' engagement: Moderately Satisfactory (MS)***

***4.3.6. The Regional context*** *(support through the Regional CIRDA Project)*

The CI/EWS project of Zambia is among 11 country-led projects supported by the regional CIRDA Project (Climate Information and Resilient Development in Africa). The CIRDA provides technical capacity support through experts consultancy missions in Zambia, on matters related to hydro-met technologies, data management and collection, private sector engagement and communications, and through participation of ZMD staff in high-level technical workshops and in regional and international exchange visits. It also supported the identification and procurement of the AWSs and other essential equipment. Specifically CIRDA's support to Zambia consisted of the following: 3 days regional workshop for Building a Sustainable Climate Change Adaptation and Economic Development Plan with focus on building public-private partnerships (PPPs) to generate revenue and improve public service delivery (3 days); 3 days regional workshop for a Systems Approach to Designing, Implementing and Utilising Observing Networks; 2 days regional CIRDA Inception Workshop with discussions between the partner countries about country-specific needs and expectations; an exposition presenting innovative technologies; a CIRDA expert mission for PPP discussions with the active mobile operators in Zambia on AWS hosting possibilities and information distribution; an expert mission to provide technical support to the project's 2015 procurement plan, setting priorities for technology acquisition, and training of the project manager on critical topics related to engaging the mobile telecom sector; support in implementing cost-effective procurements through developing regional Long Term Agreements (LTAs) with suppliers of met equipment and services; providing an Information Sharing Platform for communication and knowledge sharing between the 11 countries through the CIRDA website and blog; support of a communications expert who has been distributing weekly newsletters to approx. 700 stakeholders, donors and development practitioners; expert support is being provided in implementing a market assessment that explores revenue generating opportunities through tailored weather information products; expert technical support with the assessment of Zambia's hydro-met data digitization needs; technical support with the design of impact surveys as well as the compilation of ToRs for the consultants performing M&E activities.

All key stakeholders were of the opinion that the CIRDA provides essential technical and capacity building support to the national CI/EWS project, and that it would be desirable for achieving the project results, if the regional technical support, cooperation and exchange, would continue and be expanded.

***Rating for the Regional context (support through the Regional Project): Highly Satisfactory (HS)***

***4.3.7. Communication***

*Was the project communication strategy designed and implemented satisfactorily and did it support achieving the project's objective and outcomes?*

A comprehensive Communication Strategy for the CIEWS Project was elaborated, through a consultancy to provide communications support, including consultation with key stakeholders and the integration of their inputs. The communication strategy is thorough well designed. However, it is recommended here that the component relating to information dissemination at the local level, would be refined through further in-depth consultation process with communities, with possibly diverse and specific tailored information dissemination solutions, as relevant. The final draft was submitted by the national consultant (Just Click Technologies Zambia Limited) and adopted on January 2016, just before the realization of this MTR mission. Therefore, it would be possible to evaluate the implementation of the communication strategy and its support to achieving the project's results, only through the final evaluation of the project. Nevertheless, at this stage the communication strategy seems to be on good track for yielding positive impact by Project end. Some communication activities were already implemented, and awareness material was in advanced production phase at the time of the MTR mission. Communication with the media must also be strengthened for enhancing awareness and visibility and for facilitating information dissemination.

***Rating for Communication: Satisfactory (S)***

**4.4. Sustainability**

*To what extent are there financial, institutional, socio-economic, and/or environmental risks to sustaining long-term project results?*

***4.4.1. Identification and Management of risks to the sustainability of Project results***

*Financial risks to sustainability: Can sufficient financial sustainability be established before project end, to secure continuity?*

The financial risk was indicated by key stakeholders as a prominent risk to sustaining the project results and securing their continuity. As reported by ZMD, the budget at baseline was the equivalent in national currency (Kwacha) of 322,680. According to ZMD information, the nominal budget in local currency has increased, but not the available funds for climate information and early warning systems, in real terms as reflected in the equivalent USD. DMMU overall implemented budget in 2014 was 13,803,294 Kw (with 593,162 allocated for EWS), and 12,107,303 Kw in 2015 (593,162 for EWS). Both ZMD and DMMU budgets for CI/EWS are still significantly insufficient for enabling sustainable information collection and dissemination capacity. For project results to be sustainable after the project end, financial sustainability must be strengthened at both national and local levels, through national budgets and other sources, including agreements with private sector. An adequate committed permanent annual government budgets is essential for enabling ZMD and DMMU to maintain the infrastructure and equipment, and employ the staff trained, through this project, on permanent basis, for on-going CI/EWS monitoring and information dissemination. The permanent budget can be partly based on securing funds through establishing agreements with private sector that would enable ZMD to profit from tailored information packages. While it is essential to establish permanent funding for on-going maintenance and reading of CI/EWS and information dissemination, the expansion, strengthening and increased coverage, can rely on further short-term interventions, as the baseline/co-finance projects and others to be developed.

*Socio-economic risks to sustainability: Can adequate socio-economic sustainability be secured before project end to enable continuity?*

All relevant stakeholders at national level and the majority of local level stakeholders, consulted during the MTR process, are well informed and supportive of the project objectives. Increased focus throughout implementation on strengthening and expanding local stakeholders' sensitization and engagement, and on developing and implementing best mechanisms for information dissemination to end users, can create socio-economic sustainability by project end, to enable continuity of its results.

*Institutional risks to sustainability: Can institutional capacity be adequately established before project end, to secure sustainability of achieved project outcomes?*

A number of key stakeholders have indicated the institutional capacity as a major risk for the sustainability of the project results. The adoption of adequate policy and legal frameworks has initiated and needs to be further supported and strengthened. Institutional and managerial capacity building of ZMD and of key local level stakeholders, as well as strengthening inter-sectorial coordination, have been identified as essential for securing the required institutional capacity for securing continuity and sustainability. Relevant activities for this effect can be introduced within the existing project framework.

*Environmental risks to sustainability:* *Are environmental risks identified and mitigated?*

Environmental risks and local impact on intensifying climate risks are still prominent. For enabling sustainability, it is essential that the project would be well integrated into the overall national mitigation and adaptation strategies. Sensitization of stakeholders, for improved CI/EWS monitoring and information dissemination and use, must be accompanied with general sensitization on climate risks, impacts, and mitigation measures, at all levels.

***Rating for Sustainability*** ***(Identification and Management of risks to the sustainability of Project results): Moderately Likely (ML)***

***Overall rating of Project Performance: Satisfactory (S)***

**5. Conclusions and Recommendations**

* 1. **Conclusions and summary of findings**
     1. ***General summary of conclusions***

The overall rating of Project performance is satisfactory. The project addresses critical national and local needs. It has a good potential for having significant impact, in supporting resilience of Zambia in general, and of vulnerable populations in the target districts in particular, through improved access to, and use of, climate information and early warnings on climate shocks. Its design is in line with national policies and streamlined with other national and regional initiatives, addressing the same needs. The project is well designed for achieving its expected results, through a simple set of activities. Progress towards results is rather limited, so far, due to a long initial delay in implementation of most key activities, caused by the delay in procurement of the essential infrastructure and equipment. However, the project implementation is now on good track. For enabling the project to achieve its objective and outcomes by project end, an extension will be required, to compensate for the initial delay. Nevertheless, considering that the causes of delay were mitigated, at this stage the potential of the project to achieve its expected results, if an extension would be approved, is very high. Incorporating lessons learned, and stakeholders' considerations, it is also recommended that some adaptive changes would be introduced into implementation, especially as related to strengthening institutional capacity, inter-sectorial coordination, impact forecasting capacity, local stakeholders' sensitization and engagement, and securing sustainability. Sustainability of project results can be achieved, if the identified risks would be timely and effectively mitigated.

* + 1. ***Project strategy***
* The project is relevant to national and local priorities and addresses critical national and local needs, in supporting resilience and adaptation, through improved access and use of climate information and early warning on climate shocks;
* The project supports national ownership, through its ZMD-based management arrangements, as well as through stakeholders' participation in project design (though only partially), and through activities focused on capacity building;
* Local ownership is being addressed but needs to be strengthened;
* The project was designed in line with national policies, strategies and programmes, and is streamlined, though insufficiently, with other projects aimed at promoting the same goals;
* The Results Framework/Logframe is well designed, through a simple approach with straightforward and mostly relevant outputs and activities that logically lead to achieving the project objective and outcomes.
* However, the generating of significant on-ground impact, requires some activities' revision, especially as related to strengthening institutional capacity, national impact forecasting capacity, inter-sectorial coordination, and refined selection, through a participatory process, of mechanisms for on-ground information dissemination and use;
* Risks identification and mitigation as indicated in the PRODOC, is mostly relevant, but needs to be revisited and improved;
* The project is on good track in mitigating main challenges and bottlenecks encountered;
  + 1. ***Progress towards results***
* The project's progress towards achieving its objective and outcomes was so far limited, mainly due to the delay in implementation of key activities, following a delay in the procurement of the main equipment;
* However, the project is on good track now, following the mitigation of the main identified bottleneck;
* The project is now expected to achieve its objective and outcomes, but an extension of 6-12 months and some adaptive changes will be needed;
* National and local CI/EWS capacities were somewhat enhanced, but so far insufficiently;
* National CI/EWS finance (ZMD, DMMU) nominal increase is insufficient to enable sustainable information generation and dissemination;
* National coverage of weather stations is expected to increase through the implementation of key project activities (mainly the installment of AWSs and rehabilitation of existing manual weather stations), during the first two terms of this year;
* Frequency of data transmission has improved mostly through progress in other related projects, and is expected to be further enhanced through this project, during the first two terms of this year;
* Technical capacity building of ZMD staff and key partners, is under way;
* Local level awareness and engagement is growing, so far mainly through the impact of other related project, but needs to be improved and expanded, through more focus on on-ground activities, to be based on a participatory approach;
* Information dissemination to end users was somewhat improved but needs to be approved, following the installation of the weather stations, and based on expanded consultations with local stakeholders;
* Climate information integration into national policies is notable and under way;
* Communities with access to climate information, use it for short term and seasonal agricultural planning, as well as for planning other activities, such as fishing;
* Sector specific climate information packaging is so far provided to only two sectors (agriculture, aviation);
* The main identified bottleneck and risk for the project implementation was the significant delays in the procurement process of the main equipment, with secondary negative impact on stakeholders' confidence and engagement. The procurement bottleneck have been mitigated, with the technical support of the CIRDA, and installation is planned to be implemented during the first two trimesters of 2016;
* While training for improved technical capacity is already under way, the key project partners have identified that it must be accompanied as well by substantial institutional capacity building, including leadership and managerial training to ZMD leading staff and other key stakeholders, at both the national and local levels. Project adaptations to address this crucial barrier, were not integrated yet;
* Several adaptive management changes, among them the change of one of this project's target districts, were made during implementation, mainly for improved synchronization with the baseline/co-finance projects, and thereby for improved synergy and joint impact;
* A change of extending the target sectors for PPP development was adopted in the Inception Workshop. It was also decided at the Inception Workshop that the National Climate Change Technical Committee (NCCTC) will act the Project Board, thereby enhancing national ownership, synergy with other related projects and initiatives, and sustainability;
* Other bottlenecks that were identified and addressed through adaptive management, but still need to be strengthened through further project adaptation, are: the need to strengthen inter-sectorial coordination; the need for improved coordination and synchronization with the baseline/co-finance project; and the need to strengthen the liaison with, engagement of, and information flow with, local stakeholders and end-users.
  + 1. ***Project Implementation***
* The management arrangements of the project promote national ownership, with ZMD as the implementing partner under the National Implementation modality, and with the National Climate Change Technical Committee acting as the Project Board;
* The project management is based on a very small project team, and therefore with capacity to engage in on-ground activities. This situation was aggravated by the absence of a project manager since the end of 2015, and by ZMD's limited institutional capacity and human resources to engage in this project;
* The Project management needs to be strengthened urgently, through the accelerated recruitment of a new project manager. A gap was identified also in the project management at the local level. It was suggested that a liaison person/s for the district and local levels would be either recruited through this project or, preferably, allocated by the Government;
* The UNDP CO provides important and effective support in facilitating the project implementation;
* It was reported that challenges related to the delegation of authority and procedures, within the ZMD, as well as between the project team, ZMD and UNDP CO, acted at times as a barrier to smooth project implementation;
* Annual Workplans and Budgets (AWBs) are well based on the results framework and in turn, on the PRODOC. They are further discussed, refined and approved in Project Board meetings, integrating the inputs of key stakeholders;
* Activities were in general implemented effectively and efficiently, within the timeframe and budgets indicated in the AWBs, with the exception of delays that were the result of unforeseen challenges in the procurement process of the main equipment;
* The quarterly and annual reports provide only summarized financial information; Delivery in 2014 was only 44% of the planned budget, reflecting mostly the delays in the planned procurement of the main project equipment. Delivery in 2015 was 68% of the planned budget, following the implementation of the major procurements and other key activities;
* Detailed financial management of the project would be evaluated through an audit (not yet implemented, but in planning for implementation this year);
* The co-finance is based mostly on in-kind support of ZMD, and of the baseline/co-finance projects;
* The Project Monitoring and Evaluation plan, and the delivery and dissemination of reports, as detailed in the PRODOC, is being implemented timely and satisfactorily, and is being used to improve the project's implementation;
* At the national level, several key sectors are highly engaged, but several others remained mostly uninvolved. Activities aimed at strengthening stakeholder's engagement were implemented, at both the national and local levels;
* Strengthening of stakeholders' engagement is recommended, and especially through on-going permanent consultation process and information flow at the provincial, district and local levels;
* The project could benefit significantly from refining activities and methodologies following further consultations with local communities, especially as related to information dissemination to end-users;
* In communities or households that have access to climate information, it is distributed to all and no gender segregation was noted;
* The CIRDA regional project provides significant and essential technical and capacity building support to the CI/EWS project in Zambia;
* A comprehensive Communication Strategy was elaborated, disseminated to key stakeholders, revised, and approved, but not yet implemented. Some communication and awareness activities, however, have been initiated successfully;
  + 1. ***Sustainability***
* Sustainability of projects results can be achieved with reasonable likelihood, if the identified risks would be mitigated;
* For enabling sustainability of the project results, national (ZMD, DMMU) financial capacity for CI/EWS must be secured to maintain the weather stations, and to collect, interpret, package and disseminate weather information, including the employment of staff trained through this project, through a combination of increased annual national budget, and other sources, including agreements with private sector;
* All relevant stakeholders at national level and most local level stakeholders, are well informed and supportive of the project objectives. However, for securing sustainability, local stakeholders' sensitization and engagement, should be strengthened, expanded, and based on a permanent consultation process and information flow;
* Institutional capacity was indicated as a major risk to the sustainability of the project results, with focus on aspects of streamlining policies, building institutional and managerial capacity of ZMD and other key stakeholders at national and local levels, including possibly the DMMU, INCCS, the pilot districts' District Disaster Management Committees, and local leadership at the installed AWS and of the local Radio Station/s' Board/s, in the pilot districts, as well as strengthening inter-sectorial coordination;
* For enhancing sustainability, it is essential that the project would be well integrated into the overall national mitigation and adaptation strategies. The sensitization of stakeholders for CI/EWS monitoring and information dissemination and use, must be accompanied with general sensitization on climate risks, local impact, and mitigation measures, at all levels.

**5.2. Recommendations**

***5.2.1. Recommendations for the Project implementation***

**Recommendation 1: Urgent recruitment of the new Project Manager**

The urgent recruitment of the new Project Manager is critical for enabling smooth continuation of project implementation. It is especially urgent at this stage, in order to accelerate the installing of the AWSs and rehabilitation of the manual stations, and to recover the long delays in the procurement process. Acceleration of implementation is essential for improved local level impact and stakeholders' engagement.

**Implementer:** UNDP CO and ZMD

**Suggested timeframe:** Immediate

**Recommendation 2: No-cost extension of the Project by at least 6 months, and preferably by 12 months**

The project implementation has suffered significant delays due to the unforeseen long delay in the procurement and delivery of the key project infrastructure and equipment. Further delay is caused by the absence of a project manager since end 2015, at the time that the equipment was delivered. Moreover, the elections, expected this year, and the resulted limited capacity of movement throughout the country during around 2 months, are expected to cause additional delay in implementation of on-ground activities. It is suggested that the project team with UNDP CO and key stakeholders would analyze the time and budget required to assure the implementation of planned outputs and activities by project end, and would agree accordingly on the actual extension time required. The extension should be at least 6 months, but preferably 12 months, if the existing budget can enable it. The extension is essential for enabling achieving the project results and mitigating risks to sustainability, by actual project end.

According to the new rules regarding project extensions, they are generally not allowed unless a strong case can be made that significant progress will be made in the final years of project implementation. In the case of this Project, it is recommended that the extension would be considered favorably. That is, considering that the causes of the initial delays in implementation were well identified and mitigated, and that an extension could partially compensate for these initial delays, and would be essential for allowing the Project to achieve its defined objective and outcomes, as well as to enhance their sustainability, by Project end.

**Implementer:** UNDP CO preparation of proposal for approval by UNDP-GEF Executive Coordinator

**Suggested timeframe:** According to UNDP rules and procedures

**Recommendation 3: Strengthening consultation with, and engagement of, local level stakeholders, and allocating liaison person/s for the project at the district level**

It is recommended that the Project implementation would be strengthened at the local level, for enabling significant on-ground impact. It is suggested that the stakeholders' engagement strategy, as detailed in the PRODOC, would be adhered, and in particular the statement "on-going public consultation will be critical for successful implementation of the project". It is further recommended that implementation of activities at the local level, and especially the selection of adequate mechanisms for information dissemination to end-users at the target districts, would be refined through an in-depth participatory consultation process with local community members and other local level stakeholders. As was noted through the MTR consultation process, different means of communication may be best option in different locations in the target districts area, and it would be useful to refine and adapt specific mechanisms of information dissemination and flow, where and as relevant.

In order to strengthen the consultation and engagement with stakeholders at the district and local levels, it is essential that at least one person on at least half-time basis, in each target district, would be nominated for this task. As noted by the UNDP CO and ZMD, employing district liaison people by the project would not be possible under the existing budget, and would not be sustainable after Project end. It was therefore suggested that ZMD district officers and the manual weather stations operators, would be trained, equipped and allocated by ZMD for this task, on part-time basis, and with the on-ground help of the MAL extension officers. Together, they could act as on-ground liaison persons for the project implementation and after the project end continue in leading permanent on-ground consultation process, as well as the forecast, and information flow. Nevertheless, essential requirements for their operation should be addressed initially by the Project (e.g., petrol or bicycle, as relevant, etc. ), with a plan set for these costs to be addressed by ZMD from Project end. The liaison persons can also help in packaging useful information for communities, including early warning on risks, as well interpreted information for enabling planning agriculture, fishing and other activities. For this effect, it was also suggested to support exchange visits and peer training of farmers from communities in target areas of the different projects.

**Implementer:** ZMD to indicate and nominate an on-ground liaison person in each target site, in coordination with MAL and the District officers;

Project team and ZMD to develop detailed ToRs for the site liaison persons operation;

ZMD with UNDP CO and Project team to analyze essential requirements for the operation of the site liaison persons, and to revise the project budget to enable addressing these needs.

**Suggested timeframe:** initiate immediately, finalize nomination of the site liaison people and of creating the basic conditions for their operation by end of the 3rd term of 2016.

**Recommendation 4: Adding activities for institutional capacity building of key stakeholders, and for strengthening inter-sectorial coordination**

It was strongly recommended by several key stakeholders, that in order to enable the project to achieve its objective and outcomes and to maintain their sustainability, it is essential to include activities for institutional capacity building. That is, in additional to the technical capacity building already well addressed through the project. Institutional capacity building should focus mainly on ZMD, but address gaps also in other key stakeholders, especially at the local level. Furthermore, the inter-sectorial coordination and cooperation capacities also need to be strengthened, and especially ZMD interaction with the other stakeholders. Such activities may include managerial and leadership training; training in leading participatory processes and inter-sectorial conflict resolution, for improved cooperation in addressing climate change as a cross-cutting theme; and support to ZMD in analyzing institutional capacity needs, for realizing an institutional reform, at national, district and community levels.

Moreover, strengthening inter-sectorial cooperation should be complemented by vocational training aimed at building national capacity for producing impact forecasting, using the World Meteorological Organization (WMO)'s recommendations and guidelines on multi-hazard impact-based forecast and warning services.

Further ZMD capacity building is needed for addressing sectorial needs and providing sector-specific packaging of information, in combination with capacity strengthening for key sectors (e.g. MAL), in interpreting information. It was further suggested to establish in ZMD a Climate Information Center/Information Depositary for open receipt and dissemination of climate information.

The institutional capacity needs should be analyzed, either by the Project Team, or through a short-term consultancy, through consultation with ZMD, UNDP CO and key stakeholders, and a detailed and budgeted proposal for a set of institutional, managerial, leadership and participatory capacity building activities, including impact forecasting capacity, should be elaborated, for ZMD, and possibly also for DMMU, INCCS, MAL, the pilot districts' District Disaster Management Committees, and local leadership at the installed AWS and of the local Radio Station/s' Board/s, in the pilot districts. The proposal with adequately proposed budget revision should be submitted to the Project Board's approval. Identified capacity building requirements that cannot be addressed by this project, can be proposed for inclusion in other and future related projects and interventions.

**Implementer:** A detailed budgeted proposal to be prepared by the Project team, through consultation with ZMD, UNDP CO and key stakeholders, and submitted to the approval of the Project board.

**Suggested timeframe:** A detailed proposal to be prepared by the end of the 3rd term of 2016, and submitted to the following Project board meeting.ng.ng.by the end of the 3rd term of 2016, and submitted to the following Project board meeting.:A detailed proposal to be prepared by the end of the 3rd term of 2016, and submitted to the following Project board meeting.

**Recommendation 5: Continuation and strengthening of the regional cooperation and exchange, through technical support of the CIRDA Project**

The important contribution of the CIRDA project in supporting technical capacity building was noted. It was recommended that this technical support would continue and be expanded. Especially, capacity building through regional exchange and sharing of know-how is very useful, not only in relation to technical aspects, but also for analyzing institutional structure models.

**Implementer:** CIRDA-Project team-UNDP CO coordination

**Suggested timeframe:** throughout the Project's implementation

**Recommendation 6: Revision of the indicators**

It was recommended, through the ToC exercise results, to revise the project progress indicators as they are indicated in the PRODOC. Specifically, it was noted that national budget and policies are not specifically indicative for this project's progress, as they are subjected to multiple other impacts and factors. It was further suggested to include several new indicators - progress towards producing impact forecasting; questionnaires for evaluating communities' engagement in the target districts, including receipt, understanding/interpretation and use of climate information and early warnings; surveys on weather information received at national level; crop forecast surveys; number (and gender) of people trained by the project that were integrated back into the system. It was also suggested to possibly add an indicator of percentage of district plans that integrate climate information, among the 3 target districts and nationally. This information can be received from the ministry of planning, however, as in the case of national policies, it may be impacted by multiple factors.

The detailed suggestions for the revision of the indicators are provided in Annex V. Theory of Change Workshop Summary, Part II: Indicators. Specifically, it was suggested to delete the indicator of ZMD and DMMU budgets, and add several indicators, as specified in detail in Annex V, Part II.

**Implementer:** Project manager with UNDP CO and in consultation with UNDP RTA

**Suggested timeframe:** By the end of the 4th term of 2016

**Recommendation 7: Accelerating implementation of the communication strategy**

Communication at all levels, is a key component for the project success and for strengthening sustainability. The approved project communication strategy provides a good strategic basis and its implementation should be accelerated. A detailed communication plan with short-term, medium-term and long-term proposed activities is provided in the strategy (pp.36-41). Implementation has initiated, but there is need to accelerate it and to strengthen the communication component of the Project. Communication with the media must also be strengthened for enhancing awareness, engagement and visibility, as well as for facilitating information dissemination. It was suggested that the media would be continuously informed on AWSs installations and other key project activities. Enhancing engagement with the media can include short courses for the media, or short courses on journalism for climate expert, or possibly, mutual exchange training of journalists and climate experts, and with the participation of other key stakeholders.

**Implementer:** The Project team, ZMD, and UNDP CO to implement the communication plan and the activities specified in the approved communication plan

**Suggested timeframe:** implementation throughout the project duration

***5.2.2. Specific recommendations for the project's final evaluation***

**Recommendation 8: Include in the final evaluation quantitative data collection among local communities, through simple questionnaires**

The MTR inception report included a methodology of quantitative data collection among local communities, through questionnaires. During the MTR implementation, it was decided in consultation with the project team and UNDP CO not to use this methodology at this time. The reason being that since implementation of key activities was not realized yet, and therefore no significant on-ground impact can be noted, while expectations of communities were already raised, the implementation of such a questionnaire at this time can have an aggravating impact on communities confidence in the project. This methodology, nevertheless, is being proposed as a recommendation for implementation as part of the Final Evaluation. The proposed qualitative data collection is based on gender-sensitive anonymous simple one page questionnaires, to be designed for collect quantitative information from selected communities in the target districts, and in control groups in non-target districts, on the following evaluative quantitative questions:

* The extent that local communities are sensitized about the importance of the AWS system;
* The extent that local community members can access the improved climate-related information and early warnings;
* The extent that climate related information is translated by local communities into effective on-ground immediate response and longer-term planning of activities.

The questionnaire would be provided to 5 adult men and 5 adult women, to be selected randomly, 1 of each of the indicated 5 age groups, among each selected community, in a total of 36 communities, 9 in each of the 3 target districts, with good geographic distribution across the district, and 9 in one non-target neighboring district. In each of these 4 districts, the questionnaires will be provided to 3 communities located in a radius of within 1 km from an installed Automatic Weather Station, 3 located in a radius of within 1 km from a manual weather station, and 3 in communities located in a distance of at least 10 km from any weather station. The ZMD District officials and MAL extension officers would be trained and requested to lead the process of distributing the questionnaires, providing explanations to the selected community members, and compiling the completed questionnaires for delivery to the final evaluation consultant for analysis.

The following proposed draft questionnaire can be revised and finalized for distribution to community members:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Date: … District… Location:…. Age: 20-30/30-40/40-50/50-60/above 60… Gender: f/m  No. of members in your community:…. Is the community located near a weather station: manual/ automatic/none | | | | | |
| **Statement** | **Agree** | **Moderately agree** | **Not sure** | **Moderately disagree** | **Disagree** |
| I participated in awareness activities and/or received awareness material about Climate change risks, Early Warning Systems and Weather Stations |  |  |  |  |  |
| Early warning about extreme weather and climate events is important for me and my community |  |  |  |  |  |
| Automatic and manual Weather Stations network is needed to collect essential information on weather and climate |  |  |  |  |  |
| It is important for me and my community to protect installed AWS |  |  |  |  |  |
| I regularly receive information and early warnings on forecasted extreme weather and climate events in my region, such as droughts or floods |  |  |  |  |  |
| I and my community use information and early warning received on extreme weather and climate events to take immediate action to protect our lives, property, livestock or crops |  |  |  |  |  |
| I and my community use weather information received to better plan our activities and agriculture practice |  |  |  |  |  |

**Implementer:** Terminal Evaluation team, with UNDP CO guidance

**Suggested timeframe:** to be included in the Terminal Evaluation

**Recommendation 9: Include in the Terminal Evaluation a follow up on the ToC exercise**

It is recommended that the ToC exercise would be repeated as part of the Project's final evaluation process, as an additional tool for evaluating project progress by project end. A ToC exercise at the final evaluation can be based on the ToC exercise implemented for the MTR. The indicators' revision and additional indicators proposed through the MTR ToC exercise (Recommendation 6), can further support the final evaluation of the project.

**Implementer:** Terminal Evaluation team, with UNDP CO guidance

**Suggested timeframe:** to be included in the Terminal Evaluation

***5.2.3. Recommendations for national strengthening of the project results and***

***Sustainability (recommendations for ZMD)***

**Recommendation 10: Secure CI/EWS financial sustainability through national budgets and other sources**

National financial capacity for maintaining the CI/EWS system and for securing permanent information collection, interpretation, and dissemination, is pending on securing adequate and permanent funding, through annual national budget, and from other sources, including agreements with private sector. It is recommended that ZMD would aim to establish financial sustainability before the project end, by lobbying for an adequate national annual budget, as well as by engaging in agreements with private sector for provision of packaged information for an agreed adequate fee. In addition, it was suggested that ZMD can increase its weather information access, by collecting further weather information from other sectors (specifically, from WARMA's AWSs), and from weather stations of the private sector (including quality control for accuracy), by establishing agreements, and if will be needed, by enforcing the new relevant Act, once adopted. One time investments for increasing the national AWSs coverage and information flow, can be promoted through mobilizing further support and partnerships.

**Implementer:** ZMD

**Suggested timeframe:** ZMD should aim to establish financial sustainability by Project end

**Recommendation 11: Analyze needs and options for implementing an institutional reform of ZMD, and for institutional capacity building at national, district and community levels**

As ZMD and other stakeholders have noted, a structural and organizational reform of ZMD and institutional capacity building, are essential for enabling sustainability in climate information collection, interpretation and dissemination. It was suggested that the needs and options for performing an institutional reform of ZMD and for identifying further institutional capacity needs, and including recruitment of qualified staff to fill existing posts, would be analyzed by ZMD, in consultation with other related sectors, and with UNDP CO support, through the CI/EWS project.

**Implementer:** ZMD

**Suggested timeframe:** ZMD should aim to strengthen institutional sustainability by Project end

**Recommendation 12: Secure continued engagement of staff trained through this project**

The project includes substantial activities of training and technical capacity building, including long term diploma and graduate studies. In order to secure sustainability of project results and enable real capacity building of ZMD and the related sectors, it is essential that the people who receive the training, through this project, and especially the long term training, would be integrated back into the system. According to ZMD, there is a government policy to condition the selection of candidates, with advanced signing of a contract, committing to work in ZMD, or the related Government departments, at least during a period that is equal to the studies period. It is essential that the implementation of this policy would be followed. At this stage, it is suggested that any additional candidacy for training, through any project or framework, would include this condition. It is also suggested that ZMD would develop a strategy and create the necessary conditions to secure and incentivize the integration of the 15 individuals who receive graduate and diploma studies through this project, in senior positions of ZMD technical leadership, after the successful termination of their studies.

**Implementer:** ZMD

**Suggested timeframe:** immediate and on going

**Recommendation 13: Strengthen ZMD's inter-sectorial and multiple stakeholders' communication and coordination at all levels**

In addition to specific recommendations for the project implementation, related to the need to strengthen permanent communication with local level stakeholders, and to strengthen inter-sectorial cooperation, it is essential that ZMD would address these aspects as a high national priority. This was a major recommendation of most stakeholders interviewed and also a key conclusion of the ToC exercise. Several suggestions were made for strengthening ZMD's inter-sectorial coordination and communication at the national level, including: establishing one climate database that all sectors can access; strengthening ICCS' capacity to provide centrally accessed information to all the sectors; improving meteorological and hydrological information interface through improved ZMD cooperation with WARMA/DWA, Zambia Hydrological Department and Zambezi River Authority, etc. Suggestions related to strengthening ZMD communication with stakeholders at the local level, include: establishing permanent two ways information flow with the communities and other stakeholders, through extension officers and improved measures of communication; equipping the weather station operators with transport means to enable their constant interaction with surrounding communities; nominating further community level ZMD liaison persons; cooperating with MAL for the engagement of the agriculture extension officers; capacity building at community level for enabling best action and planning in response to early warnings; training of local communities in weather information reading and understanding, through the Farming Training Centers, and with focus on provision of accurate information through household approach; integrating the mobile communication network providers in the dissemination of climate information, through Public-Private-Partnerships.

The ZMD Provincial Officers and District Officers are important centerpiece, and should be substantially engaged on a permanent basis in leading the liaison of the project with the Provincial, District and local levels, and the ZMD on-going consultation and information flow, after the project end.

**Implementer:** ZMD with key national stakeholders

**Suggested timeframe:** on-going

**Recommendation 14: Establish impact forecasting capacity, and build ZMD capacity to address sectorial information needs**

For improved national adaptation to climate change and national resilience, it is essential that ZMD would be capacitated to provide not only crude weather forecasts and climate information, but to provide also impact forecasting. It is equally essential that ZMD would be able to address sectorial information needs, and provide tailored sector-specific information packaging. It is especially important that end-users at the community level would receive information that is adequately packaged and interpreted to enable their appropriate response in immediate action and longer term planning of agricultural and other activities, as relevant. It was suggested that activities to improve ZMD's capacity to provide impact forecasting, would include: revising ZMD's strategic plan to include impact forecasting; staff training to produce impact forecasting; increasing AWSs coverage; procuring equipment and developing protocols for producing impact forecasting. It was further suggested that activities for addressing sectorial information needs would include: strengthening the sectorial early warning mechanisms (e.g. Department of Policy and Planning in MAL); DMMU dissemination of policy guidelines for early warnings on hazards for sectorial use; constant and frequent training of staff of the related sectors (taking into consideration staff turnover). Moreover, it was suggested that ZMD should promote the integration of climate information, early warning systems, impact forecasting, and risks mitigation into its national, provincial and district policies, and ensuring their implementation. The importance of coordination in accessing information for the implementation of the sectorial climate related policies was also stressed, e.g., the National Climate Change Policy (Environment); the Agricultural Policy (MAL); the Disaster Management Policy (DMMU).

**Implementer:** ZMD with key national stakeholders

**Suggested timeframe:** immediate and on going

***5.2.4. Systemic recommendations (lessons learned for UNDP)***

The following systemic recommendations for UNDP are based on lessons learned, received from key partners and stakeholders of this project, and that can be relevant at systemic level, for the design of other UNDP-GEF projects. Moreover, it should be noted that the recommendations listed here are verified by the MTR consultant, as they also reflect similar lessons learned from other UNDP-GEF projects, as based on the consultant's own experience.

**Recommendation 15: Revisit project management arrangements for improved flow between and within Project team, UNDP and Government counterpart, in order to facilitate implementation**

Project management arrangements that are based on the NIM modality, and on the national counterpart's leadership and substantive engagement, with a very limited project team, make good sense for promoting national ownership, as well as sustainability. However, with such management arrangements the institutional capacity limitations of the Implementing Partner (that its capacity building is among the main project's objective), have direct impact on the project's implementation and on its capacity to achieve its expected results by project end. This effect is aggravated by that the day-to-day implementation of each activity must comply with national rules and procedures and at the same time be adapted to the UNDP rules, regulations, and procedures. Especially in the case of direct payments by UNDP (as in this case), project implementation is burdened by multiple procedures for enabling implementation of every activity. Moreover, the project team reports at the same time to both the Implementing Partner and to UNDP, whose rules, regulations, procedures and even "institutional culture", such as hierarchical considerations, delegation of authority, etc, are not always compatible. This situation can cause delays in implementation of activities, and thereby in project progress, and it also occupies the small project team in administrative and procedural processes, rather than in actual implementation and on-ground activities.

It is suggested here that the UNDP-GEF would analyze existing management arrangements, rules, regulations and procedures of projects, aiming to facilitate implementation and minimizing administrative and procedural burdens. Possibly the NIM modality rules and regulation can be re-visited, aiming to reach new and more flexible modality, that promotes national ownership but minimizes the limitations and risks caused, with simplified administrative and authorization procedures. The contracting of organizational experts for this task can prove to be significantly cost-effective in the long run.

It is also suggested that in addition to the PAC meeting at project start and the Inception Workshop during first phase of implementation, projects' implementation would also be preceded by 2-3 days training and consultation workshops. Such a workshop with the participation of the project team, UNDP CO, the implementing partner, and possibly other key stakeholders, would aim at refining agreed procedures, authorizations and delegation of authority, simplified administrative processes, and clear reporting flow.

**Implementer:** UNDP CO, with Project team and ZMD, and in consultation with UNDP RTA, to agree on a simple set of facilitated and clear management arrangements and information and approval flows.

**Suggested timeframe:** a simplified proposal to be prepared by end of term 3 of 2016 and submitted for approval in the following Project Board meeting

**Recommendation 16: Revisit procurement procedures**

The long procurement process of the key equipment for this project caused long delay in the project implementation, with consequent secondary negative impacts, such as loss of confidence and engagement of key stakeholders, especially at the local level. This situation is not unique to this project, and occurs often in UNDP-GEF projects. It is suggested here that the UNDP-GEF would analyze the existing procurement, recruitments, and payment procedures, rules and regulation, aiming to develop simplified and facilitated procedures, for enabling facilitated project implementation. This could be done, e.g., through a short-term consultancy of an organizational expert. Such a consultancy should be based on consultation with a selection of COs and project teams, and on review of a selection of MTRs and TEs referring to implementation delays related to procurement procedures.

**Implementer:** UNDP HQ

**Suggested timeframe:** One year, including a 2-3 months consultancy.

**Recommendation 17: Secure continued engagement of people trained**

The selection of candidates to participate in short-term and long-term training activities is entirely the responsibility of the implementing partner, in projects implemented under the NIM modality. Nevertheless, considering that substantive project resources are often invested in training, as an important component of the capacity building of target institutes, it is essential that trained individuals would be integrated back in the target institute/s, with the termination of the training or study period. This is especially important when a project provides long-term graduate or diploma studies to individuals. It is therefore suggested that, as a rule, the criteria and conditions for the selection of candidates to receiving long term training (from six months courses on), as part of the capacity building activities of national institutions, under a UNDP-GEF project, would include a signed contract with the respective national institute, with a commitment of the candidate to work in the referred or related national institution/Government department, during at least a period that is equal to the studies period. It is further suggested that such projects would include additional activities for supporting the creating the necessary conditions to secure and incentivize the integration of individuals who receive long term training/studies through the project, in senior positions of the referred institute's technical leadership, following the successful termination of their studies.

**Implementer:** UNDPHQ

**Suggested timeframe:** immediate and on-going

**Recommendation 18: Continue and expand the regional project's technical support**

It was evident through this project's MTR process, that the regional CIRDA project provided important technical support to the national project in Zambia, and had a positive impact on progress in the national project's implementation, in mitigating barriers, and in technical capacity building. It is suggested that this good model would be expanded, and used more widely. Especially, the facilitating of exchange for sharing know how and capacity building, regionally, or between countries implementing similar projects, was noted as a very good experience. Other UNDP-GEF programmes can therefore benefit from further integration of this model of a regional project providing central technical support to a number of similar national projects.

**Implementer:** UNDP CO in coordination with CIRDA. The more general recommendation is for UNDP HQ

**Suggested timeframe:** on-going

**Annex I. Midterm Review Evaluative Matrix**

|  |  |  |  |
| --- | --- | --- | --- |
| **Evaluative Questions** | **Indicators** | **Sources** | **Methodology** |
| **Project Strategy: To what extent is the project strategy relevant to country priorities, country ownership, and the best route towards expected results?** | | | |
| Does the project strategy support achieving national needs and priorities? | Project objective and outcomes in line with priorities indicated in national policies, strategies and programmes | PRODOC; published relevant national policies, strategies and programmes | Documents review; consultation with UNDP CO and main government partners |
| Does the project strategy support achieving needs and priorities of local stakeholders? | Project objective and outcomes in line with priorities indicated by local stakeholders | Project documentation; interviews with local stakeholders | Documents review; consultation with District and local level stakeholders |
| To what extent is the project complementary to government's and partners' initiatives (regional, national and local projects and programmes) addressing the same priorities? | Project design complements existing and planned initiatives | PRODOC; documentation of complementing initiatives | Documents review; consultation with relevant stakeholders and partners |
| Are the Project outputs and activities relevant and feasible for achieving the Project objective and outcomes? | Project outputs and activities logically lead to achieving Project objective and outcomes | Project documentation; interviews with local stakeholders | Documents review; consultation with relevant stakeholders |
| Were risks well identified and mitigation measures well designed to adequately address the risks? | Verification relevance of of risks and effectiveness of mitigation measures indicated in the PRODOC, through later Project reporting | Project documentation; interviews with Project team and relevant stakeholders | Documents review; consultation with Project team and relevant stakeholders |
| Do the Project's outputs and management arrangements promote national ownership? | Project outputs support national and local capacity building; Project management arrangements are based on national ownership | Project documentation; interviews with Project team and relevant stakeholders | Documents review; consultation with Project team and relevant stakeholders |
| **Progress Towards Results: To what extent have the expected outcomes and objectives of the project been achieved thus far?** | | | |
| Objective: | | | |
| Was national and local capacity enhanced? | Capacity self-assessment scorecards:  Increased rating in July 2015 from the average rating of 80 at project design phase; reporting on capacity building activities | Capacity Assessment Scorecards and further Project reports; interviews with relevant national and local stakeholders | Documents review; consultation with relevant stakeholders |
| Was domestic finance committed to ZMD and DMMU to monitor, forecast and warn against extreme weather and climate change increased? | Annual budget of ZMD and DMMU to monitor and warn against extreme weather and climate change increased by at least 10% from baseline and expected/committed to increase by 20% by project end. | ZMD and DMMU annual budgets and financial reports; PIR; interviews with ZMD and DMMU officials | Documents review; consultation with relevant stakeholders |
| Are climate monitoring, forecast and warning systems functional and support response to climate shocks and climate change adaptation planning, nationally and in the target districts? | Climate and weather information received through systems installed or supported by this project, recorded, disseminated, and integrated into local and national short term response and long term plans | Project reports; National agencies' reports and strategic plans; interviews with relevant stakeholders | Documents review; consultation with relevant stakeholders; ToC exercise |
| Is the project realistically expected to achieve its objective by project end, within the defined timeline? | At least 50% of end of project targets for project objective and outcomes, indicated in the Project Results Framework, achieved | Project documentation; national documentation; interviews with Project team, UNDP CO and implementing partners | Documents review; consultation with relevant stakeholders; ToC exercise |
| Outcome 1: | | | |
| Is ZMD's capacity to monitor, forecast and communicate information, on extreme weather and climate change, enhanced? | Increased percentage of national coverage of fully operational climate monitoring network (automatic: at least 15% of district, manual: at least 19% of districts) | Project reports; national agencies' reports; national climate information database; District and local climate information datasets and reports; interviews with relevant national and local stakeholders | Documents review; review of climate information database; consultation with relevant stakeholders;  Inspection of selected automatic and manual AWS stations in the target districts |
| Increased frequency of data transmission and reception (at least 15 AWS stations transmit data continuously; at least 20 rehabilitated manual stations collecting data and sending to ZMD 6 times daily) | Project reports; national agencies' reports; national climate information database; District and local climate information datasets and reports; interviews with relevant national and local stakeholders | Documents review; review of climate information database; consultation with relevant stakeholders;  Inspection of selected automatic and manual AWS stations in the target districts |
| Increased technical capacity to operate and maintain the climate observation network and to produce and communicate adequate weather and climate information for users (at least 10 engineers and technicians, 12 climatologists and analysts, and 15 weather forecasters were trained; communities near AWS stations in target districts were sensitized; all installed and rehabilitated stations are fully operational; weather information is produced, packaged and distributed to users regularly, in accordance with set protocols) | Project reports; weather information reports and datasets; climate prediction models; website; training courses syllabi, training manuals and sensitization materials; observation network quality control and maintenance toolbox; interviews with relevant national and local stakeholders | Documents review; training and sensitization material analysis; analysis of climate information reports, prediction models, and communication protocols; consultation with relevant national and local stakeholders; questionnaires to selected communities in the target districts |
| Outcome 2: | | | |
| Is hydro-meteorological and environmental information used efficiently and effectively for making early warnings and in preparing long-term development plans? | Increased percentage of population in the target districts with access to improved climate-related flood and drought warnings (at least 50%, disaggregated by gender) | Project reports; National agencies' and district reports; interviews with gender-sensitive questionnaires of selected communities in the target districts | Documents review; consultation with relevant national and local stakeholders; questionnaires to selected communities in the target districts |
| Development frameworks and disaster policies integrate climate information in the formulation (at least the Seventh National Development Plan incorporates climate information availability into the 5 years planning) | Project reports; the Seventh National Development Plan; other relevant national policies, strategies, plans and programmes; interviews with relevant stakeholders | Documents review; consultation with relevant stakeholders; |
| Sector specific tailored climate information packages that integrate climate risks, are produced for agriculture, aviation, water, health, tourism, construction, road and rail transport, and energy. | Project reports; national agencies reports; sector-specific climate information packages; interviews with relevant stakeholders | Documents review; consultation with relevant stakeholders; analysis of sector-specific information packages |
| **Project Implementation and Adaptive Management: Has the project been implemented efficiently, cost-effectively, and been able to adapt to any changing conditions thus far? To what extent are project-level monitoring and evaluation systems, reporting, and project communications supporting the project’s implementation?** | | | |
| Have the project and individual activities been implemented in line with the defined timeframe and budget, and in accordance with the Annual Workplans and Budgets? | Annual Workplans and Budgets (AWBs) are based on the results framework and total budget and workplan; Activities are implemented within the timeframe and budgets indicated in the AWBs | Project documentation; Project team, UNDP CO and key national partners, RTA | Documents review; consultation with relevant stakeholders |
| Were the project monitoring and evaluation and reporting plans implemented satisfactorily and did they support the project's implementation? | Quarterly and Annual Reports submitted timely and provide adequate information on progress, bottlenecks, and proposed mitigation measures; M&E Plan implemented and used to improve the project's implementation | Project documentation; Project team, UNDP CO and key national partners, RTA | Documents review; consultation with relevant stakeholders |
| Were risks, challenges and bottlenecks adequately and timely identified and mitigated? | Mitigation measures of identified bottlenecks and negative impact on implementation were implemented timely and effectively | Project documentation; Project team, UNDP CO and key national partners | Documents review; consultation with relevant stakeholders |
| Were any needs for adaptive management changes identified and implemented? | Adaptive management changes made and positively impacted project implementation | Project documentation; Project team, UNDP CO and key national partners | Documents review; consultation with relevant stakeholders |
| Was the project communication strategy designed and implemented satisfactorily and did it support achieving the project's objective and outcomes? | Project communication strategy elaborated, adopted and implemented; identified stakeholders and target groups were adequately informed | Project documentation; Communication materials; interviews with relevant stakeholders | Documents review; consultation with relevant stakeholders |
| Were the project's management arrangement and support of the partner organizations adequate for enabling efficient implementation? | Project implemented smoothly. Support provided by UNDP facilitated implementation | Project documentation; Project team, UNDP CO and key national partners | Documents review; consultation with relevant stakeholders |
| Was the project's financial management adequate? | Adequate, complete and detailed financial reports; audit | Project documentation, specifically - financial reports; Project team, UNDP CO and key national partners | Documents review; consultation with relevant stakeholders |
| **Sustainability: To what extent are there financial, institutional, socio-economic, and/or environmental risks to sustaining long-term project results?** | | | |
| Can sufficient financial sustainability be established before project end, to secure continuity? | Committed permanent adequate annual government budgets to enable ZMD and DMMU to monitor and warn against extreme weather and climate change; other financial resources | Project documentation; National agencies' documentation; interviews with relevant stakeholders | Documents review; consultation with relevant stakeholders |
| Can institutional capacity be adequately established before project end, to secure sustainability of achieved project outcomes? | Adequate policy and legal framework adopted; ZMD has sufficient institutional and technical capacity to secure continuity. | Project documentation; National agencies' documentation; interviews with relevant stakeholders | Documents review; consultation with relevant stakeholders |
| Can adequate socio-economic sustainability be secured before project end to enable continuity? | All relevant stakeholders at national and local levels are well informed and supportive of the project objectives | Project documentation; National agencies' documentation; interviews with relevant stakeholders | Documents review; consultation with relevant stakeholders |
| Are environmental risks identified and mitigated? | Environmental risks are analyzed and reported and mitigation measures proposed and implemented | Project documentation; National agencies' documentation; interviews with relevant stakeholders | Documents review; consultation with relevant stakeholders |

**Annex II. MTR Mission Itinerary**

|  |  |  |
| --- | --- | --- |
| Date | Activity | Location |
| Monday 8th February 2016 | Arrival on Flight SA62 from JHB | KKIA |
| Tuesday 9th February 2016 | Meeting with UNDP: ARR Env, PA | UNDP |
| Meeting with Zambia Meteorological Department – Director, Project Focal Point and ZMD Team | ZMD |
| Meeting with Mr. Anderson Banda (Project Focal Point) Disaster Management and Mitigation Unit | DMMU |
| Wednesday, 10th February 2016 | Meeting with Ms. Chama Nambeya – Interim Climate Change Secretariat | Interim Climate Change Secretariat |
| Meeting with Ms. Chibesa Pensulo, former Project  Manager  And Mr. Isaac Chomba Nshimb, Project Associate | ZMD |
| Mr. Rowen Jani - Department of Water Affairs | WRMA/DWA |
| Thursday, 11th February 2016 | Departure to Gwembe District  Meeting with Dr. Durton Nanja, Southern Province ZMD Provincial Officer |  |
| Friday, 12th –  Saturday, 13th February 2016 | Gwembe District: meetings with the District Commissioner and the DDMC, meetings with selected communities and visit to an AWS and a manual weather station | Gwembe District |
| Sunday, 14th February | Departure to Livingstone |  |
| Monday 15th –  Tuesday, 16th February 2016 | Kazangula District: meeting with community members in non-target District | Kazangula District |
| Sesheke District: meetings with the District Commissioner and the DDMC, meetings with selected communities and a community radio station board | Sesheke District |
| Wednesday, 17th February 2016 | Return to Lusaka |  |
| Thursday, 18th February 2016 | ToC Workshop |  |
| Meeting with Mr. Joy Sinyangwe, MAL |  |
| Mr. Andson Nsune, M&E Officer | UNDP |
| Friday, 19th February 2016 | Skype meeting with Mr. Benjamin Larroquette, UNDP-GEF RTA | UNDP |
| Meeting with Mr. Alan Mulando, WFP |  |
| Meeting with Mr. Absalom Sakala – Ministry of Lands, Environment and Natural Resources | Ministry of Lands |
| Saturday, 20th – Sunday, 21st February 2016 | Initial analysis of findings and preparations of the presentation |  |
| Monday, 22nd February 2016 | De-briefing/wrap-up of the mission; Presentation of initial findings to UNDP CO, Project team, and ZMD Focal Point | UNDP |
| Meeting with Ms. Monica Chundama, ZCCN | ZCCN |
| Tuesday, 23rd February 2016 | Departure | KKIA |

**Annex III. List of People Interviewed**

**UNDP CO and Project Team –**

Ms. Winnie Musonda, Assistant Resident Representative, Environment Advisor

Mr. Chongo Simpasa, Programme Associate responsible for the CIEWS Project

Mr. Andson Nsune, M&E Officer

Ms. Chibesa Pensulo, former Project Manager (until December 2015)

Mr. Isaac Chomba Nshimbi, Project Financial and Administration Associate

Mr. Donal Muunga, Project Driver

**ZMD –**

Mr. Jacob Nkomoti, Director

Mr. Mukufute Mukelabai, Project Focal Point

Mr. Edson Nkonda, Principal meteorologist, Research and Development

Mr. Mutau Christopher, Senior Engineer

Dr. Durton Nanja, Southern Province ZMD Provincial Officer

**DMMU** –

Mr. Anderson Banda, Head of Information Management System, Focal Point for the Project

**INCCS –**

Ms. Chama Nambeya

**Ministry of Lands, Environment and Natural Resources** –

Mr. Absalom Sakala, Environment Management Officer, Focal Point for the Project

**DWA/WARMA** –

Mr. Rowen Jani, Kafue Catchment Manager, Focal Point for the Project

**MAL –**

Mr. Joy Sinyangwe, Principal Agriculture Specialist, Focal Point for the Project

**World Food Programme -**

Mr. Alan Mulando

**ZCCN –**

Ms. Monica Chundama, ZCCN Acting Chairperson

**CIRDA Project –**

Mr. Benjamin Larroquette, UNDP-GEF Regional Technical Advisor- Climate Change

Adaptation (Skype interview)

Ms. Bonizella Biagini, CIRDA Project Manager (provided information by email)

Ms. Roxana Manea, CIRDA Project (provided information by email)

**District: GWEMBE**

Ms. Alice Mwiinga, District Commissioner

Mr. Devi Montari, Senior Agricultural Officer, DDMU

Mr. Charles Maimdo, District Water Officer, DDMU

**MUNYUMBWE** (meeting with participants from several communities and cooperatives, near an AWS installed by the project)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S/N** | **Name** | **Position** | **Gender** | **Area/Community** |
| 1 | MOONGA FRED | FARMER,  Cahirman | M | HANYIMBO |
| 2 | DOMINIC HAMANYANGA | FARMER | M | HALUMYA |
| 3 | ALBERT SUNTWE | FARMER | M | HAKALENDA |
| 4 | IREEN MUYUNI | FARMER | F | JONGOLA |
| 5 | ELIZABETH NAKOONZE | FARMER | F | HANGALA |
| 6 | NAIN HAKALINDA | FARMER | M | JONGOLA |
| 7 | BRILLIANCE HAMUYEBWA | FARMER | M | MUNYUMBWE |
| 8 | HAMAAMBO MUCHINDU | FARMER | M | HAMALENGWA |
| 9 | SIMON SIBUKANDE | FARMER | M | HACEELO |
| 10 | TREASA KACHOMA | FARMER | F | HABEENE |
| 11 | MUMBO GODWIN | FARMER | M | HAMUYEBWA |

**LUKONDE, HARMONALY VILLAGE** (meeting with farmers, 3.5 Km from an AWS installed by the project)

|  |  |  |  |
| --- | --- | --- | --- |
| **S/N** | **Name** | **Position** | **Gender** |
| 1 | WILSON SIANDUBA | FARMER, Village Committee Secretary | M |
| 2 | IVY CHIPETA | FARMER | F |
| 3 | ANDERSON CHIFUWE | FARMER | M |

**CHIPEPO HARBOUR**

Mr. Innocent Mainza, ZMD Meteorological Officer, Chipepo Station Operator

Meeting with community members near Chipepo manual weather station

|  |  |  |  |
| --- | --- | --- | --- |
| **S/N** | **Name** | **Position** | **Gender** |
| 1 | JERE CHALI | FARMER | M |
| 2 | EVANS HANYULU | FARMER | M |
| 3 | BILLY MAMBWE | FISHERMAN | M |
| 4 | BEGANY CHIKUMBI | FARMER | M |
| 5 | ALBERTINA MUSO | FARMER | F |
| 6 | EDITH MUMBA | FARMER | F |
| 7 | SIMAZWE | FARMER | F |
| 8 | FENITIOUS CHIKONDI | FARMER | M |
| 9 | CHIYAZE | FARMER | F |
| 10 | RONALD MUWOWO | FARMER | M |
| 11 | MARY SIMUUMBU | FARMER | F |

**HALUBILO VILLAGE** (meeting with community members, 11 Km from the AWS)

|  |  |  |  |
| --- | --- | --- | --- |
| **S/N** | **Name** | **Position** | **Gender** |
| 1 | EUNESTER MWEENE | FARMER | F |
| 2 | ELINA KANENE | FARMER | F |
| 3 | LITNESS HAJOBA | FARMER | F |
| 4 | LOVENESS CHAABA | FARMER | F |
| 5 | ROYCE MWEENE | FARMER | F |
| 6 | GRACE MWEENE | FARMER | F |

**District: KAZUNGULA**

**Village: NAMAPANDE** (meeting with community members in a non-target district)

|  |  |  |  |
| --- | --- | --- | --- |
| **S/N** | **Name** | **Position** | **Gender** |
| 1 | ROSEMARY KABIKA | BEE KEEPER | F |
| 2 | MONICA SIMUSHI | FARMER | F |
| 3 | B.S MULEYA | SEEDGROWER | M |
| 4 | ALICE MULUMO | FARMER | F |
| 5 | FRIDAH KABOZO | FARMER | F |
| 6 | ELIZABETH MUSIYAMO | FARMER | F |
| 7 | GEORGE SISHEKANU | FARMER | M |
| 8 | KAPALU NAMUSHI | BEE KEEPER | M |

**District: SESHEKE**

Mr. Mubita Syimana, District Commissioner

**Sesheke Community Radio Station Board**

Kalimukwa Sikufele, Chair, Sesheke Community Radio Station Board

Muyunda Christopher, Vice Chair, Sesheke Community Radio Station Board

Edna Mwangaba, member, Sesheke Community Radio Station Board

**Sesheke District Disaster Management Committee**

|  |  |  |  |
| --- | --- | --- | --- |
| **S/N** | **Name** | **Institute** | **Position** |
| 1 | SIBANDA S.M | ZMD | ASS. O.I.C |
| 2 | MATONGO LENON | YETA DIST. HOSP. | HOSP. ADMIN. |
| 3 | GREENFORD NCHUKWA | DMO | PLANNER |
| 4 | INAMBAO NALUMINO | FORESTRY | D.F.O |
| 5 | KAWANA WAMUWI | COMDEV | CDA |
| 6 | MUCHALI EUNICE | SOCIAL WELFARE | ASWO |
| 7 | MAJORIE NYAMBE | CHIEF’S AFFIARS | TAO |
| 8 | MUNDIA PHIRI | NRPC | DR |
| 9 | ESNART BANDA |  | OOP (SP) |
| 10 | ELIZABETH L. MUTETO | COUNCIL | CS |
| 11 | PROSPER BWALYA |  | D.L.O |
| 12 | SIMALAMBO MICHELO | AGRIC | AGRIC OFFICER |
| 13 | WENDY M. MUSIWA | WWF | ADMIN CLERK |
| 14 | MWALINDU SHOVILE | NAZ | PROF. ASS. |
| 15 | PAUL MUTALE | DMO | CCO/AG DMO |
| 16 | BANDA ARNOLD | EDUCATION | DPO |
| 17 | SYANCHILI BENSON | POLICE | O.I |

**MAKA COOPERATIVE**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S/N** | **Name** | **Gender** | **Position** | **Organization** |
| 1 | MALUTA FALLON | M | Agr. Extension Officer | AGRI. (MAL) |
| 2 | BENZU MWANANYAMBE | M | FARMER | MAKA |
| 3 | NAMBULA SANGOMA | F | FARMER | MAKA |
| 4 | BEATRICE M MALIWA | F | FARMER | MAKA |
| 5 | MUSHABATI MUTANEKELWA | F | FARMER | MAKA |
| 6 | GRACE MALIWA | F | FARMER | MAKA |
| 7 | MASULE MOOWA | M | FARMER, Vice Chair | MAKA |

**Annex IV. List of Documents Reviewed**

The following documents were provided by UNDP-Zambia, the Project team ZMD, and other stakeholders, to support the MTR process.

**IV.A. Project Documentation**

1. The Project Document
2. Annexes of the Project Document: Stakeholder involvement in Project Preparatory Phase; Key assessment reports– Inception Report; Agreements; Project Risk Log; Capacity Assessment Scorecard; Capacity assessment and recommendation of Implementing Partner of the LDCF project; ToRs; UNDP Environmental and Social Screening results; Response report on Council comments; Key references
3. Project Identification Form (PIF), May 2012
4. Annual Workplans (AWP) – 2014; 2015
5. Project Trimestral and Annual Progress Reports – 2014 (Q1&Q2, Q3, Annual); 2015 (Q1, Q2, Q3)
6. The Project Implementation Review report (PIR 2015)
7. Project Partner Capacity Self-Assessment Scorecard on climate information and early warning systems – Zambia Meteorological Department (ZMD), July 2015
8. Project Partner Capacity Self-Assessment Scorecard on climate information and early warning systems – Disaster Mitigation and Management Unit (DMMU), July 2015
9. Project Communication Strategy - Final Draft, January 2016
10. Project communication brochure CIEWS National Task Team meetings minutes (Jan 2015; Apr 2015; Sept 2015)
11. Project Manager Handover Report – December 2015
12. Baseline Study for Climate Information and Early Warning Systems (CIEWS) Project (Volume 1: Baseline Report and Database; Volume 2: Updated Monitoring and Evaluation Plan; Volume 3: Process Report). IECN, October 2015
13. UNDP-GEF RTA Mission Report – November 2015
14. ZMD Report on the Study Tour of the Tanzania Meteorological Agency, 9 – 11 September 2015
15. UNDP ATLAS Combined Delivery Report (CDR) by Project, 2014, 2015 (produced on 10.02.2016).
16. Detailed ToRs of the MTR assignement

**IV. B. Other supporting documents received from stakeholders**

1. The Disaster Management Act, 2010
2. ZMD Crop Weather Bulletin examples (February 2015, January 2016)
3. ZMD Meteorological Rainfall Calendar example (2015/6)
4. ZMD Meteorological Stations Map
5. ZMD website: [www.zmd.gov.zm](http://www.zmd.gov.zm).
6. National Climate Change Technical Committee members list and contact details
7. Functions of the Climate Change Secretariat
8. National Disaster Management Policy, DMMU, July 2015
9. Disaster Management Operations Manual, DMMU, July 2015
10. DMMU Information, Education and Communication Strategy 2016-2019 Draft, October 2015
11. DMMU Summary Budget 2014, 2015, 2016
12. Situation Report on the 2015/2016 Rainfall Season. The Zambia Vulnerability Assessment Committee, February 2016
13. National Agricultural Policy 2004-2015, Ministry of Agriculture and Co-operatives, October 2004
14. The National Agriculture Policy, 2012-2030, Ministry of Agriculture and Co-operatives, August 2011
15. Climate Information for Resilient Development and Adaptation to Climate Change in Africa (CIRDA): Project Document
16. CIRDA Project Mission Reports to Zambia, and related Technical Reports: Mission of the CTA for Alternative Technologies, 8-12 March 2015, Mission Report and BtR; Technical Reports for Data Rescue Assessment and Data Digitization Requirements, 13-16 July 2015
17. CIRDA Project Report: on Projects' Team Exposure Visit to the Philippines, 9-16 August 2015
18. Proposed Strategic Climate Fund Grant and Credit to the Government of the Republic of Zambia for a Zambia Strengthening Climate Resilience Project (PPCR Phase II) - Project Appraisal Document (PAD). International Bank for Reconstruction and Development, February 6, 2013
19. Implementing ENACTS (Enhancing National Climate Services) in Zambia: Project of International Research Institute for Climate Society (IRI), The Earth Institute at Columbia University with ZMD, 2015.
20. World Food Programme (WFP) – Fact Sheet - R4 Rural Resilience Initiative, Building Resilience to Climate Change for Long Term Food Security and Livelihoods Improvement, September 2015
21. World Food Programme (WFP) – Fact Sheet - R4 Rural Resilience Initiative, Resilient Livelihoods in a Changing Climate, January 2016
22. World Food Programme (WFP) – Power Point Presentation - R4 Rural Resilience Initiative Milestones, by Stanley Ndhlovu, February 2016
23. Guidance for Conducting Midterm Reviews of UNDP-Supported GEF-Financed Projects

**Annex V. Theory of Change Workshop Summary, 18.2.2016**

**Participants:**

Isaac C. Nshimbi - CIEWS Project; organization of the ToC exercise

Tamar Ron - MTR Consultant; facilitation of the ToC exercise

Mukufute M. Mukelabai - Zambia Meteorological Department, Project focal point

Winnie Musonda - UNDP Country Office

Chongo Simpasa - UNDP Country Office

Joy Sinyangwe - Ministry of Agriculture

Silvia Kapungwe - DMMU

Anderson Banda - DMMU

Hope Banda - Ministry of Lands, Natural Resources and

Environmental Protection

Doreen G. Tembo - Central Statistics Office

Evaristo Nyanoka - Department of Agriculture, MAL

**Introduction:**

The MTR evaluation methodology included a Theory of Change exercise with key stakeholders. Theory of Change (ToC) is a methodology for project/programme planning and evaluation through a participatory approach. It aims to promote social change by defining long-term goals and mappings required preconditions backward, as an "outcomes pathway". Ideally, ToC would be part of the planning phase of the project, allowing all key stakeholders to participate in modeling the desired outcomes, the required preconditions to achieving them and a set of indicators for evaluating progress and actual outcome. Thereby, it supports the design of a project strategy that would best achieve a set of agreed desired outcomes, with built-in tools for project evaluation and adaption, throughout the project cycle.

Applying the ToC at this stage of mid-term review of the project is useful for strengthening the project's evaluation through a participatory approach, and for collectively guiding its future directions, with the aim of best achieving its pre-defined desired outcomes, by the project end.

For this purpose, a ToC exercise was held in a half day (5-6 hours) workshop, during the evaluation mission, with key stakeholders, in Lusaka. The exercise was kept simple, with the use of a flip chart and markers. The exercise and discussion were based on the project's defined objective and two outcomes and their defined indicators. The ToC workshop focused on the following evaluative aspects:

First session: Project objective and Outcomes:

* To what extent were the defined objective and outcomes achieved so far
* What is needed in order to better achieve the defined objective and outcomes

Second session: Indicators

* Analysis of progress in the defined indicators
* Comments on the defined indicators and suggestions for further indicators

Third session: Specific Sectorial comments.

**Part I: Project Objective and Outcomes**

**The Objective and Outcomes in short:**

* Improved climate monitoring and early warning systems
* Improved ZMD forecasting and information dissemination capacity
* Improved information dissemination to end users
* Use of information for response to climate events and for long term climate change adaptation planning

**Achieved:**

* Staff training
* Several team meetings
* Agro-meteorological calendar developed
* Radio updates provided regularly: daily, weekly, every 10 days
* Crop bulletins provided
* Continuous improvement of ZMD interactions with stakeholders (better every year)
* Continuous improvement in providing information (better every year)
* The climate information network keeps expanding
* Capacity enhanced
* Coverage improving
* Information dissemination is daily and more consistent
* Improving end users engagement in the 3 pilot districts and beyond
* Increased awareness
* Increasing number of users
* Several districts are using information for planning and for sectorial policies (MAL, Forestry)

**What is needed in order to better achieve the defined objective and outcomes**

* Better coverage, more stations(note: better coverage and expanded network is expected in this trimester)
* Improve ZMD interaction with stakeholders
* Better packaging of information to inform communities on risks
* Packaging for better use of information by communities for planning
* Better information packaging for other sectors (in addition to MAL)
* Strengthen interaction with the media
* Establish constant interaction between climate information producers and end users
* Establish in ZMD a Climate Information Center/Information Depositary for open receipt and dissemination of climate information
* Provide more detailed information for improved impact weather forecasting
* Build capacity for impact weather forecasting
* Multi-sectorial cooperation and coordination for producing and disseminating impact forecasting
* Use and integration of the World Meteorological Organization (WMO)'s recommendations and guidelines on impact forecasting
* Reform and strengthen Early Warning Systems
* Produce simpler and better interpreted information packaging for end users (specifically for communities)
* Improve technologies for information dissemination and presentation
* Capacity strengthening for key sectors (e.g. MAL), in interpreting information
* Capacitate forecasters to forecast and produce sectorial information packaging
* Capacitate ZMD, including:specialized training for improved technical capacity; better access to equipment and modern technology; recruitment of staff to fulfill existing posts
* Analyze needs and options for ZMD reform and institutional capacity building at national, district and community levels (including capacity to address sectorial needs)
* Strengthen national climate change mechanisms; inter-sectorial climate forum; integration of climate change into national and sectorial policies
* Training of stakeholders of different sectors at national level and stakeholders at local level on participatory approach and conflict resolution for improved cooperation in addressing climate change as a cross-cutting theme
* Strengthen capacities of DMMU and other key stakeholders
* Provide short courses for the media
* Provide short courses on journalism for climate experts
* Possibly – implement a mutual exchange training course of journalists and climate experts, and with the participation of other key stakeholders
* Strengthen communities and other end users' capacity to understand and use climate information
* Exchange visits and peer training of farmers from communities in target areas of the different projects

**Part II:** **Indicators**

**Defined Indicators** (based on the PRODOC)

Objective Indicators:

* Capacity scorecard
* ZMD and DMMU forecasting budgets/finance

Outcome 1 Indicators:

* Percentage of national coverage of climate monitoring network
* Frequency of data transmission and reception

Outcome 2 Indicators:

* Percentage of population in the 3 target districts receiving improved early warnings
* Policies (development, disaster) integrating climate information
* Sector-specific tailored climate information packages

**Analysis of progress in the defined indicators**

* Comparison of capacity scorecards of ZMD produced at baseline (2014) and in 2015
* ZMD and DMMU climate information budgets increased in ZKW but not in USD (no increase in real terms)
* Coverage not yet improved (except for 1 AWS installed in Gwembe district), but improvement expected in this trimester with the installation of the already procured equipment
* Frequency of data provision was increased – daily information is now provided with no failure
* Frequency of data reception was also increased but is not optimal
* Percentage of population receiving improved climate information and early warning increased in Gwembe district but not yet in Sesheke and Mambwe districts (note: Chipata was replaced by Mambwe as target district); Sesheke population receives seasonal information
* Climate information integrated in the national disaster policy (of DMMU)
* Early warning information integrated into the Intended National Determined Contributions
* Use of climate information in the National Adaptation Plan (in prep.)
* The agriculture sector (only) receives sector specific climate information packaging, integrating contribution from the two projects)

**Comments on the defined indicators and suggestions for further indicators**

* ZMD and DMMU budgets are not indicative of this project's progress and impact
* Indicators for progress towards producing impact forecasting: revision of ZMD strategic plan to include impact forecasting; staff training to produce impact forecasting; equipment procured and protocols developed for producing impact forecasting
* Questionnaires for communities in the target districts (and in selected neighboring non-target districts for comparison/control) on receipt, understanding/interpretation and use of climate information and early warnings
* Surveys on weather information received at national level; crop forecast surveys
* No (and gender) of people trained by the project; no of trained people that were integrated back into ZMD
* Improved system for information generation (functional hardware and software)
* Percentage of district plans that integrate climate information among the 3 target districts and nationally (information to be received from ministry of planning)

**Part III: Specific sectorial comments**

**Agriculture (MAL):**

* There is need for more AWSs – considering coverage radius of around 25 Km of each AWS, around 300 AWSs are needed nationally
* Improved Early Warning frequency is needed for better preparedness and for better adaptation planning capacity
* Importance of the rehabilitation of the manual weather stations for increasing the network (planned to be implemented during this trimester)
* Training of local communities in weather information reading and understanding is needed – to be implemented through the Farming Training Centers; focus on provision of accurate information through household approach (rather than one-man approach)
* Considering staff turnover – importance of permanent and frequent/constant training of stakeholders
* Need for ZMD to collect further information from weather stations of the private sector (including quality control for accuracy), and by enforcing the new Act once adopted
* Need for ZMD to include information from WARMA's AWSs.

**Environment:**

* Importance of coordination in access of information for implementation of the sectorial climate-related policies: National Climate Change Policy (Environment); Agricultural Policy (MAL); Disaster Management Policy (DMMU)
* Need for one climate database that all sectors can access; strengthen capacity of the ICCS to provide centrally accessed information to all the sectors
* Need of institutional capacity building for facilitating inter-sectorial coordination and cooperation
* Need to inform stakeholders and the media on project activities and especially on AWS installations

**DMMU:**

* Strengthen the sectorial early warning mechanisms (e.g. Department of Policy and Planning in MAL)
* Need for DMMU to disseminate policy guidelines for early warnings on hazards for sectorial use
* Need for improved meteorological and hydrological information interface through improved ZMD cooperation with WARMA/DWA, Zambia Hydrological Department and Zambezi River Authority
* Urgent need for capacity building for response to early warning at community level in the project target districts
* Need to establish two ways information flow with the communities and other stakeholders
* Need to integrate the mobile communication network providers in the dissemination of climate information
* Need to implement the project's approved communication strategy

**Part IV: Feedback on the Theory of Change (ToC) Workshop**

* The ToC workshop provides good platform for cooperative planning and monitoring of the project
* Important for ZMD to understand the other sectors' point of view
* The questions discussed should be circulated in advance, to allow for internal discussions and enabling the formulation of sectorial coordinated response, before the workshop
* It is important to include participation of all key stakeholders and of several participants of each sector (however, the total number of the participants must be limited to enable active participation)
* The ToC workshop should initiate with a short presentation of the project and its implementation so far (considering that not all stakeholders are continuously involved and that not the same people from each sector participate in all the meetings)
* Use of twitter/facebook/project website for receiving stakeholders' comments

**Annex VI**

**UNDP-GEF MTR Report Audit Trail**

To the comments received in April 2016 from the Midterm Review of the project titled “Strengthening climate information and early warning systems in Eastern and Southern Africa for climate resilient development and adaptation to climate change – Zambia” (UNDP Project ID- PIMS# 5091).

*The following comments were provided in track changes and by email to the draft Midterm Review report; they are referenced by institution (“Author” column) and track change/ comment number (“#” column):*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Author** | **#/ Date** | **Para No./ comment location** | **Comment/Feedback on the draft MTR report** | **MTR Reviewer**  **response and actions taken** |
| Stephanie Ullrich, UNDP-GEF Evaluation Consultant (SU) | #1, April 8th 2016  (received 16th May 2016) | Recommendation 2 | Recommendation 2 is a No-cost extension of the Project by at least 6 months, and preferably by 12 months. Please note that it is not guaranteed that a project extension will be granted.  There are new rules regarding project extensions and they are generally not allowed unless a strong case can be made that significant progress will be made in the final years of project implementation.  The UNDP-GEF Executive Coordinator must approved all project extensions. The consultant should take this into account when creating the final report. | The recommendation is maintained, and its justification , according to the referred rules, was added to the final report. |
| SU | 2 | Recommendations | Recommendations should be made more specific. To the extent possible, each recommendation should be specific and relevant, and they should have a suggested time-frame and implementer indicated. Currently, none of the recommendations have a suggested time-frame; only some of them have an implementer indicated; and many of them are not specific enough (e.g. Recommendation 7: Accelerating implementation of the communication strategy, and Recommendation 16: Revisit procurement procedures), both in the executive summary and in the recommendations section 5.2. | Suggested time-frame and implementer are added to each recommendation. Specific clarifications are added to several recommendations. |
| SU | 3 | Recommendation 6 | Recommendation 6 is “Revision of the indicators”- but there are not many specific recommendations about which indicators should be reviewed and how. Section 4.1.2 Results Framework Analysis makes two suggestions, and this recommendation is expanded a little on pg. 45, but is this the extent to the revisions that the consultant envisions? How else can the project make the indicators more “SMART”? Which indicators need revisions? | Recommendation 6 was among the outcomes of the ToC workshop. The detailed proposed revision of the indicators is included in Annex V. Theory of Change Workshop Summary, Part II: Indicators. A comment referring to Annex V was added to the text of Recommendation 6, in the final report. |
| SU | 4 | section 3.8, Main Stakeholders | In section 3.8, Main Stakeholders List, the main stakeholders are listed, but their roles and contributions to the project (including in-kind contributions, technical assistance, participation, staff time, training, leadership and advocacy) are not clearly described. | The list is replaced by a table, with the key role of each stakeholder in the project is added |
| SU | 5 | Progress Towards Outcomes matrix | Section 4.2 presents a well-documented discussion on progress towards results, however the consultant doesn’t include the Progress Towards Outcomes matrix, as required by the ToR. Please see attached a template for this matrix. | The completed Progress Towards Results matrix was added to section 4.2. |
| SU | 6 | Annexes/ audit trail | In addition to the annexes already included, I suggest that the evaluator also include an audit trail, as the consultant has indicated will be annexed separately from the report. | The audit trail is hereby annexed as Annex VI |
| Winnie Musonda, UNDP CO (WM) | 7, Received 16th May 2016 | Throughout the document | Editorial and other minor corrections | All the editorial and other minor corrections are integrated in the final report. A track-change version of the final report is provided |
| WM | 8 | Section 2.2.3. MTR limitations | Should refer to the capacity building that has taken place at national level | Reference to the capacity building activities was inserted |
| WM | 9 | Section 4.1.1. Findings -Project design | The Interim Climate Change Secretariat is providing the coordination between the different initiatives | This comment is integrated in the final report |
| WM | 10 | Section 4.2.1. Progress towards achieving Outcome 1 | Given that this is mid –term , with 50% score, this should be sufficient | The sentence is re-phrased to accommodate this comment, and to clarify better the evaluation of progress towards achieving Outcome1 |
| WM | 11 | Section 4.3.1. Management arrangements | Providing an example will provide clarity. Further for projects matrix management is also foreseen | The paragraph is re-phrased and expanded to provide more detail and clarity on the evaluation of the management arrangements. |
| WM | 12 | Section 4.3.5. Stakeholders' engagement – gender considerations | It will be better to include also the gender mainstreaming aspects to have a balance assessment on gender performance | The section is expended with more details on addressing the gender mainstreaming aspects of the Project implementation. |
| Mukufute Mukelabai,ZMD project focal point (MM) | Received 15th April 2016, 13 | Throughout the document | Editorial and other minor corrections | All the editorial and other minor corrections are integrated in the final report. A track-change version of the final report is provided |
| MM | 14 | Progress towards achieving Outcome 1 | Detailed corrections related to the specific capacity building activities implemented | The corrections are integrated in the final report |
| MM | 15 | Section 5.1.5. (conclusions - sustainability | Detail the stakeholders that should be recipients of institutional and managerial capacity building for improved sustainability of the project results. | The details were added in section 5.1.5. |
| MM | 16 | Recommendation 12 | The conditioning of the selection of candidates for receiving training through this project, with their committing to work in the related Government departments, at least during a period that is equal to the studies period, is already included in Government policy | Recommendation 12 was corrected, to integrate this information. |
|  |  |  |  |  |

**Annex VII: MTR Terms of Reference** (Annexed separately)

**Annex VIII: Power Point Presentation of Initial Findings** (Annexed separately)

**Annex IX: Signed UNEG Code of Conduct Form** (Annexed separately)

**Annex X: Signed MTR Final Report Clearance** (to be signed by UNDP CO and UNDP-GEF RTA)

**Midterm Review Report Reviewed and Cleared By:**

**UNDP Zambia**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**UNDP-GEF Regional Technical Advisor**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. According to the UNDP-GEF performance rating scales: HS= Highly Satisfactory; S = Satisfactory; Moderately Satisfactory (MS); MU = Moderately Unsatisfactory; U = Unsatisfactory; HU = Highly Unsatisfactory. For sustainability, the GEF scale is: L= Likely; ML= Moderately Likely: MU= Moderately Unlikely; U=Unlikely. [↑](#footnote-ref-1)