



United Nations Environment Programme

Final Report

Terminal Evaluation of the Project: “Strengthening of the Gambia's Climate Change Early Warning Systems”

Project Number: LDL/00386. GEF Project ID: 3728



Authors:

Revocatus Twinomuhangi

Gilbert Ong'isa Ouma

Evaluation Office of UNEP

September 2015

Acknowledgements

This Terminal Evaluation report of the project "Strengthening of The Gambia's Climate Change Early Warning Systems" was prepared by Revocatus Twinomuhangi and Gilbert Ongi'sa Ouma who take full responsibility for the content.

There are far too many people to mention by name – and hopefully everyone who contributed is included in the lists of names annexed to this report (Annex III - B and C) – but special mention must be made of the UNEP Evaluation office, UNEP project team and the Project Management Unit team who gave unstintingly of their time to this evaluation. The UNEP Evaluation Office: Harriet Matsaert and Pauline Marima for the coordination, overall guidance, direction and quality assurance of the entire evaluation process; the UNEP Project team Nina Raasakka (the Project Task Manager) and Shakira Khawaja (the Fund Management Officer) for their technical inputs to the evaluation process; the Gambia Project team and in particular Lamin Mai Touray (the Project Director) and Bubu P Jellow (the Chief Technical Advisor) for their technical inputs and direction of the evaluation mission to The Gambia and also for providing a platform for full participation of the project stakeholders and beneficiaries. The availability of the Project Steering Committee members to the evaluation team is highly appreciated. The views and information provided by project team, stakeholders and beneficiaries in the Gambia and project sites are also highly appreciated.

We wish to emphasize that views expressed in this report are purely those of the authors and do not necessarily reflect the views of UNEP, or project stakeholders, including beneficiaries, who were consulted in the preparation of this report. This report, or portions thereof, may not be reproduced without explicit written reference to the source.

Table of contents

1	INTRODUCTION	15
1.1	Subject and scope of the evaluation	15
1.2	Evaluation objectives	16
1.3	Evaluation approach and methodology	16
1.4	Main evaluation criteria and questions	17
1.4.1	<i>Evaluation Limitations</i>	<i>17</i>
2	PROJECT BACKGROUND	19
2.1	Context	19
2.2	Project Objectives and Components	20
2.2.1	<i>Objectives.....</i>	<i>20</i>
2.2.2	<i>Components.....</i>	<i>20</i>
2.3	Target areas/groups	21
2.4	Milestones in Project Design and Implementation	22
2.5	Implementation Arrangements.....	22
2.6	Project Financing.....	22
2.7	Project partners	23
2.8	Changes in design during implementation	23
2.9	Reconstructed theory of change of the project	23
3	EVALUATION FINDINGS	29
3.1	Strategic Relevance	29
3.1.1	<i>Alignment with UNEP's strategy, policies and mandate.....</i>	<i>29</i>
3.1.2	<i>Alignment with GEF focal areas and strategic priorities.....</i>	<i>31</i>
3.1.3	<i>Relevance to global, regional and national environmental issues and needs</i>	<i>31</i>
3.1.4	<i>Relevance to national development and environmental needs and priorities.....</i>	<i>32</i>
3.2	Achievement of outputs.....	34
3.2.1	<i>Component 1: Climate change information, monitoring and early warning systems</i>	<i>34</i>
3.2.2	<i>Component 2: Climate change information dissemination and communication to end users,</i>	<i>36</i>
3.2.3	<i>Component 3: Institutional capacity for climate change policies and protocols</i>	<i>38</i>
3.3	Effectiveness: Attainment of objectives and planned results	40
3.3.1	<i>Achievement of direct outcomes as defined in the reconstructed Theory of Change</i>	<i>40</i>
3.3.2	<i>Likelihood of impact using the Review of Outcomes to Impact (ROtI) approach.....</i>	<i>43</i>
3.3.3	<i>Achievement of the formal project objectives as presented in the Project Document</i>	<i>46</i>
3.4	Sustainability and Replication	47
3.4.1	<i>Socio-political sustainability</i>	<i>48</i>
3.4.2	<i>Sustainability of Financial Resources</i>	<i>49</i>
3.4.3	<i>Sustainability of Institutional Frameworks</i>	<i>49</i>
3.4.4	<i>Environmental sustainability</i>	<i>50</i>
3.4.5	<i>Catalytic Role and Replication</i>	<i>50</i>
3.5	Efficiency	54
3.5.1	<i>Cost effectiveness</i>	<i>54</i>
3.5.2	<i>Timeliness</i>	<i>55</i>
3.6	Factors affecting performance	56
3.6.1	<i>Preparation and readiness.....</i>	<i>56</i>
3.6.2	<i>Project implementation and management.....</i>	<i>57</i>
3.6.3	<i>Stakeholder participation, cooperation and partnerships</i>	<i>58</i>
3.6.4	<i>Communication and public awareness</i>	<i>58</i>
3.6.5	<i>Country ownership and driven-ness.....</i>	<i>58</i>
3.6.6	<i>Financial planning and management</i>	<i>59</i>
3.6.7	<i>Supervision, guidance and technical backstopping</i>	<i>60</i>
3.6.8	<i>Monitoring and evaluation</i>	<i>60</i>

4	CONCLUSIONS, RECOMMENDATIONS & LESSONS LEARNED	62
4.1	Conclusions	62
4.1	Lessons Learned	66
4.2	Recommendations	69
5	ANNEXES	71

List of tables, figures & diagrams

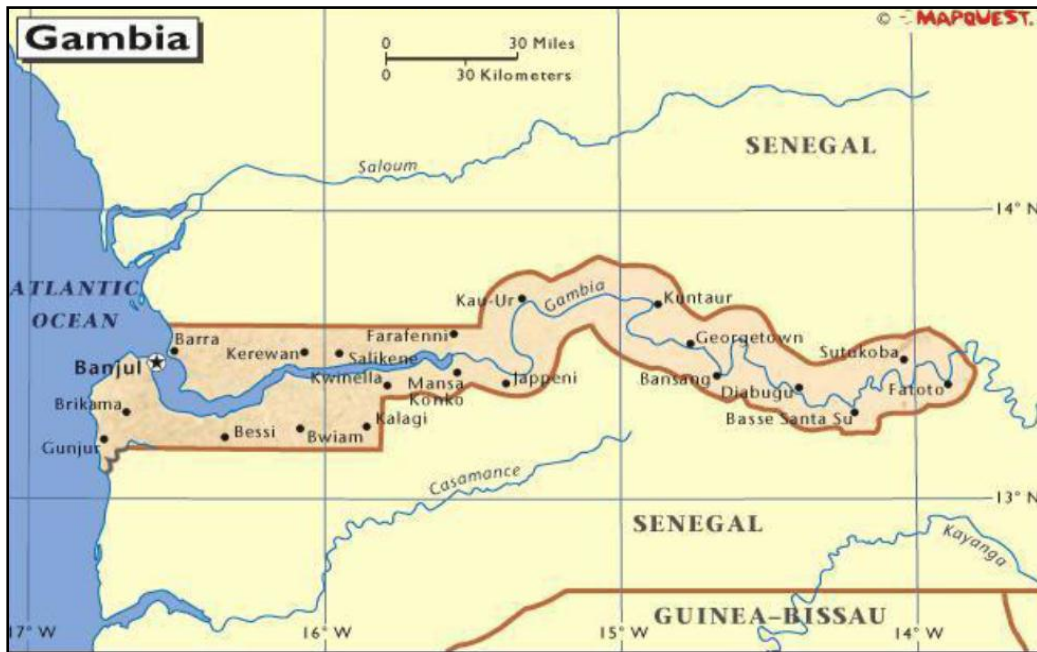
Table 1: Project Identification Table	vii
Table 2: Summary of Evaluation Ratings	x
Table 3: Milestones in project design and implementation	22
Table 4: Project budget summary	23
Table 5: Rating Scale for Outcomes and Progress towards Intermediate States	43
Table 6: Overall Likelihood of Achieving Impact	43
Table 7: Summary of Evaluation criteria, assessment and ratings	64
Figure 1: Location of the Gambia	vi
Figure 2: Theory of Change – Outputs to Impact Analysis	28

List of acronyms & abbreviations

Acronym/Abbreviation	Meaning
ACPC	African Climate Policy Centre
AF	Adaptation Fund
AfDB	African Development Bank
ANR	Agriculture and natural Resources
AWS	Automatic Weather Station
BCC	Banjul City Council
COP	Conference of the Parties
CTA	Chief Technical Advisor
DEPI	UNEP's Division of Environmental Policy Implementation
DNA	Designated National Authority
DWR	Department of Water Resource
EA	Expected Accomplishments
ECOWAS	Economic Community for West African States
EWS	Early Warning Systems
FAO	Food and Agricultural Organisation
FNC	First National Communication
GCCI	Gambia Chamber of Commerce and Industry
GCF	Green Climate Fund
GCMs	General Circulation Models
GEF	Global Environmental Facility
GIS	Geographical Information Systems
GOTG	Government of The Gambia
GRTS	Gambia Radio and Television Services
HDI	Human Development Index
IA	Implementing Agency
ICAO	International Civil Aviation Organization
IFAD	International Fund for Agricultural Development
IWRM	Integrated Water Resource Management
KNC	Kanifang Municipal Council (KNC).
LDCF	Least Developed Countries Fund
MDFTs	Multidisciplinary Facilitation Teams
MDGs	Millennium Development Goals
MOA	Ministry of Agriculture
MOECCWW	Ministry of Environment, Climate Change, Water and Wildlife
MOFEA	Ministry of Finance and Economic Affairs
MOFWRNAM	Ministry of Fisheries, Water Resources and National Assembly Matters
NAPA	National Adaptation Programme of Action
NDMA	National Disaster Management Agency
NBR	North Bank Region
NCC	National Climate Change Committee
NEA	National Environment Agency
NMHS	National Meteorology and Hydrological Services
NWSR	National Water Sector Reform Project
PAGE	Programme for Accelerated Growth and Employment

Acronym/Abbreviation	Meaning
PCU	Project Coordinating Unit
PMU	Project Management Unit
PC	Project Coordinator
PCU	Project Coordination Unit
PD	Project Director
PMU	Project Management Unit
ProDoc	Project Document
PRSP	Poverty Reduction Strategy Programme
PSC	Project Steering Committee
RLGs	Radio Listening Groups
ROtI	Review of Outcomes to Impacts
SCCF	Special Climate Change Fund
SNC	Second National Communication
TNC	Third National Communication
TOC	Theory of Change
TORs	Terms of Reference
UNDAF	United Nations Development Assistance Framework
UNDAP	United Nations Development Assistance Plan
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
WCR	West Coast Region
WISDOM	Women in Services, Development Organization and Management
WMO	World Meteorological Organisation

Figure 1: Location of the Gambia



Source: The Government of The Gambia, 2013, The Second National Communication

Table 1: Project Identification Table

GEF project ID:	3728	IMIS number:	LDL-2328-2725-4C10
Focal Area(s):	Climate change	GEF OP #:	
GEF Strategic Priority/Objective:	Climate Change Adaptation	GEF approval date*:	24 March 2011
UNEP approval date:	24 June 2011	Date of first disbursement*:	5 Aug 2011
Actual start date:	1 August 2011	Planned duration:	36 months
Intended completion date*:	31 July 2014	Actual or Expected completion date:	30 June 2015*
Project Type:	MSP	GEF Allocation*:	US\$1,028,500
PPG GEF cost*:	US\$30,000	PPG co-financing*:	US\$50,000
Expected MSP/FSP Co-financing*:	US\$1,555,000	Total Cost*:	US\$2,663,500
Mid-term review/evaluation (planned date):	July 2012	Terminal Evaluation (actual date):	March-September 2015
Mid-term review/evaluation(actual date):	Not conducted***	No. of revisions:	2**
Date of last Steering Committee meeting:	19 March 2015	Date of last Revision:	10 April 2014
Disbursement as of 31 march 2015:	USD1,028,500	Date of financial closure:	N/A
Date of Completion:	30 June 2014	Actual expenditures reported as of 31 March 2015	USD1,028,500
Total co-financing realized as of 31 December 2014:	USD 969,175	Actual expenditures entered in IMIS as of 31 December 2014:	USD564,642.43
Leveraged financing:			

*Legal Amendment No. 1 to the PCA provides for an extension of the legal instrument (covering reporting times) up until 30 June 2015.

** Two minor revisions have been made to date. A closing revision (third) will be made account for some of the negatives on the project lines that have been overspent in the last expenditure report.

*** An MTR was not conducted as this is a 3 year MSP for which MTR is not compulsory.

Executive summary

Introduction

The project "Strengthening of The Gambia's Climate Change Early Warning Systems" was implemented by the United Nations Environment Programme (UNEP) Division of Environmental Policy Implementation (DEPI) in collaboration with the with the Government of The Gambia's Department of Water Resources (DWR), which houses the National Meteorological and Hydrological Services (NMHS), as the project's executing agency. The project was implemented from 1 August 2011 to 31 July 2014, and got a no cost extension up to December 2014 to complete some activities.

The need for the project arose from the climate change impacts assessments conducted under the First National Communication (FNC) and National Adaptation Programmes of Action (NAPA) that found out that the Gambia is highly vulnerable to climate change and variability, and one of the ways to address reduce the vulnerability is to strengthen climate early warning systems (EWS).

The major objective of the project was "to enhance adaptive capacity and reduce vulnerability to climate change through a strengthened early warning and information sharing mechanism for a better informed decision making by government and affected population".

The major objective of the terminal evaluation was to assess project performance (in terms of relevance, effectiveness and efficiency), determine its outcomes and impacts as well as their sustainability, and to identify valuable lessons learnt.

Evaluation methodology

The findings of the evaluations were based on a desk review of project documents, key informant interviews, group discussions and field visits to pilot sites in the Gambia as well as evaluations of the technical aspects of the projects that have been implemented. Country-specific documents related to climate change adaptation, development and environment were also reviewed prior to and after the field mission. UNEP and GEF documents related to strategies, policies and programming, and evaluation were also reviewed.

Progress made towards achievement of project objectives and impacts was examined using a reconstructed Theory of Change (TOC) approach and Review of Outcomes to Impacts (ROtI) analysis. The reconstructed TOC was based on the premise that strengthened early warning systems i.e. strengthened hydro-meteorological services, enhanced delivery of climate information and early warnings, and appropriate policy setting, would enhance the adaptive capacity and reduce vulnerability to climate change. This would ultimately lead to increased climate change resilience of national development and communities.

Summary of the main evaluation findings

For purposes of the evaluation, the original project outcomes were re-formulated to better reflect the project's intended outcomes. To that end, the main outcome was reformulated to read "capacity to adapt and reduce vulnerability to climate change is enhanced through strengthened early warning and information sharing mechanisms that better inform decision making by government and the affected population", and used in the TOC analysis. The following re-formulated immediate outcomes were used to develop the project's Theory of Change (TOC): (i)Capacity of hydro-meteorological services and networks enhanced to predict climate events, identify the associated risks and issue early warnings;(ii) improvement in the delivery of climate information, including early warnings, to various users for effective adaptation decision making; and(iii) enhanced preparedness of communities and government to respond to climate risks and vulnerabilities.

In terms of ROTI analysis and the TOC, the project's objectives and implementation remained relevant in the context of the issues it intended to address.

A. Strategic relevance:

The objectives and implementation of the project were aligned to the Gambia's development and environmental strategies and programmes, and were tightly aligned to the country's climate change adaptation needs and priorities. The project addressed one of the top ten adaptation priorities identified in the FNC and NAPA i.e. strengthened climate early warning and information sharing mechanisms. The project was also relevant and aligned to GEF and UNEP's policies and strategies on climate change. For UNEP the project is aligned to the programmatic objectives and expected accomplishments on climate change adaptation in the UNEP Mid Term Strategy (MTS) 2010–2013, and the Bali Strategic Plan for Technology Support and Capacity-building.

B. Achievement of outputs:

Although the project set very ambitious targets on technical and human capacity development, the project satisfactorily delivered planned outputs with a relatively small budget and in limited time frame. Achievement against project outputs under component 1 was satisfactory. The Gambia's hydro-meteorological network was rehabilitated, upgraded and equipped, and human capacity enhanced through training and recruitment of hydro meteorological staff to use the strengthened network. Achievement of outputs under component 2 was highly satisfactory. Effective channels for communicating climate information were developed, deployed and demonstrated in pilot sites, and lessons learned used to improve the EWS. The achievement of project outputs under component 3 was satisfactory. Capacity to initiate and revise policies and plans with view to climate proof them was enhanced through training and sensitization. Climate change has been integrated in some sectoral policies (Agriculture and Natural resource Policy, Forestry Policy and Fisheries Strategy and Action Plan) and the Country's Programme for Accelerated Growth and Employment (PAGE). The demonstration aspects focused on removing climate information and adaptation barriers at the national and community levels geared to promoting adaptive management and implementation of adaptation actions at the community and household levels.

C. Effectiveness (attainment of project objectives and results):

The achievement of direct (immediate) outcomes, as defined in the reconstructed TOC, for all three components is rated as 'B' or better, indicating that the project's intended outcomes were delivered and were designed to feed into a continuing process. The upgraded and equipped hydro-meteorological network and the trained and retained meteorological staff are already delivering reliable and accurate climate information and early warnings to users. The delivery of climate information and early warnings to the various users was the most effective in terms of achieving the overall project objective. There is evidence of increased confidence in climate information and early warning messages by communities in the pilot sites. The effectiveness of climate mainstreaming studies and lessons learnt resulted into the core teams in sectors that are trained on integration of climate change into policy and development planning. By bringing together policy makers together to integrate climate change into policy, the project was effective in enhancing the preparedness of government to respond to climate risks and vulnerabilities.

D. Sustainability and replication:

The project's prospects of sustainability are moderate across all four dimensions (financial, socio-political, institutional and environmental) of sustainability of project outcomes. The availability of financial resources for the second phase will drive up scaling and replication. In addition ongoing and planned initiatives in climate change adaptation supported by both the GOTG and bilateral donors provide excellent opportunities for sustaining project outcomes through uptake in some of them. Additionally, the socio-political situation and institutional frameworks are currently very conducive to

sustaining project outcomes. Sustainability will be high if follow up funding sources are secured, specifically by self-financing through the sale of climate information by the proposed Meteorological Authority. In addition, ownership and enthusiasm at community and national levels will increase the sustainability of the project achievements. The proposed phase two of the project is an indication that the results of the project need to be sustained, and its implementation will further enhance the sustainability of the project along all the four dimensions.

Catalytic role and replication:

The project has been catalytic in changing community practice in regard to EWS and adaptation which could trigger replication and scale-up, triggering integrated government policy and securing donor funding. The rating of progress towards the Intermediate States and impact is rated “C” meaning it is “Likely” to achieve the expected Impact. However, long term impacts regarding adaptation and building resilience will more likely accrue if EWS forms part of a wider framework for integrating adaptation into planning and socio-economic development at the national, sub-national, local and community levels (programmes and projects). The early successes of the pilots showcases the project’s concrete, on-the ground achievements, which will be instrumental in promoting further stakeholder buy-in and acceptance of climate information, early warnings, and uptake adaptation actions by households and communities. The phase two of the project will entrench drivers that are catalytic to impact, build on lessons learned and best practices, and upscale and replicate the project results in the whole of the Gambia.

E. Efficiency:

Although the project set ambitious targets in terms of capacity building, project implementation was generally cost-effective and timely. Project activities were low cost and were achieved with a small budget, and cast a vast net in terms of likelihood impact. In this sense the project was very cost-effective. This was achieved through establishing strategic and strong partnerships, using a participatory approach, building on existing institutions and initiatives in climate change, selection of pilot sites in areas with ongoing projects and programmes, and above involving local communities in implementation.

F. Factors affecting project performance:

The evaluation found that preparedness and readiness, project implementation and management and stakeholder participation and public awareness acted positively to enable successful project performance. In addition a strong and effective PMU, ability to generate political buy-in and country driven-ness contributed greatly to the success of the project. However, the project set ambitious targets given its budget and time frame and M&E was not very effective due to absence of an M&E dedicated staff.

Table 2: Summary of Evaluation Ratings

Criterion	Overall Rating
A. Strategic relevance	Highly Satisfactory
B. Achievement of outputs	Satisfactory
C. Effectiveness: Attainment of objectives and planned results	Satisfactory
1. Achievement of direct outcomes as defined in the reconstructed TOC	Satisfactory
2. Likelihood of impact using ROI approach	Likely
3. Achievement of formal project objectives as presented in the Project Document.	Satisfactory
D. Sustainability and replication	Moderately Likely
1. Socio-political sustainability	Likely
2. Financial resources	likely
3. Institutional framework	Moderately Likely

Criterion	Overall Rating
4. Environmental sustainability	Likely
5. Catalytic role and replication	Satisfactory
E. Efficiency	Highly Satisfactory
F. Factors affecting project performance	
1. Preparation and readiness	Satisfactory
2. Project implementation and management	Highly Satisfactory
3. Stakeholders participation, cooperation and partnerships	Satisfactory
4. Communication and public awareness	Satisfactory
5. Country ownership and driven-ness	Highly Satisfactory
6. Financial planning and management	Moderately Unsatisfactory
7. Supervision, guidance and technical backstopping	Satisfactory
8. Monitoring and evaluation	Moderately Unsatisfactory
i. M&E design	Moderately Satisfactory
ii. M&E plan implementation	Moderately Unsatisfactory
Overall project rating	Satisfactory

Summary of lessons learned and recommendations

The following is a summary of the main lessons that have been learned from the project's successes as well challenges:

Finding	The Theory of Change (TOC) approach was not yet in use during the project design phase and was not used in the planning and implementation of the projects. The logical framework approach was the tool used to represent the project's causality and guide project planning, management and monitoring. (Sections 1.4.1 - Evaluation Limitations, and 2.9 - Reconstructed TOC). Both the TOC and logic models can improve project design but in different ways. The TOC is a causal model that illustrates how and why desired outcomes and impacts are expected to come about, including the preconditions necessary for this to occur.
Lesson 1	The TOC approach is a useful tool for articulating drivers and assumptions and explaining the causal relationship between intended actions, outputs, outcomes, intermediate states and impact of projects. In order to depict the causal pathways from outputs to outcomes over intermediate states towards impact, it is ideal that the TOC be envisaged at the project design stage.
Application	UNEP project design
Finding	The project had ambitious targets at design; it was not realistic to expect that the EWS of the Gambia would be strengthened in three years and with USD 2.5 million. It was also not realistic that increased adaptive capacity and reduced vulnerability would be achieved only through effective EWS. In addition, increasing resilience is a long process. The design did not take into account of (and was not flexible enough to take care of) the sequential arrangement of activities and outputs; for example, adaptation actions depend on effective meteorological networks, reliable climate information and effective delivery mechanisms. Some substantial parts of the capacity building (upgrading met. networks) and community preparedness were undertaken toward the end of the project (Sections 3.2.1 – Component 1 outputs, 3.5.1 – cost-effectiveness, and 3.6.1 preparation and readiness).
Lesson 2	The design of projects in climate change adaptation needs to be realistic in terms of targets, time and resources, mindful of the sequential arrangement where some outputs are dependent on the results of preceding activities and outputs. In addition, a number of factors and uncertainties come into play in project implementation and hence flexibility and adaptability in project design can save it from such risks and uncertainties.
Application	UNEP project design and implementation, taking into account the need for flexibility and adaptive management.
Finding	The project was largely successful because it was country driven, aligned to the country's climate change and development needs and priorities, and implemented with the existing institutional

	frameworks that ensured a strong coordination and management mechanism (Section 3.1.4 - Relevance to national development and environmental needs and priorities).
Lesson 3	Alignment of projects with national and local needs and priorities enhances ownership and strong coordination, and should therefore be promoted in design and implementation of projects. Strong coordination at country level enhances ownership and opens channels for future collaboration and knowledge sharing.
Application	Design and implementation of Projects.
Finding:	Building partnerships and stakeholder engagements were critical to the success of the project. Leveraging on the work and finances of the NWSR project and African Climate Policy Centre (ACPC), and taking advantage of synergies with other organizations increased project efficiency (Section 3.6.3 - Stakeholder participation, cooperation and partnerships).
Lesson 4:	Engagement of a cross-section of stakeholders, including local communities and beneficiaries, is important for the successful implementation of projects in which the long term impact is highly dependent on their actions.
Application:	Building partnerships (during project design and implementation) that are essential to enhancing adaptive capacity and reduced vulnerability to climate change.
Finding	The project's major strategy to adaptive capacity building comprised of learning-by-doing approach and demonstrations. The sensitization of the public and training of technical staff, policy makers, practitioners, communities and media change agents enabled them to be directly involved in implementation. The involvement of technical staff, media and communities in the delivering of climate information and early warnings helped enhance the EWS capacity of the Gambia, which was translated into day-to-day work with a strong sense of ownership (Sections 3.1.4 relevance to national development needs, 3.2.2 outputs of component 2, and 3.4.5 catalytic role and replication).
Lesson 5:	Learning-by-doing capacity building results in ownership of project results and impact.
Application	Building capacity through learning-by-doing and demonstrations.
Finding	One of the project's strengths lay in the involvement of the local communities (especially Radio Listening Groups), who are among the most vulnerable and are the key project beneficiaries, in the selection and execution of the pilots on climate information and early warning communication/dissemination. The communities are the main users of EWS and use them in decision making on appropriate adaptation actions (Sections 3.4.5 - Catalytic role and replication, and 3.6.3 - stakeholder participation, cooperation and partnerships).
Lesson 6:	Involvement of key beneficiaries (local communities) at an early stage of project design, selection of pilots and implementation promotes acceptance of project results which increases the likelihood that project outcomes will be sustained.
Application	Involvement of the ultimate beneficiaries in the design and execution of pilots and demonstrations.
Context	The project operated alongside other organisations, sectors, programmes and initiatives on the Gambia climate change landscape to contribute towards climate change resilience. Therefore, attribution by tracing back change to the project's specific outputs beyond immediate outcomes is difficult because of the many actors and programmes in the country that are contributing to the intended impact i.e. increased climate resilience. In this regard, impact cannot be attributed to one intervention (Sections 1.4.1 Evaluation Limitations and 3.3.2 Likelihood of impact)
Lesson 7	Since the impact (increased climate resilience) cannot be attributed to a single intervention (the project), outcome mapping, from project design to implementation and M&E, should not only focus on measuring behavioural changes exhibited by primary and secondary beneficiaries, but also on attribution and contribution of other actors and programmes on behavioural change exhibited by the beneficiaries.
Application	Design and implementation of projects
Finding:	Some challenges were experienced in the monitoring and reporting of project activities, arising from the omission of an M&E Officer position in the project design. The absence of M&E officers resulted in inadequate regular monitoring of progress against indicators, and lack of documentation of lessons learned. While a number of studies (through consultancies) were

conducted, there is no documentation of lessons learned from them; consequently, despite being planned project outputs, their effectiveness in contributing towards outcomes is limited. A mid-term review evaluation was not conducted, which undermined the assessment of progress made and the identification of corrective action in project implementation (Section 3.6.8 M&E).

Lesson 8: **Projects should take M&E seriously at both project design and implementation. The M&E officer position should always be catered for in the ProDoc. In addition Project Management should keep track of targets that are likely to be missed and then appropriately adjust to achievable targets by the end of the project.**

Application: Design of all UNEP projects

Finding: The evaluation finds that the PMU was very effective in implementing the project and maintaining clear communication between Project Management, Project Proponents and Project Beneficiaries; this enhanced the success of the project. The PSC was also very effective in providing direction and supervision of project activities (Sections 2.5 - Implementation arrangements, 3.6.2-Project implementation and management, and 3.6.6 - Financial planning and management).

Lesson #9: **Effective project management that promotes clear and transparent communication are key to creating strong working relationships and avoiding raised expectations resulting in disappointment, loss of hope and mistrust.**

Application: Implementation of all UNEP projects

The following is a summary of the main recommendations that have been generated from the evaluation findings:

Context The project has created a considerable interest and confidence in climate information and EWS, and for climate change adaptation. It has enhanced the capacity for hydro-meteorological services and improved delivery of climate information. Through this, the project has generated useful lessons and best practices in developing and implementing EWS and adaptation interventions (Section 3.3.1 achievement of direct outcomes).

Recommendation 1: **The planned phase two of the project, and other similar interventions in the country, should implement follow-on activities for replicating and up-scaling the project results, and for integration of climate change adaptation into policy, plans, budgets and institutional frameworks.**

Responsibility UNEP and the Government of the Gambia

Time Frame Implementation of Phase Two of the project - 2015-2018

Context: The project design had very ambitious capacity building targets and milestones (Sections 3.2.1 – Component 1 outputs, 3.5.1 – cost-effectiveness, and 3.6.1 preparation and readiness).

Recommendation 2: **In designing projects of a similar nature as this one, UNEP should ensure that a needs assessment is conducted and that the log-frame is robust and includes 'SMART' indicators, baselines and time-bound targets.**

Responsibility: UNEP and Government of The Gambia

Time-frame: Design of follow-up projects.

Context: Although communities have increased interest in climate information and have responded positively to improved EWS, the adoption of the right adaptation responses is yet to be achieved because the practices have not yet been identified and tested (Section 3.4.5 Catalytic role and replication).

Recommendation 3: **The design and implementation of EWS projects should be built in the overall context of adaptation planning and actions at the national, local and community levels. This is because building resilience will more likely accrue if EWS forms not only wider response to climate risks, but incorporates community based adaptation interventions. The government should integrate climate change adaptation into broader development programmes in which the needs of the most vulnerable communities are addressed.**

Responsibility: UNEP and Government of the Gambia

Time-frame: Design and follow up projects

Context: The projects results and lessons learned were not well communicated and documented (Section 3.6.6 M&E).

Recommendation 4: **There is need to better document lessons learned from project implementation, not only to better inform policy processes and planning at national and local level, but also to inform replication and up-scaling processes. UNEP and the Government of Gambia could channel some funds (may be from phase two) to conduct a study on lessons learned in the EWS to inform policy and planning on adaptation.**

Responsibility: UNEP and the Government of Gambia

Time-frame: Phase two of the project

Context: Though the project's intention was enhancing adaptive capacity, there was no clear focus on adaptation actions and decisions made based on the climate change risks identified. It is possible that communities could have responded with adaptation activities that were not always linked to associated risks (Section 3.3.1 Achievement of direct outcomes).

Recommendation 5: **By linking climate information and risks with adaptation options, learning processes could produce useful capacity building outcomes for future adaptation interventions.**

Responsibility: UNEP

Time-frame: Future programming

Context: The likelihood for project sustainability is high with the planned phase two of the project. However, counterpart funding is very necessary to ensure that project benefits are not lost after phase two (Section 3.4.2 sustainability of financial resources).

Recommendation 6: **Implementation of the project's second phase should build on the achievements and partnerships built in the phase one. In particular, climate modelling and prediction (down scaling) should be taken into account. Building the capacity of meteorological services to generate income, as planned in phase two is a sure way ensuring financial sustainability of EWS.**

Responsibility: UNEP and the Government of the Gambia

Time-frame: Design and implementation of phase and other follow-up projects.

Context: The project design did not provide for a Finance Officer at the PMU and thus relied on the Accountant at the government's Department of Water Resources (DWR). As a result the Accountant was overwhelmed by project work and government work and this caused unnecessary delays. In addition, the project did not have a separate bank account and used the DWR bank account. In January 2014, the migration to another Accounting Software at the Treasury Department under the Ministry of Finance and Economic seriously delayed project implementation (Section 3.6.6 – Financial Planning and Management).

Recommendation 7: **In the second phase of the project a Project Finance Officer should be hired and a separate project account opened to enhance efficiency in project implementation.**

Responsibility: UNEP, DRW

Time-frame: Second phase of the project

Context: The M&E design did not provide an M&E position and this translated in inadequacies on monitoring, reporting and evaluation during project implementation (Section 3.6.8 M&E).

Recommendation 8: **Strengthen M&E at project design and implementation. The M&E position should always be catered for in project design. PMU should ensure that monitoring and reporting activities are adequately facilitated and followed up. Appropriate mechanisms should be put in place to document and share lessons learned.**

Responsibility: UNEP, Project Executing Agency and PMU.

Time-frame: Project design and implementation

1 INTRODUCTION

1. In line with guidance for the Least Developed Countries Fund (LDCF), the Republic of The Gambia sought funding for a Medium-Sized Project (MSP) entitled "Strengthening of The Gambia's Climate Change Early Warning Systems" in order to implement one of the ten priority adaptation programmes identified as urgent in both the Gambia National Adaptation Programme of Action (NAPA) and Gambia's First National Communication (FNC) to the United Nations Framework Convention on Climate Change (UNFCCC).

2. The Global Environmental Facility (GEF) administers the LDCF which was established by the Conference of the Parties (COP) to the UNFCCC. As an Implementing Agency of the GEF, UNEP supported the LDCF project in Gambia and was the Implementing Agency (IA). Thus UNEP was responsible for overseeing and monitoring project implementation in accordance with its rules and procedures, including, among others technical backstopping.

3. This evaluation report refers to the Project: "Strengthening of The Gambia's Climate Change Early Warning Systems" (Project ID - LDL 00386; GEF Project ID - 3728; IMIS No - LDL-2328-2725-4C10) that was approved by GEF in March 2011 and by UNEP in June 2011 for a duration of 3 years (2011-2014). The project had a total budget of USD2,583,500, of which 40% represents the GEF allocation (USD 1,028,500). The remaining 60% (USD 1,555,000) was to be provided by the Government of The Gambia (GOTG) of which USD 500,000 was to be provided in cash and 1,055,000 in kind.

4. The project goal was "to adapt national development in the face of climate variability and change" and the project objective was "to enhance adaptive capacity and reduce vulnerability to climate change through a strengthened early warning and information sharing mechanism for a better informed decision making by government and affected population". The project expected results are described in section 4 of this document (Theory of Change). The Terminal Evaluation (TE) was undertaken in line with the UNEP Evaluation Policy¹ and the UNEP Evaluation Manual² to assess project performance and to determine the outcomes and impacts (actual and potential) stemming from the project, including their sustainability. The evaluation analysis used standard evaluation criteria to examine six aspects of the project: strategic relevance, attainment of objectives and planned result sustainability and replication, efficiency, factors and processes affecting project performance, and complementarity with the UNEP strategies and programmes. In this Evaluation Report, the evaluation team presents the results of the evaluation as well as the conclusions, lessons learned and recommendations.

1.1 Subject and scope of the evaluation

5. Independent terminal project evaluations are an integral part of UNEP Evaluation Policy. To that end, in March 2015, the UNEP Evaluation Office (EO) commissioned a team of two consultants to undertake a Terminal Evaluation (TE) of the project. The evaluation covered the period from the start to the completion of the project (August 2011 to December 2014). The evaluation was conducted between March and September 2015 and included a visit to the UNEP Headquarters in Nairobi for consultations with UNEP officials, a country visit mission to the Gambia for consultations

¹<http://www.unep.org/eou/StandardsPolicyandPractices/UNEPEvaluationPolicy/tabid/3050/language/en-US/Default.aspx>

²<http://www.unep.org/eou/StandardsPolicyandPractices/UNEPEvaluationManual/tabid/2314/language/en-US/Default.aspx>

with project team, partners and beneficiaries and also for field visits to project pilot sites in March 2015. The detailed evaluation timeframe is given in Annex III.

6. In line with the Terms of Reference (TOR), the evaluation revolved around the following key questions, based on the project's components and the intended outcomes:

- i. Has the project been successful in enhancing the capacity of The Gambian hydro-meteorological services and networks for predicting climate change events and risk factors?
- ii. To what degree has the project succeeded in promoting more effective, efficient and targeted delivery of climate information including early warnings?
- iii. Have project activities contributed to improved and timely preparedness and responses of various stakeholders to climate linked risks and vulnerabilities?
- iv. What contribution has the project made to the development of enhanced adaptive capacity and reduced vulnerability to climate change in The Gambia?

7. These questions were expanded by the evaluation team (see evaluation matrix, Annex VIII).

1.2 Evaluation objectives

8. The Terminal Evaluation had two primary purposes:

- i. to provide evidence of results to meet accountability requirements, and;
- ii. to promote operational improvement, learning and knowledge sharing through results and lessons learned among UNEP and the key project partners. Therefore, the evaluation will identify lessons of operational relevance for future project formulation and implementation

9. In addition, the evaluation was intended to identify lessons of operational relevance for future project formulation and implementation and to provide recommendations for the planned second phase of the project.

1.3 Evaluation approach and methodology

10. In line with the TORs (Annex I), this evaluation was conducted using a mix of approaches: (i) a desk review of project documentation, including project reports, outputs, studies, meeting minutes, implementation and financial reports; (ii) a review of documentation of UNEP policies and programmes as well as country documents; (iii) conducting a set of interviews with key project partners, participants and beneficiaries, and (iv) a country visit to the Gambia and project pilot sites and holding group discussions with project beneficiaries. The list of stakeholders consulted and interviewed is available in Annex III and a list of consulted documents reviewed is provided in bibliography (Annex IV).

11. The evaluation was conducted by two Consultants; Revocatus Twinomuhangi (Lead Consultant) and Gilbert Ouma (Support Consultant), under the supervision and with the support of the UNEP Evaluation Office.

12. The deeper analysis in this evaluation is based on the Theory of Change (TOC). It suffices to mention that the project design (ProDoc) did not contain a TOC. To that end, a reconstructed TOC was developed based on analysis of the ProDoc in order to support a comprehensive Review of

Outcomes to Impact (ROtI) analysis. Therefore, the evaluation may not correspond to the implicit TOC that the project team worked with (generally they did not use this framework). However, the reconstructed TOC analysis (Section 2.9) describes the main components of the project's logical framework. The evaluation table on design quality from the Inception Report is presented in Annex IX).

1.4 Main evaluation criteria and questions

13. In line with the UNEP Evaluation Policy, the UNEP Programme Manual and the TOR, the project was assessed with respect to a minimum set of evaluation criteria grouped into six categories:

- i. Strategic Relevance, which looks at the alignment of project objectives country policies, strategies and needs;
- ii. Attainment of objectives and planned result, which comprises the assessment of outputs achieved, effectiveness and likelihood of impact;
- iii. Sustainability and replication, which focuses on financial, socio-political, institutional and environmental factors conditioning sustainability of project outcomes, and also assesses efforts and achievements in terms of replication and up-scaling of project lessons and good practices;
- iv. Efficiency; which covers cost-effectiveness and timeliness;
- v. Factors and processes affecting project performance, including preparation and readiness, implementation and management, stakeholder participation and public awareness, country ownership and driven-ness, financial planning and management, UNEP supervision and backstopping, and project monitoring and evaluation, and;
- vi. Complementarity with the UNEP strategies and programmes, which covers linkage to UNEP's Medium Term Strategy (MTS), Expected Accomplishments and alignment with the Bali Strategic Plan.

14. Several of these criteria were reviewed in the Inception Report. These have been updated and included in the full impact evaluation. All evaluation criteria were rated on a six-point scale in accordance with standard UNEP assessment guidelines which were given in the evaluation TORs.

15. Sustainability is rated from Highly Likely (HL) to Highly Unlikely (HU) – as outlined in the TORs. According to the UNEP Office of Evaluation, all the dimensions of sustainability are critical; this means that the overall rating for sustainability must not be higher than the lowest rating of the individual sustainability dimensions.

16. In addition, the quality of project design was assessed (see Annex IX). An Evaluation Matrix (Annex VIII) was used to outline in detail the proposed indicators that were used to answer the evaluation questions across the core areas of evaluation.

1.4.1 Evaluation Limitations

17. **Use of the TOC to assess effectiveness:** Use of the TOC to assess effectiveness: At project design, the TOC methodology was not used in the design and implementation of the project. The log frame model was however used to illustrate the project's causality. Therefore, the evaluation team reconstructed a TOC (post design) by relying on the ProDoc, in particular the Log-frame matrix, and refined the project's causality to address the higher level outcomes in the results chain, and also

identified the preconditions necessary for impact achievement. However, the project team was not conversant with the TOC methodology. In order to enhance the effectiveness of the reconstructed TOC in the evaluation, the consultants discussed it with the project team and Project Steering Committee (PSC) early in the evaluation process and was able to get adequate input and consensus.

18. **Attribution Vs Contribution:** The project did not operate in isolation on The Gambia climate change landscape. It therefore contributes towards the climate change adaptation results of a much wider set of sectors, actors and development partners. Thus, it was not easy for this evaluation to identify and qualify the projects relative contribution toward the high-level impact of reducing vulnerability and adapting Gambia's national development to climate variability and change and intermediate outcomes that was pursued by the project. A number of other projects and actors in The Gambia are also contributing to this overall impact/result. Therefore, outcome mapping at project design should have focussed not only on measuring the behavioural changes exhibited by primary and secondary beneficiaries of the project, but also on the contribution of other actors (programmes and projects) on behavioural change.

19. Generally, the country mission consultations were an extremely valuable component of the terminal evaluation and feedback was very comprehensive. However, not all stakeholders were available during the country mission. Mostly, interviews were limited to "impact" assessment i.e. interviews with project partners, and some beneficiaries. However, despite the unavailability of some of the partners, country visits and interviews formed the most detailed project performance assessment.

20. The documentation for the project design is at an output and immediate outcome level with very few specific indicators at the outcome and impact indicators formulated at project onset and during implementation. Some project proponents were not met during the country missions and did not respond to e-mails and hence they could not be further located for a response. For example, Bernard Gomez the former Project Coordinator and Pa Ousman Jarju, the former Project Director who managed the project for the larger part of project period were not interviewed. As a result background and project documentation (status, updates and reports) were used to identify the results, significant changes and lessons learnt without project proponent communication.

21. Although the ProDoc (project design) provided for a mid-term evaluation, for this project, none was conducted. Although in a three year project a mid-term review is not compulsory (according to the Task Manager), this terminal evaluation therefore missed an opportunity of building on the results and lessons learned that would have been generated through a mid-term review. In addition, the evaluation team faced a limitation in availability of documented evidence, and most of the documents available were actual products/reports generated as outputs, rather than progress reports or evaluations.

22. **Determining causality from limited information on results:** The project was designed to deliver outputs and achieve immediate outcomes and main project outcome. Thus data at the intermediate state (medium-term and intermediate outcome levels) has been difficult to come by or triangulate. The evaluation team had to, in some cases, rely on the evaluative evidence of quality and utility of outputs (products and services) delivered by project interventions. However, the TOC analysis has helped overcome this limitation to the assessment, drawing out intended outcome level results, assumptions, and impact drivers from a variety of sources.

23. The evaluation considers aspects related to financial management and financial flows with respect to: consistency between planned and realized expenditures, efficiency of financial planning and reporting mechanisms, and the transparency of financial management processes. The

evaluation did not include an assessment of financial management in the fiduciary sense, which would normally be delivered through regular account audits.

2 PROJECT BACKGROUND

2.1 Context

24. The Gambia is one of Africa's smallest and poorest countries. The country has an area of about 11,000 km², a population of about 1.82 million, an annual population growth rate of 2.5% and a population density of about 130 persons per sq.km. With this population density, The Gambia is among the five most densely populated countries in Africa. It is a low-income, food deficit country with a predominantly agrarian economy. About 69% of the population lives below the poverty line, and it is ranked 168th out of 182 countries in the United Nations Human Development Index (HDI). It is classified as a least developed country and is one of the highly indebted poor countries.

25. The Gambia is currently experiencing negative and adverse impacts of climate change such as decreasing rainfall and rising sea levels. A one metre sea-level rise projected to occur by 2050, may result in the inundation of over 90 sq.km of the coastal zone leading to the loss of the capital city of Banjul, displacement of people, loss of lives and livelihood, and a significant negative impact on economic growth and development. Since the late 1960s, The Gambia has been experiencing shorter crop growing seasons, decrease in average annual rainfall, decreasing ground water recharge and lower water levels in water points (wells and boreholes). Drought frequency and severity have increased and the advancement of desertification conditions in the country has been observed. The overall impact is reduced agricultural productivity that repeatedly fails to meet household food security needs and national food security goals.

26. Based on climate change impacts assessments conducted under the National Communication and National Adaptation Programmes of Action (NAPA) processes, the country is found to be highly vulnerable to climate change and variability. This vulnerability is exacerbated by low adaptive capacity of the country which is evident at all levels. The major root cause of this high vulnerability of the country to climate change arise from the geographical location of the country in the very marginal and transition zone of the Sahel Region of West Africa. This location makes the country prone to droughts, wind storms, coastal erosion and sea level rise. The vulnerability is further exacerbated by anthropogenic practices such as deforestation for fuel wood and agriculture production. Indirect root causes that exacerbate the country's vulnerability include poverty, high population density, reliance on rain-fed agriculture and inadequate policy and legislation to effectively address climate change issues.

27. A major barrier that limits the capacity of Gambia to address and adapt to climate change is the inability to effectively predict climate change events, assess potential impacts and deliver both short and long term alerts and warnings to end-users. Capacity to collect reliable data, produce relevant information, effectively monitor climate variability and change, and develop timely alerts and early warnings is low. This low capacity is due to a number of infrastructural constraints and human capacity limitations that include:

- i. inadequate number and quality of equipment, tools and data processing software to collect and analyse climate data and produce relevant information;
- ii. shortage of qualified personnel to transform the data into weather forecasts and early warnings;

- iii. inadequacies in the packaging of the information into user-friendly products such as advisories and warnings; and
- iv. inadequacies in finding and utilizing appropriate communication media and language.

28. This situation is expected to persist and will be exacerbated under climate change unless urgent measures are taken to address it and strengthen climate change early warning system in The Gambia.

29. The project was therefore conceived and designed to support the country to strengthen Early warning Systems (EWS) in order to reduce vulnerability and contribute to current national efforts to develop appropriate and effective adaptive capacity of the country. Particular emphasis was given to interventions that:

- i. enhance the capacity of hydro-meteorological services and networks to predict climate events and risk factors;
- ii. develop a more effective, efficient and targeted delivery of climate information including early warnings; and
- iii. contribute to improved and timely preparedness and responses of various stakeholders to climate linked risks and vulnerabilities.

30. UNEP's Division of Environmental Policy Implementation (DEPI) was the Implementing Agency (IA) with responsibility for overseeing and monitoring the project implementation process, including technical backstopping. UNEP worked in close collaboration with the Government of The Gambia's Department of Water Resource (DWR), which houses the National Meteorological and Hydrological Services (NMHS), as the project's executing agency.

2.2 Project Objectives and Components

2.2.1 Objectives

31. As already mentioned in paragraph 4 primary goal of the LDCF project was "to adapt national development in the face of climate variability and change". The main project objective was "to enhance adaptive capacity and reduce vulnerability to climate change through a strengthened early warning and information sharing mechanism for a better informed decision making by government and affected population".

2.2.2 Components

32. The project included 3 key components: (1) climate change information, monitoring and early warning systems, (2) Climate change information dissemination and communication to end users, and (3) Institutional capacity for climate change policies and protocols.

Component 1: Climate change information, monitoring and early warning systems

33. The component was meant to provide support to improve infrastructural and human resource capacity for effective and efficient collection of relevant weather related information, monitoring and tracking climate change, processing of collected data and information for risks analyses as well as interpretation of the processed data to formulate early warning messages. This would be enabled through the rehabilitation of hydro-meteorological stations (repair and/or installation of a critical minimal set of equipment and instruments), human resources development so that meteorology staff have capacity to use the equipment and instruments, and interpret the collected and processed data. In addition, support under this component was meant to strengthen

and increase capacity for archiving and the digitization of historical data to provide solid evidence based climate related information.

Component 2: Climate change information dissemination and communication to end users

34. Through climate change information dissemination and communication, the capacity of the National Meteorological and Hydrological Services (NMHS) was meant to be enhanced to enable it to collect, package and share weather forecasts, climate information and early warning messages in ways that capture the interest and attention of specific and targeted end-users/stakeholders. Support under this component was also meant to deliver effective climate information and identify and test effective channels of communication for various users of the NMHS products, including better communication of the early warning messages for the farmers.

Component 3: Institutional capacity for climate change policies and protocols.

35. This institutional capacity component was meant to build on components 1 and 2, and support integrating climate change into key policy instruments that is crucial for enhancing the capacity for climate change response in The Gambia. Through this component national capacity to initiate and undertake policy revisions for climate sensitivity would be enhanced and climate risks integrated into national planning with appropriate budget allocations for implementation. The component was also meant to enable public sector engagement through creation of a consultative forum with major private sector partners, delivery of information including a set of key messages, and providing training to private sector partners. (The project's logical framework is presented in Annex X).

2.3 Target areas/groups

36. The project was implemented in The Gambia, and the scope was national. The target groups were climate information providers and end users of climate information in the Gambia. For information providers, the target group was the main national climate information provider in the country, the National Meteorological and Hydrological Services (NMHS) in the Meteorology Division of the DWR. For this target group, the project was implemented mainly at the sites of the synoptic meteorological and hydrological stations.

37. The users climate information products are clustered into four categories: Government Ministries and Agencies; Civil Society Organizations (Community Based Organizations and Non-Governmental Organizations especially those in the North Bank Region); the private sector mainly in the tourism and hospitality sector located mainly in the Greater Banjul Area; Public and Private Press.

38. The Government Ministries and agencies included: the Department of Agriculture (DOA), Department of Fisheries, Gambia Tourism Board, Department of Forestry (DOF), The National Disaster Management Agency (NDMA), the Gambia Fire and Ambulance Services, the Gambia Civil Aviation Authority (GCAA), Gambia National Army (GNA) and Gambia Ports Authority (GPA), the National Climate Change Committee, Regional/Divisional Governments, Divisional Climate Change Committees.

39. The other target group was the Media that disseminate climate information to the users. Both public and private media agents were important stakeholders of the project: the Gambia Radio and Television services (public sector); community radio stations, media agents and Community Radio Listening Groups constituted within the communities in the project sites to receive and disseminate climate variability and change, and early warning products (forecasts, warnings, advisories and bulletins). In addition were farming community groups and stakeholders in pilot sites

in the North Bank Region (NBR), West Coast Region (WCR), Banjul City Council (BCC), and Kanifang Municipal Council (KNC).

2.4 Milestones in Project Design and Implementation

The table below presents the milestones and key dates in project design and implementation:

Table 3: Milestones in project design and implementation

Milestones	Completion dates
GEF project approval date	24 March 2011
UNEP Project Approval Date	24 June 2011
Actual Start Date	1 August 2011
Intended Completion Date	31 July 2014
Planned Duration	36 months
Project Inception Workshop	27 October 2011
Completion Date	31 December 2014
Date of financial closure	31 December 2014
Terminal Evaluation completion	September 2015

2.5 Implementation Arrangements

40. As an Implementing Agency of the GEF, UNEP was the Implementing Agency (IA) of the LDCF project. UNEP's Division of Environmental Policy Implementation (DEPI) was responsible for overseeing and monitoring the project implementation process, including technical backstopping. In addition, UNEP was expected to ensure timelines, quality and fiduciary standards in project delivery. The UNEP Project Task Manager was responsible for project supervision. UNEP worked in close collaboration with the Government of The Gambia's Department of Water Resources (DWR) which was the Project's Executing Agency (EA). The DWR houses the National Meteorological and Hydrological Services (NMHS).

41. The Director of the DWR served as the Project Director (PD) ensuring a continued cohesion between the project and DWR and providing linkages and coordination with the Government of The Gambia (GOTG). A Project Coordination Unit (PCU) was put in place to manage and implement the project, supported by a multidisciplinary team of experts in meteorology, hydrology, socioeconomics, policy analysis, information and communication. A project Coordinator (PC) was hired as full time position to lead and direct the PCU supported by a team of experts mentioned above. The PC was provided with administrative/logistical support staff assistance to serve as the focal point for the multi-dimensional interactions between the project and the various partners.

42. In addition, a Chief Technical Advisor (CTA) was also hired to function as a member of the Project Coordination Unit PCU, and reporting to the PD. A Project Steering Committee (PSC) was put in place to play an oversight role, and provide support, policy guidance and supervision for the project. THE PSC was multi-disciplinary and multi-stakeholder in composed of representation from the project partners, relevant government institutions, NGOs, Private Sector and the media.

2.6 Project Financing

43. The project had a total budget of USD 2,583,500, of which 40% represents the GEF allocation (USD 1,028,500). The remaining 60% (USD 1,555,000) was provided by the Government of The Gambia (GOTG) of which USD 500,000 was to be provided in cash and 1,055,000 in kind. Table 4 below provides a summary of financial reporting 31 December 2014.

Table 4: Project budget summary

Particulars	Amount (USD)
Cost to GEF/LDCF Fund	1,028,500
Co-financing	1,555,000
Total Cost of the Project	2,583,500

2.7 Project partners

44. The main project stakeholders included the Implementing Agency and the Executing Agency, already highlighted in Section 2.5 above, and project partners to include the following: the Ministry of Agriculture (MoA), Ministry of Finance and Economic Affairs (MoFEA), Ministry of Environment, Climate Change, Water Resources, Parks and Wildlife (MoECWW), Ministry of Fisheries (MoFish), National Environment Agency (NEA), National Disaster Management Agency (NDMA), Department of Forestry (DoF), UNCCD Focal Point), Department of Parks and Wildlife Management (DPWM, UNCBD Focal Point), Women's Bureau, Gambia Tourism Board (GTB), Stay Green Foundation (NGO), Gambia Radio and Television Services (GRTS), Gambia Chamber of Commerce & Industry (GCCl), Select Committee on Environment and Natural Resources of the National Assembly of The Gambia, and the UNDP/UN Country Office.

2.8 Changes in design during implementation

45. The project started in August 2011. Based on the findings of needs assessment study conducted at the beginning of the project, the project baseline targets for human capacity building (training) were found to be over ambitious and could not be achieved with the project budget. The needs assessment study undertaken made recommendations to prioritise the personnel to be trained under the project³. There was no major revision to the project design. The only changes were two budget revision/modifications carried out in April 2013 and April 2014. The other notable change was Legal Amendment No.1 that provides for an extension of six months (covering reporting times) until 30 June 2015 to cater for the time needed to complete the project. Phase two of the project (a separate project funded by LDCF building on this first project) will address some of the budget issues encountered in this project. Reconstructed Theory of Change of the Project

2.9 Reconstructed theory of change of the project

46. Progress made towards achievement of project objectives and impacts was examined using the Theory of Change (TOC) approach and Review of Outcomes to Impacts (ROtI) analysis. Following UNEP's terminology, the TOC is a logical model derived directly from the Programmes of Work and strategy/design documents to identify and help explain the causal relationship between intended actions, outputs, immediate outcomes, medium-term outcomes, intermediate states and impacts of programmes and projects. In addition, the TOC highlights drivers and assumptions, which are important external factors affecting change at different levels of the causal pathways.

47. As already mentioned in Section 1.4.1 (on limitations) the TOC methodology was not used at the time the project was being designed; the log-frame model was used to represent the project's causality at that time. However, the TOC has an added advantage over the log-frame in that it enhances the logical-framework by addressing higher-level outcomes and identifying drivers, assumptions, and other preconditions necessary for impact achievement that may not be included in the log-frame. Nevertheless, the log frame matrix used in the project design, which in itself is an

³Peacock G.J, et al, 2012. Needs Assessment report for an Effective Early Warning System in The Gambia

expression of the project's causality, was the basis upon which the TOC developed in this evaluation was reconstructed post-design.

48. The TOC methodology has three distinct stages: (i) identifying the project's intended impacts, (ii) reviewing the project's logical framework and (iii) analysing and modelling of the project's outcomes-impact pathways.

49. **Stage 1** - Referring to the "objectives" statement in the ProDoc, the ultimate impact of the project was contributing to a national development that is adapted to climate variability and change. The main objective of the project was to enhance adaptive capacity and reduce vulnerability to climate change through a strengthened early warning and information sharing mechanism for a better informed decision making by government and affected population (called the objective in the Results Framework).

50. Therefore, we consider as the main Project Outcome⁴: "capacity to adapt and reduce vulnerability to climate change is enhanced through a strengthened early warning and information sharing mechanisms that better informs decision making by government and the affected population". Achievement of this outcome would contribute to adapting national development to the impacts of climate change. The project's activities were designed to deliver certain Outputs⁵, which in turn aim to make a significant contribution to the achievement of a set of direct (or immediate) outcomes that, as a whole, represent the main Project Outcome defined above (see Figure 2).

51. **Stage 2:** The broader outcome defined in the logical framework is clear and can be verified by keeping track of how hydro-meteorological networks were upgraded or repaired, how many staff have were trained or by cross checking how many communities access and use early warning messages and climate information or how many policies climate proofed.

52. The overall project logical frameworks (and now TOC) analysis is based on the premise that: enhanced capacity of hydro-meteorological services and networks, effective, efficient and targeted delivery of climate information, and improved and timely preparedness and responses of various stakeholders to climate linked risks will strengthen early warning and information sharing mechanisms which inform decision making by government and affected population, culminating into enhanced adaptive capacity and reduced vulnerability to impacts of climate change.

53. The first group of Outputs refers to the assistance given by the Project to alleviate infrastructural and human resource deficiencies for climate change information, monitoring and early warning systems, i.e. strengthening national network to provide vital inputs for climate monitoring and prediction; putting in place human capacity to use the rehabilitated and upgraded network; and, putting in place systems to couple climate and socio-economic assessments. These are conducive to "capacity of hydro-meteorological services and networks enhanced to predict climate events, identify the associated risks and issue early warnings", which is the Direct/Immediate expected Outcome 1.

54. The second set of Outputs refers to the support given by the project for improving climate change information, dissemination and communication to end users: i.e. developing appropriate

⁴ Outcomes: the short to medium term behavioural or systemic effects that the project makes a contribution towards, and that are designed to help achieve the project's impacts ("the ROTI Handbook", GEF, 2009)

⁵ Outputs : the goods and services that the project must deliver in order to achieve the project outcomes (idem)

information and communications capacities at the NMHS for packaging and sharing weather forecasts and early warning messages; demonstrating effective communication and response strategies to warnings. Collecting lessons learned from pilot projects and using them to improve the system (adaptive management); leading to the second expected Direct/Immediate Outcome, "Improvement in the delivery of climate information, including early warnings, to various users for effective adaptation decision making".

55. The third set of Outputs includes the support given by the Project for institutional capacity for climate change policies and protocols: i.e. building capacity to initiate and undertake policy revision for climate sensitivity; undertaking policy revisions and developing implementation plans; increasing awareness of climate risks by policy makers; and, developing a functional policy response system to encourage preventative planning and decision making in response to early warnings and climate change trends; establishing a public-private platform for risk management to engage private sector in climate proofing; leading to the Direct/Immediate Outcome 3: "Enhanced preparedness of communities and government to respond to climate risks and vulnerabilities".

56. Direct/Immediate Outcomes 1 and 2 are prerequisites to Immediate Outcome 3: improved and timely preparedness and responses of various stakeholders to climate linked risks and vulnerabilities. Emerging from the ProDoc, main **key-drivers** for the delivery of the several goods and services (Outputs) are:

- i. Project partners play their coordinating and management roles;
- ii. Essential equipment is in place and staff is in place or trained in time to implement project activities;
- iii. Availability of credible and useful climate data and information;
- iv. Selected pilot sites are best placed for project interventions to demonstrate adaptation measures; and
- v. Awareness is increased among key agencies and institutions on the need and use of EWS

57. Deriving from the three components, each with a cluster of Outputs, three direct/immediate Outcomes were meant to be achieved provided that the DRW/NMHS actively assume a leading role and that the main national stakeholders assume their specific responsibility in the process (institutional uptake).

58. However, the achievement of the three Direct/Immediate Outcomes identified by the Project does not automatically imply that the main Project Outcome (enhanced adaptive capacity and reduced vulnerability through a strengthened early warning and information sharing mechanism for a better informed decision making by government and affected population) is achieved. At that stage, an effective coordination has to be in place in order to assemble and harmonically implement all the functions and instruments included in the Results Framework. The DWR/NMHS has to fully play a coordination and promotion role, while the institutional uptake by the main stakeholders has to be maintained and strengthened. Moreover, the DRW/NMHS will be fully operational under the **assumptions** that:

- i. Key agencies and institutions recognise the need for effective EWS and increase uptake of early warning information;
- ii. Availability of technical expertise and equipment for upgrading the network.

- iii. Stakeholders are committed to implement project interventions and provide necessary support.
- iv. Communities respond positively to improved early warning and adopt the right adaptation responses.
- v. The human resources trained by the Project remain in place in their respective institutions and find conducive work and institutional environment, allowing them to be really effective.

59. **Stage 3-** The assessment of the theory of change led to the identification of the impact pathways and specification of the impact drivers and assumptions, as summarized below:

60. Three **Intermediate States** have been identified between the project outcomes and the intended impacts.

61. The impact that this project intends to achieve is contributing to a national development that is adapted to climate variability and change. The pathway from the Project Outcome (Capacity to adapt and reduce vulnerability to climate change is enhanced through a strengthened early warning and information sharing mechanisms that better inform decision making by government and the affected population) to the intended Impact is not a straightforward process. Intermediate States (I.S), the transitional conditions between the project's immediate outcomes and the intended impact, are necessary conditions for the achievement of the intended impacts. We have identified the three Intermediate States (I.S.) that have to be fulfilled (as shown in Figure 2), which presents our understanding of the causal logic and of the pathway from Outcome to Impact. A number of key drivers and assumptions were also identified to move from the project outcomes to Intermediate States towards Impact.

62. Assuming that the Outcome is achieved and maintained (under the conditions that, firstly, policy makers are catalyzed to promote and mainstream climate change adaptation in national planning and development processes, and that there is strong political will to mainstream climate change in policy and planning), the process will lead to "increased sharing and use of early warning information by the government and the affected population to inform adaptation planning and decision making" (**I.S. 1**). The key impact drivers (factors) expected to contribute to realization of this I.S 1 are: Partners play their roles; lessons learned and best practices on EWS are scaled-up and/or replicated, and; credible climate and information sharing mechanisms and tools are available. Increased technical capacity support policy setting and planning for adaptation.

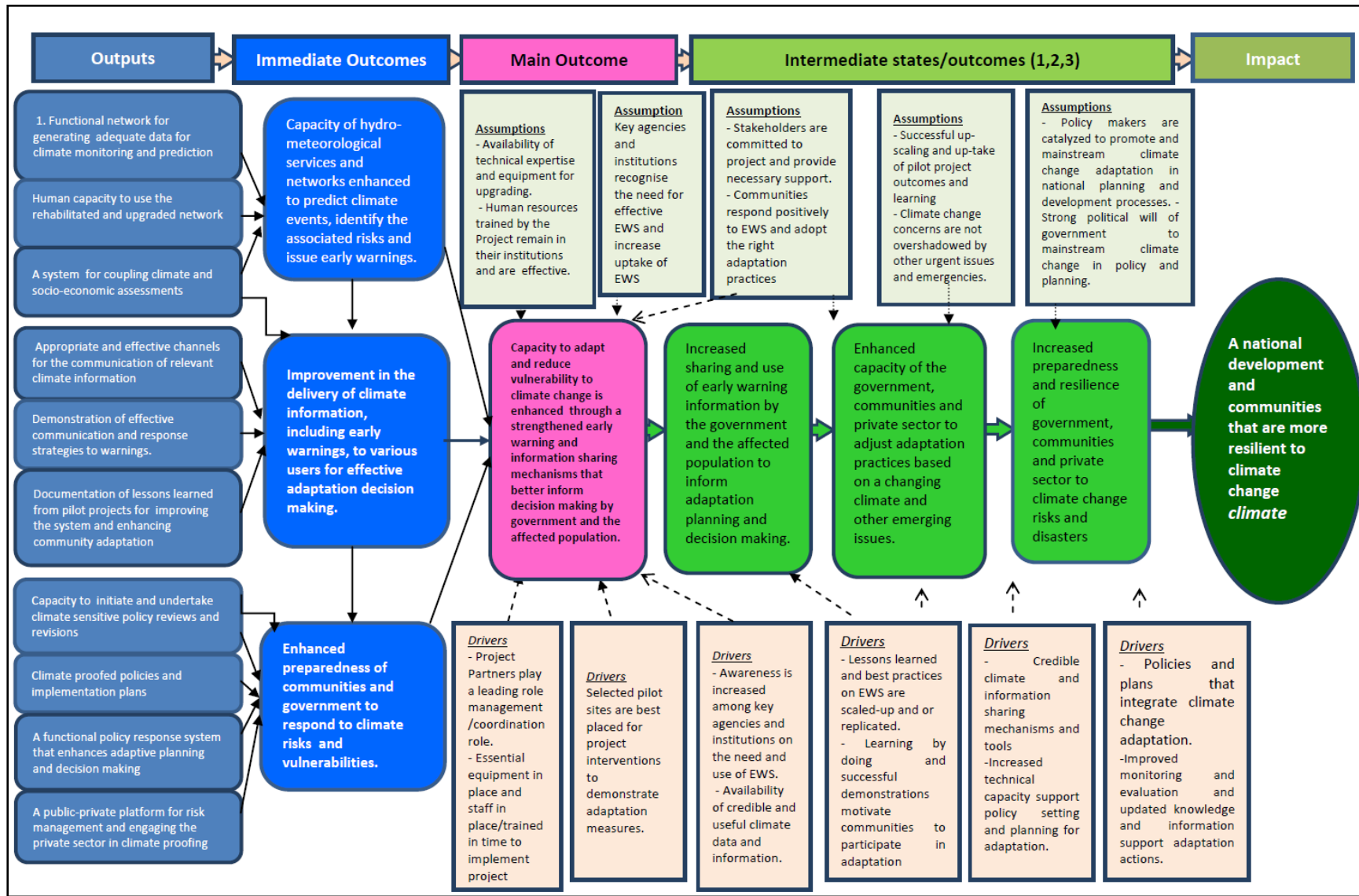
63. Our understanding is that increased sharing and use of early warning information by the government and the affected population to inform adaptation planning and decision-making will lead to: "enhanced capacity of the government, communities and the private sector to adjust adaptation practices based on a changing climate and other emerging issues" (**I.S. 2**), on assumption that: there is successful up-scaling and up-take of pilot project outcomes and learning; policy makers are catalyzed to promote and mainstream climate change adaptation in national planning and development processes; and still that there is strong political will in government to mainstream climate change in policy and planning. The main impact drivers at that stage are an effective National Climate Change Committee to guide the process; effective stakeholders participation and collaboration on adaptation planning and decision making; and learning by doing and successful demonstrations motivate communities to participate in adaptation.

64. Enhanced capacity of the government, communities and the private sector to adjust adaptation practices based on a changing climate and other emerging issues will lead to: "Increased

preparedness and resilience of the population, communities and private sector to climate change risks and disasters" (**I.S. 3**). The drivers at this level are availability of policies and plans that integrate climate change adaptation. The assumptions are that the public and private sectors use early warning and implement climate-proofed policies and plans; sectors and communities adopt the right adaptation practices, there is successful up-scaling and up-take of pilot project outcomes and learning; and, there is good relationship with other agencies dealing in climate change issues.

65. Finally, the **Project Impact** "national development and communities that are resilient to climate change" can be achieved under the assumptions that: there is political will from government to address climate change and that climate change concerns are not overshadowed by other urgent issues and emergency matters; and, there is sudden and large-scale climate-related phenomenon occurs to wipe out advances in adaptation; This will be driven by improved monitoring and evaluation, and updated knowledge, information support adaptation actions, and appropriate climate change policies.

Figure2: Theory of Change – Outputs to Impact Analysis



3 EVALUATION FINDINGS

3.1 Strategic Relevance

3.1.1 Alignment with UNEP's strategy, policies and mandate

66. This section provides an analysis of the extent to which the Project was consistent with UNEP's policies, strategies and programme of work. In retrospect it is possible to affirm that the project's objectives were fully consistent with the UNEP's strategies, policies and mandate at the time of design. The project was designed in 2010-2011 and is aligned to emerging knowledge, strategic thinking and programming on climate change and especially adaptation in UNEP.

67. The UNEP Medium Term Strategy (MTS) 2010–2013 identifies six cross-cutting thematic priorities including climate change. The intended results of the Gambia's Climate Change Early Warning Systems project are consistent with UNEP's programmatic objectives and expected accomplishments of various cross-cutting priorities of the MTS 2010-2013. The objectives and expected accomplishments focus on providing environmental leadership in the four areas prominent in the international response to climate change: adaptation, mitigation, technology and finance, and their interlinkages. The EWS project's outcomes contribute to UNEP's aim to help developing countries to build resilience to the impacts of climate change, to build and strengthen national institutional capacities for adaptation planning, and support national efforts to integrate climate change adaptation measures into development planning practices.

68. The project is aligned to UNEP's Climate Change Programme of Work (POW) 2010-2011 and 2012-2013 that provides the strategic framework for Climate Change. The overall objective of the Climate Change Strategy is "to strengthen the ability of countries to integrate climate change responses into national development processes". Along the life span of the EWS project, the project outcomes were aligned in several ways to the respective POW, most notably to integrate climate change responses into national development processes.

69. Most notably, the POW 2010-2011 has climate change as one of its four themes, and the project fits within the context of Expected Accomplishment (a) - on adaptation - i.e. *Adaptation, planning, financing and cost-effective preventive actions are increasingly incorporated into national development processes that are supported by scientific information, integrated climate impact assessments and local climate data*. Expected Accomplishment (a) is in line with the fourth area mentioned under UNEP's mandate that is "facilitating the development, implementation and evolution of norms and standards and developing coherent inter-linkages among international environmental conventions".

Alignment with the Bali Strategic Plan (BSP)⁶

70. One of UNEP's mandates, made explicit in the Bali Strategic Plan, is 'strengthening technology support and capacity-building in line with country needs and priorities'. By engaging in adaptation, UNEP aims to build a scientific knowledge base, and develop enabling capacity necessary to integrate science into adaptation policy and planning to support countries to adapt by building resilience to a changing climate.

71. Given UNEP's mandate and that the focus of the Gambia's EWS project was to enhance adaptive capacity and reduce vulnerability to climate change through a strengthened early warning

⁶<http://www.unep.org/GC/GC23/documents/GC23-6-add-1.pdf>

and information sharing mechanism, this evaluation finds that the project's objective is highly relevant to and consistent with the BSP for Technological Support and Capacity Building which aims at a more coherent, coordinated and effective delivery of capacity building and technical support at all levels and by all actors, in response to country priorities and needs.

Gender balance

72. The ProDoc considered the benefits of increased access to climate information and early warnings for women farmers who are often most adversely affected by the climate risks and disasters. To enhance the contribution and ownership opportunities for both men and women, it had proposed to adopt a gender-sensitive strategy, in which women farmers and women groups would be positively targeted to ensure gender equity and balance with regards to participating in and benefiting from project activities.

73. The project proposed to use a focus group tool, to identify specific involvement of women in farming or other activities that may benefit from alerts or warnings, and ensuring equitable women participation. The ProDoc also proposed that gender equity would be addressed at the level of the DWR by ensuring that women technicians and professionals benefit from the planned training activities.

74. During the implementation of the project, the Women's Bureau under the Office of the President was represented on the PSC. The Women's Bureau and the Women in Services and Development (WISDOM) NGO were very active and vocal in presenting gender issues. This evaluation found out that sensitization and training sessions with stakeholders in pilot sites ensured participation of women. Additionally, stakeholders varied and included public and private sectors, civil society, women and youth groups, and representation in these groups took gender into consideration.

Human rights based approach (HRBA)

75. For this project, human rights were not the primary focus of the intervention. The intervention theory considered human rights issues to some extent i.e. principles of inclusion, participation, fairness in design and implementation. The project targeted the most vulnerable communities who are also the poorest in the Gambia. The project pilot sites were in the poor communities in NBR and WCR. By enhancing the adaptive capacity of the poor vulnerable communities the project promotes inclusive development. In addition the project deployed participatory techniques. All stakeholders including communities were consulted in the design of the project and during implementation. The project pilot sites were selected through stakeholder consultations. There were no cases of human rights violations.

South-South Cooperation

76. Though the project design did not explicitly mention South-South cooperation it provides for replication which is an avenue for South-South Cooperation. For example, the project proposed to increase access to effective and reliable climate information and early warnings to households, communities, private sector and government agencies, which is relevant in the Gambia as well as in the other African countries in general. The Gambia is a member of the ECOWAS where the successes in EWS in Gambia could be replicated. The development of networks and partnerships and strengthening of the capacity of hydro-meteorological services to provide climate information can easily be replicated in other (West) African countries with similar environmental contexts. The pilot projects were designed to provide adaptation lessons and best practices that can easily be transferred elsewhere. Therefore there is a potential for replication of the project results which can

be done through south-south cooperation. The Meteorology personnel on the project were trained in Nigeria and Kenya which is also evidence of south-south cooperation.

3.1.2 Alignment with GEF focal areas and strategic priorities

77. GEF serves as a financial mechanism for the UNFCCC, supports adaptation and mitigation interventions that address climate change and also provides the secretariat for the LDCF. Climate change is one of the focal areas of the GEF. This evaluation finds that the project is aligned to and framed in GEF Portfolio for Climate Change and contributes to the achievement of the GEF strategic priorities and targets in adaptation. Implementation of the project yields results that contribute directly to the strengthening of EWS within the Gambia and contributes to the LDCF Objective 1 (reducing vulnerability) and Objective 2 (increasing adaptive capacity). In particular, the project contributes to Outcome 1.1 - *Mainstreamed adaptation in broader development frameworks at country level and in targeted vulnerable areas*, as well as Outcome 2.1 - *Increased knowledge and understanding of climate variability and change-induced threats at country level and in targeted vulnerable areas* through project focus on strengthening the national network capacity to formulate early warning messages and improving their relevance and dissemination to target groups.

78. The project ensured that weather and climate variables are observed and exchanged with the rest of the world following established standards and norms. In addition, climate change was integrated in several sectoral plans and programmes, to ensure that stakeholders take into account the climate dimension fully, as being a resource and a hazard to society, the environment and national development aspirations.

79. The project was designed taking into account overall GEF conformity i.e. sustainability, replicability, M&E and stakeholder involvement. During the implementation of the project, interpretation and application of the GEF Guidelines were adhered to as far as capacity permitted. The Project Coordinator had more than five years' experience with the applications of GEF Guidelines as participant in the development of the Second National Communications, and participation in the PIF and PPG development phases of the project. The Project Director and the Chief Technical Adviser, who are members of the Project Management Team, had gathered much expertise in the interpretation and application of GEF guidelines from participation in the negotiations of the Financial Mechanism, the LDCF, the Special Climate Change Fund (SCCF), and the Adaptation Fund (AF) to implementation of GEF Projects at the Regional and National levels.

3.1.3 Relevance to global, regional and national environmental issues and needs

80. This project is aligned to one of the most pressing challenges the world faces today, climate change. Globally, there is increased recognition for the need to build climate change resilience through adaptation. The need for adaptation to climate change impacts arises from the mounting scientific evidence that shows that ecosystems and communities are under unprecedented pressure from climate change impacts that undermine prospects for sustainable development especially in developing countries; despite their least contribution to the climate change problem. Adverse impacts of climate change have also been and are still a threat for many developing countries to achieve the agreed Millennium Development Goals (MDGs), such as eradication of poverty and attainment of environmental sustainability.

81. Parties to the UNFCCC recognize the paramount importance of promoting adaptation actions. One of the UN priorities is attainment of MDGs; and this project's activities supporting adaptive capacity contribute towards the attainment of MDG 7 (ensure environmental sustainability) as well as other MDGs through the increased resilience of communities to the impacts of climate change.

82. Although MDGs expire at the end of 2015 (this year), Sustainable Development Goals (SDGs) - a proposed set of targets relating to future international development - are set to replace MDGs. Taking urgent action to combat climate change and its impacts is one of the proposed global SDGs (SDG 13). Given evidence on the critical links between climate change and development, development that does not take into account climate change resilience could put many of the most vulnerable nations at risk of failing to achieve the SDG targets. In addition, the development of SDGs that do not address climate change or climate resilience could mean that achieving the SDGs would not ensure long term climate compatible development. Thus, although at the design of this project SDGs were not in place, this evaluation finds that the project is in line with the global SDGs that will replace the MDGs.

83. The ProDoc indicates that the 80 km long Gambian coast line contains valuable ecosystems and diverse resources, including mangrove forests (66,000 ha), mud flats and wetlands. A total of 45,801 hectares (about 4% of the total area of the country) are classified as protected areas and contain parks and reserves selected because of the endangered nature of their habitat type and/or the endangered species they harbour, such as the locally rare and endangered West African manatee and the Cape clawless otter associated with the mangroves. The protected areas are: Abuko Nature Reserve, Tanji River Bird Reserve, Bao-Bolong wetland Reserve, Kiang west National Park, River Gambia National Park, Nuimi National Park, and the Tambi Wetland Complex

84. A combination of irregular rainfall patterns, temperature and sea level rise may affect the mangrove ecosystem along the coastline. Moreover, regardless of the magnitude of sea level rise, some of the country's UNSECO World Heritage sites – James Island, Juffureh and Albreda - which are steeped in African and European colonial history are under threat from wave erosion and submergence and need to be protected⁷. A robust early warning system, resulting from this project, that predicts climate linked threats and triggers the implementation of adaptive and protective actions and policies will contribute significantly towards managing potential negative impacts of climate change on these ecosystems of global significance.

85. In addition, the ProDoc indicates that the Gambia's North Bank Region, the main project site contains over 60% of the nation's mangrove and hosts the BaoBolong Wetland Reserve (RAMSAR site). The expected improved climate change monitoring capacity, resulting from this project, will enable The Gambia to contribute more effectively to the global assessments for climate change led by the IPCC, as well as to the development of a comprehensive global climate EWS linked to natural hazards led by UNISDR, as requested by the Secretary General of the United Nations following the tsunami of 26 December 2004, and that such a system be built upon existing national and regional capacities.

86. Therefore, in its support of the strengthened EWS in the Gambia, the project objectives and outcomes are consistent with global, regional and national environmental needs. This was confirmed through a needs assessment and gap analysis, and consultation with the project partners and stakeholders.

3.1.4 Relevance to national development and environmental needs and priorities

87. In retrospect, it is possible to affirm that the project's objectives were fully consistent with the national priorities of the time. For example, the project addresses Gambia's climate change adaptation needs. The Gambia is highly vulnerable to the impacts of climate change (i) changes in rainfall levels and patterns (ii) rising temperature and (iii) sea level rise associated with increased

⁷GOTG, 2007. National Adaptation Programmes of Action

frequency of climate hazards such as droughts, flood, storms and episodes of heavy rain. However, The Gambia lacks adequate capacity to cope with these climate change events, adapt to them and reduce vulnerability to the accompanying hazards. This will continue to be the case unless timely adaptation interventions are implemented. This project is therefore relevant in that it strengthens EWS in order to reduce vulnerability and contribute to current national efforts to develop appropriate and effective adaptive capacity of the country.

88. The project addresses the second top priority identified under the country's National Adaptation Programmes of Action (NAPA) submitted to the UNFCCC in 2007; the improvement of national early warning system in order to inform farmers and their communities as well as other stakeholders on possible climate change and its impacts on the various economic sectors and livelihood systems, and sensitize them to develop and implement adaptation measures. This was also assessed as an urgent need in the Gambia's First National Communication (FNC) to UNFCCC.

89. The project is country driven and falls within the framework of Vision 2020. It is aligned and in harmony with national policy instruments such as Poverty Reduction Strategy Programme (PRSP) 2007 to 2011 in which mainstreaming environmental issues is one of the key programmes. The project is also well aligned to the Gambia Environmental Action Plan (GEAP)⁸, which recommends a focus on climate change through actions that: deliver immediate adaptation benefits; contribute to building local and national adaptive capacities; and build foundations for maximising long term adaptation benefits.

90. Although the project was designed before the design of the Gambia's Programme for Accelerated growth and Employment (PAGE)⁹, the document recognizes the adverse interface between chronic poverty, agricultural development and climate change, whereby the most drought-prone NBR has the highest levels of poverty in The Gambia. Climate change is integrated in the priority action plan for the PAGE. Based on the foregoing, the project is aligned to the Gambia's development and poverty eradication goals and objectives.

91. The project addresses Priority Area 1 of the country's United Nations Development Assistance Framework (UNDAF 2007-2011) on Poverty Reduction and Social Protection whose main outcome is: "Poverty reduction and social protection strategies and systems are established that enable the poor, vulnerable, women and youth to increase their productive capacities and generate sustainable livelihoods while protecting the environment" Specifically it will contribute to the country programme outcome 1.3.3: Establishment of a national Early Warning system, national Emergency preparedness and relief plans development and implementation supported.

92. The project is also in line with the goals and needs of several departments such as the DWR; the technical departments of the Ministry of Agriculture responsible for Agricultural and Livestock Services as well as the National Environment Agency (NEA) and Local Government Authorities which are in need of climate information and early warnings.

93. From conceptualization to implementation, the project depicts country ownership. Stakeholder analysis and consultations were part of the project design. The project was nationally executed and all the project institutions and stakeholders are nationals, except for the Agro-meteorological Consultant who is from Mali.

⁸The Republic of Gambia, 2008. Gambia Environmental Action Plan (GEAP).

⁹The Republic of Gambia, 2012. Programme for accelerated growth and employment (PAGE), Ministry of Finance and Economic Affairs.

The overall rating for project relevance is Highly Satisfactory.

3.2 Achievement of outputs

94. Overall, the achievement of outputs should be seen within the systems approach of the TOC and ROTI analysis. The project sought to achieve three outcomes (11 outputs) that were supposed to lead it to a higher-level result which is presented in the ProDoc as the principal objective of the project: “to enhance adaptive capacity and reduce vulnerability to climate change through a strengthened early warning and information sharing mechanism for a better informed decision making by government and affected population”.

95. All the project components and their relative outputs were implemented in a manner in which their achievements are cross-cutting and overlapping. Therefore, the detailed assessments below may have some outputs whose achievement resulted from the implementation of activities from more than one component. The achievement of individual outputs is discussed below and summarized in Annex XI.

3.2.1 Component 1: Climate change information, monitoring and early warning systems

96. Output 1.1 - National network is strengthened to provide vital inputs for climate monitoring, prediction and generation of adequate data for climate impacts' assessment at appropriate geographical scales. The outputs delivered by the project included a needs assessment and baseline study and the rehabilitation of the hydro-meteorological network. The final Project Implementation Review (PIR) indicates that level of achievement of this output is 100% except for the rehabilitation of meteorological stations where the level of achievement was at 90% at the time of evaluation.

97. A study was successfully conducted by C4EcoSolutions (South Africa) to establish and confirm baseline indicators¹⁰. With the findings of this study, some baselines were dropped because they were not measurable. In the same vein, some of the targets, such as recruitment and training were found to be too ambitious. A needs assessment study was successfully conducted to confirm previous needs and also determine emerging needs¹¹. The study provided comprehensive needs for an effective and sustainable climate and climate change early warning system.

98. Gambia's hydro-meteorological network was rehabilitated. All the Meteorological Stations (10) in Gambia are now fully equipped with instruments to measure and record all the weather elements. Rehabilitation works and fencing at Kerewan, Kaur, Janjangbureh, Basse, Fatoto, Jenoi, and Sibano have been completed. Appropriate positioning of the instruments within the enclosure to meet WMO and ICAO standards is also completed (final PIR and some stations were visited by the evaluation team). In addition, relocation of the Airport Instrument Enclosure containing meteorological instruments to the newly acquired land close to the runway is completed. Due to delay in acquiring and clearing the land, office facilities have not yet been completed but work is progressing satisfactorily (site visited by the evaluation team). The remaining 10% of the activity was to be completed by the end of April 2015, before the expiry of the project extension period on 30 June 2015.

99. The weather stations at Kerewan, Kaur, Janjangbureh, Basse, Fatoto, Jenoi, and Sibano were rehabilitated and fenced (See pictures in Annex XII). In addition appropriate positioning of the

¹⁰C4 EcoSolutions, 2011. Baseline information and indicators for the Gambia LDCF project, November 2011

¹¹Peacock, 2012. Consultancy Report on the Needs Assessment for an Effective Early Warning System in The Gambia

instruments within the enclosure to meet WMO and ICAO standards was conducted (stations visited during evaluation).

100. Some weather stations were relocated, including the Basse and Airport Instrument Enclosure (See pictures in Annex XII). However, due to delay in acquiring and clearing the land, construction of office facilities have not yet been completed but work is in progress. VAISALA supplied and successfully installed one Automatic Weather Station (AWS) at the Central Weather Forecasting Office in the Banjul International Airport, thus enhancing continuous monitoring and accuracy of measurements at the airport and in the Greater Banjul Area (Final report, visited during evaluation mission).

101. In addition, Water Level Recorder was successfully installed at the Bansang Hydrological Station and flow measurement equipment (baby current meters) installed in Ballengho, Basse–PrufuBolong and Pakaliba Flow Gauging Stations. This saw the commencement of the generation of flow data on the River Gambia. In addition, six Observation Boreholes have been drilled and data loggers to measure groundwater level have been supplied and installed (Tanene underground water observation borehole was visited during evaluation mission).

102. Output 1.2 - Human capacity in place to use the rehabilitated and upgraded network. This output involved the development of human resource to manage and use the upgraded network. It also had 100% achievement. In all, four Cadet Meteorologists were recruited and trained. Out of the four, three (interviewed during the evaluation) have been absorbed in the Public Service Pay Roll (2014) while one of the Cadets resigned. Two meteorologists/Cadet Forecasters were trained from the project funds. One Meteorologist/Cadet Weather Forecaster (interviewed during the evaluation) was trained at the UK Meteorology Office Training School (LDCF), and one Meteorologist is pursuing MSc training at the Federal University of Technology in Akure, Nigeria (co-financing through the NWSR project). Due to the limited LDCF project funds some of the trainings were achieved through co-financing, for example, the NWSR project.

103. Through co-financing by African Climate Policy Centre (ACPC), seven Meteorological Technicians and six Computer and Data Analysis Technicians have been trained locally by IRI (of Columbia, USA) on Enhancing National Climate Services ENACTs, and two Meteorological and Hydrological Instrument Technicians were trained in India on the installation, operation and maintenance of AWS (interview with DWR Director/Project Director).

104. The NWSR project co-financing mechanisms has contributed to human capacity development: i) one Hydrologist on a MSc programme in IWRM at the University of Dar-es-Salaam, Tanzania; ii) seven Water Resources Technicians pursuing MSc training on Hydrogeology in South Africa (NWSR); iii) seven Meteorological Technicians were trained at the Nigerian Meteorological Agency's Regional Meteorological Training Institute in Oshodi, Lagos; and, iv) 10 Hydrological Technicians from the Department of Water Resources are on training at the National Water Resources Institute, Kaduna, Nigeria (interview with DWR Director/Project Director).

105. 1.3 System in place to couple climate and socio-economic assessments for more relevant predictions and better informed recommendations. This output included recommendations on software, tools and training programmes, capacity building for users of climate information, training of Radio Listening Groups (RLGs) and extension agents, and development of partnerships to enable better use of climate information. It has also attained 100% achievement. All trainings in local communities have been conducted. The Agro-meteorological Consultant and National Technical Team conducted 5 trainings in the NBR (Kerewan, Njabakunda, Jurunku, Kerr Jarga and Essau). A total of 150 participants (125 of the local communities and 25 extension agents) were trained on rainfall measurement and phenological observations. Another training conducted in the

communities is the training of 120 members of the Radio Listening Groups (RLGs) in SuwarehKunda, Kuntair and Munyagen in the NBR and in, ToubaKouta, ManduarWollof and KassaKunda in the WCR (the evaluation team visited SuwarehKunda and Tuba ManduarRLGs, see Annex XII - pictures).

106. RLGs were trained on the operations of the Recorders and the transcription of the recorded broadcast of the weather forecast bulletin from the Community Radios. They also simulate the discussions and the subsequent dissemination of the recorded weather forecasts. During these trainings, posters were discussed and distributed to promote understanding of climate change causes, impacts and responses (the evaluation team visited Suwareh Kunda and Tuba ManduarRLGs).

107. One hundred and fifty extension agents and local community members have been trained and collect rainfall and phonological observations during the rainy season. One hundred and twenty members of the six RLGs have been formed and trained on reception and dissemination of weather forecasts and have started to disseminate climate information within their localities.

108. Recommendations on software and tools and a Training Programme are contained in the Socioeconomic Consultancy Report and the Report on the institutionalization of a Climate Change Adaptation Working Group. The acquisition of the Models and Tools and training will be conducted under the Third National Communications process from August 2015.

109. Agreements were signed between the PMU and the Community Radios in NBR and WCR. The Forecast Office provides climate early warning products through the internet; the Community Radios receive and broadcast the products (these agreements expired in December 2014). The partnership between the PMU, the Local Communities, RLGs, Non-Formal Education Unit and Media Houses has provided a translation of meteorological terms into four local languages (Fullah, Jola, Mandinka and Wollof).

The overall rating on the delivery of outputs related to this outcome is Satisfactory.

3.2.2 Component 2: Climate change information dissemination and communication to end users,

110. Output 2.1 - Appropriate and effective channels for the communication of relevant climate information. A study was successfully conducted to determine the effective channels of communication of climate early warning information from providers to users.¹² Recommendations of the Study were further tested in the field by engaging the beneficiary stakeholders in consultations. The results of the consultations suggest that Community Radios, RLGs and the use of the Multidisciplinary Facilitation Teams (MDFTs) were the most effective channels of communication. Suggested technologies to be used include internet connection between the Met. Services and the Community Radio Stations, Radio sets to the RLGs and Mobile Cellular phones.

111. For sustainability, participants were trained in translation and communication of early climate and early warning information to end-users. Step-down training is also expected under the Second Phase. In addition to this training, other capacity building and strengthening activities included the provision of equipment and tools (radio sets, mobile/cell phones, motorcycles/bicycles, public address systems) for effective communication. The Community Radio stations were provided with a computer with installed internet facilities to receive weather and climate alerts and forecasts

¹²Ansumanna Ali Cham,20131. Institutionalizing an effective climatechange early warning system in the Gambia.

for broadcasting to the population(The evaluation team visited Kerewan and Brikama community radio stations - see pictures in Annex XII)

112. Output 2.2 - Demonstration of effective communication and response strategies to warnings are implemented. Partnerships were established between the PMU, the RLGs and Community Radios that assured achievement of this activity. The MOUs signed between the PMU and the Community Radios specified the roles and responsibilities of the partners (Forecasters, Broadcasters and the PMU). The PMU provided the Community Radios with computer, internet and payment for airtime (evaluation team visited Kerewan and Brikama community radio stations).

113. The Forecasters provide the weather forecasts by e-mail to the Community Radio Broadcasters. The Broadcasters download, translate and broadcast the weather forecasts in any of the 4 local languages (Fullah, Jola, Mandinka and Wollof) using the airtime paid for by the PMU. Members of the Radio Listening Groups also listen/receive, record, discuss and orally disseminate the weather forecast broadcasts by the Community Radios. Both the broadcasters of the Community Radios and the members of the RLGs make use of the documented Translated Meteorological Terms into the four local languages. Staff of the Community Radios visited the Weather Forecasts Office and had first-hand orientation on how weather forecasts are produced and disseminated(visits to Kerewan and Brikama community radio stations, and Suwareh Kunda and Tuba ManduarRLGs).

114. In collaboration with GRTS, RLGs were established in NBR and WCR. RLGs were trained to enable them understand climate and climate change products and how to provide feedback on impacts of the products. The 2013 Seasonal Rainfall Outlook was provided, discussed and disseminated to farmer groups and other stakeholders to increase their interest and uptake of climate information. The project facilitated dissemination of this outlook to local stakeholders and the information is being used in planning for farming seasons.

115. Three hundred members of the general public were sensitized and trained (in NBR, WCR, BCC and KMC) and in particular MDFTs (consisting of Extension Agents from Government and Civil Society). The training was on climate and climate science, risks, impacts and responses, types of alerts and forecast, communication of the information, translation of the information into local languages and modes of dissemination of the information.

116. In addition, 45 Media Agents were trained in climate and climate science, risks, impacts and responses, types of alerts and forecasts, and on reporting on climate change issues in their media outlets (newspapers and radios)¹³. One recommendation from the workshop was the dissemination of the daily forecasts to media houses and this is being done on a daily basis. The Daily Observer is one of the Papers that carry the forecasts (see Annex XII).

117. Output 2.3 Lessons learned are collected from pilot projects and used to improve the system (adaptive management). A survey conducted by the PMU identified the good practices of project implementation and recommended remedies. Good practices include (a) strengthening of existing structures through capacity building, sensitization and training workshops; (b) creation of incentives for Data Collectors; (c) creation and capacity development of RLGs; (d) facilitation of coverage for weather information and warning bulletins issued in local languages; (e) regular flow of weather information and more air time for weather forecasts; (f) timely transmission of Data from collection points to the main office at the Airport; (g) the project created a lot of awareness among farmers related to their negative attitude towards deforestation and linking this to climate and climate

¹³The Training Programme and Report are uploaded on to the website: www.mofwr.gov.gm.

change (h) the bottom-up approach employed by the Project; and (i) implementation of the project was more people-centred.

118. The survey indicated bad practices as: (a) failure by the Meteorological Services to collect the 2012 and 2013 rainfall (and other data) recorded by farmers (at their homes) using the rain gauges provided by the project and installed in farmers' homes, which in a way discouraged the farmers; (b) failure to share project information and documents with Regions and communities.

119. Suggested follow-up activities include (a) provision of Public Address Systems to RLGs; (b) increase/expand the use of Community Radio Stations in providing weather and climate information; (c) use the successes of this project as baseline for the next phase; (d) Enhance the collaboration between farmers and scientists through field/demonstration work; (e) increase airtime for more information dissemination on Television and Radio; (f) climate forecasts should be part of the national news; (g) provide mobile phones and also bicycles to enable reception and dissemination of information on climate and climate change related issues; (h) conduct study tours to other countries implementing early warning systems for benchmarking; (i) provide transport for Regional Officers for monitoring of activities; and (j) involve more institutions in early warning.

120. A Communication Strategy was successfully developed and completed in January 2013 and was useful in planning and conducting the training of Media Agents.¹⁴

The overall rating on the delivery of outputs related to this outcome is Highly Satisfactory.

3.2.3 Component 3: Institutional capacity for climate change policies and protocols

121. *Output 3.1- Capacity to initiate and undertake policy revision for climate sensitivity.* This output included the generation of climate change projection and risk maps, provision of climate data and early warning information to users, policy briefing, training on integration of climate change into policies, and identification of policies for integration. The output was almost fully achieved. GIS maps of projected temperature and rainfall based on three GCMs have been produced. However, climate vulnerability risk maps have not been generated because the available data and information are old. Under the TNC process, newer data and information will be generated that will be used to produce vulnerability and impacts maps.

122. A study was successfully conducted on the institutionalization of the Climate Change Adaptation Working Group and the report includes the Terms of Reference, the composition and the major policy and technical activities to be conducted by the Group¹⁵. A Joint LDCF and NATCOM Workshop to train the National Climate Change Adaptation Working Group is planned under the National Communications process, in August 2015. This Adaptation Working Group will produce the climate hazard maps.

123. Provision of data and information on the vulnerability of the Gambian Economy has been included in the briefing of 13 Policy Makers, and the training of 40 Media Agents, 56 Private and Business Sector Entities and 39 sectoral personnel on Integration of Climate Change. The identification of the models and tools for use by the Adaptation Working Group on vulnerability and adaptation assessments have been accomplished and included in the Report on the

¹⁴Ansumanna Ali Cham, 2013. Institutionalizing an effective climate change early warning system in the Gambia.

¹⁵Gambia's EWS Project Final Report, 2014. Appendix III- Institutionalization of a National Climate Change Adaptation working Group

institutionalization of the Climate Change Adaptation Working Group. The training of the Adaptation Working Group on these models and tools will be conducted in conjunction with the implementation of the same models and tools in under the National Communications Project.

124. The Agriculture and Natural Resources Policy, the Forest Policy and the Fisheries Strategic Action Plan were identified for integration of climate change.

125. Output 3.2 - Policy revisions are undertaken and implementation plans are developed. Regarding this output, the achievement was 100%, except for policy revision which was at 90%. The Agriculture and Natural Resources Policy, the Forest Policy and the Fisheries Strategic Action Plan were reviewed and analysed to determine their sensitivity to climate change. A training workshop was conducted in this regard and thereafter sectoral staff worked with the Consultant to integrate climate change issues into the policy documents.

126. Integration of climate change into the Agriculture and Natural Resources and Forest Policies, and the Fisheries Strategic Action Plan was undertaken and the climate change proofed policy documents presented to and validated by senior staff of the relevant sectors at a Validation Workshop organized by the Project on 22 and 23 April 2014.

127. Output 3.3 - Policy makers are aware of climate risks. This output was also fully achieved. At the beginning of the initiative to integrate climate change into policies and strategies, policymakers were brought together and briefed on climate change and on the process to integrate climate change into development frameworks. The policy makers are regularly updated on climate change through the National Climate Change Committee. It had also been proposed to organize a briefing session for Cabinet Ministers during one of the Cabinet Retreats. However, this has not yet been realized because the project was yet to be allocated a slot by the Office of the President during a Cabinet Retreat by the time of the evaluation. The proposed Briefing Session for Cabinet Ministers is only possible at the beginning of the second Phase of the LDCF project in 2015. It will therefore serve a dual purpose of briefing the Ministers on the achievements of the first phase and the proposed activities in the second phase.

128. To increase awareness of policy makers on climate change, the government website¹⁶ is being regularly updated as per project progress and outputs. All the project reports are uploaded. In addition, about 45 Media Agents participated in the Training Session¹⁷ held on 17 and 18 September 2013 at the NaNA Conference Hall. The Media Agents have since increased their participation in reporting climate change issues in the media. Based on one of the recommendations from that Workshop, the Forecast Office provides the Weather Forecasts to selected Media Houses that requested to receive the forecasts from the Met. Services.

129. Output 3.4 - A functional policy response system is developed to encourage preventive planning and decision making in response to early warnings and climate change trends. This output was also successfully achieved. Updating of data and information other than climate and climate change has been being carried out by staff of the sectors responsible for the implementation of the three climate change integrated policy documents.

130. Currently existing network is for recording, transmission, reception, analysis, storage and archiving of climate data from all the collection points of the NMHS in DWR. However, the project

¹⁶www.mofwr.gov.gm/ccews

¹⁷<http://www.mfwrnam.gov.gm/>

was also meant to establish an interdepartmental/ministerial network of data management centres handling metadata. A document containing a proposal to establish such a Climate and Climate Change Data Management System within the NMHS of the Department of Water Resources has been developed.¹⁸ The report identifies all the custodians of climate and climate related data, the status of these data sets, and what is needed to network all the data centres. Setting up the data management network is what remains. In this network of Data Management Systems, the NMS in DWR will be the Lead Agency to coordinate with other custodian Departments and Ministries that have climate related data thus establishing a data coordination network through inter-ministerial coordination mechanism.

131. Output 3.5 - Establishment of a public-private platform for risk management to engage private sector in climate proofing. This output was also successfully achieved. In collaboration with the Gambia Chamber of Commerce and Industry (GCCl), PMU has successfully engaged the Private Sector through sensitization and training of about 65 private and business sector entities organized at the premises of the GCCl. Discussions on the institutionalization of the Consultative Forum were initiated by the CEO of the Gambia Chamber of Commerce. The set-up of this forum will be built on by the proposed GOTG/GCF Project to enhance the readiness of the Ministry of Finance and Economic Affairs and the GCCl to serve as the National Designated Authority (NDA) of the GCF in The Gambia.

132. Another activity of this project was to support the institutionalization of the Private Sector Forum as a conduit to access funds from the Private Sector Facility of the GCF. The relevant information has been presented at a workshop organized for the private sector through the collaboration of the PMU and GCCl. Apart from the workshop and representation of the private sector on the PSC, this evaluation did not find any other evidence that the project supported the private sector, nor that it is accessing the GCF.

The overall rating on the delivery of outputs related to this outcome is Satisfactory.

3.3 Effectiveness: Attainment of objectives and planned results

133. Assessment of effectiveness concerns the extent to which the project achieved its immediate outcomes and objectives. Section 3.2 already presents an assessment of the project's rate of achievement of its various outputs and activities.

3.3.1 Achievement of direct outcomes as defined in the reconstructed Theory of Change

134. As discussed in section 2.9(Reconstructed TOC), the project sought to achieve direct outcomes that are supposed to lead the project towards its overall objective and main outcome. The evaluation of the effectiveness is based on the extent to which the immediate outcomes were achieved, especially keeping in view the TOC developed for the project.

Immediate Outcome 1:Capacity of hydro-meteorological services and networks enhanced to predict climate events, identify the associated risks and issue early warnings.

135. In terms of outcome 1, the project was successful to great extent in enhancing the capacity of hydro-meteorological services and networks to predict climate events identify the associated risks and issue early warnings. The indicators selected to measure achievement of this objective were the

¹⁸Gambia's EWS Project Final Report, 2014. Appendix IV - Mainstreaming Report.

“number of operating fully equipped hydro-meteorological stations, and number of trained staff”. The first step for developing a EWS is a functional meteorological network. The Gambia now has 10 operational weather observation stations and trained meteorology staff. In addition, the collection of reliable climate data is successfully being conducted and disseminated. However, the datasets from the rehabilitated meteorological network of stations is still not robust enough for forecasting. Thus, NHMS still relies on global climate projections from the WMO global producing centres for forecasting, without downscaling models to local needs. To that end, the project was less successful in achieving the objective of climate prediction.

136. The project was successful in putting in place the core technical elements for an effective EWS. In, particular success was recorded in: conducting an assessment of the training needs of weather forecasters; trained nine meteorology staff and weather forecasters, provided on-the-job training of practising forecasters; provided equipment for the generation, analysis and storage of weather and water level data; and improved the security and exposure of instruments installed at the meteorological stations. This achievement strengthened the warning service component of the EWS and could eventually translate into the establishment of a fully-fledged Climate EWS for the Gambia in the longer term. Overall, the improved meteorological network will lead to improvement in climate information and early warning messages production and use. Lessons learnt from this intervention may still emerge beyond the project timeframe and period and be absorbed in the future.

Immediate Outcome 2: Improvement in the delivery of climate information, including early warnings, to various users for effective adaptation decision making.

137. The delivery of climate information and early warnings to the various users was perhaps the most effective in terms of achieving the overall objective. For example, a survey conducted at the end of the project¹⁹ suggests that 92% of the respondents in the project sites received early warning messages and 8% had not received the messages. Out of the respondents that had received the messages, 53% received alerts consistently for all events and 23% receive alerts only in extreme events but with little warning.

138. The commissioning of studies to increase understanding of socio-economic variables used in enriching climate information, and the sensitization of information intermediaries in vulnerable stakeholder groups on climate change early warning enhanced the effectiveness of delivery of early warning services to climate information users. The findings of this evaluation indicate that there was an overall increase in interest and confidence in climate information and early warning messages by communities in the pilot sites (interviews with community members in the visited sites). However, there is no mention in project reports on how communities used the EWS to inform adaptation decision making, and the project design did not take this into account.

139. In particular the use of community radios, RLGs and Multidisciplinary Facilitation Teams (MDFTs), television and print Media, and translation of meteorological terms and messages into local languages ensured that climate information and early warnings reached the end users and prepared them for climate change risk (see annex XII). This increased the adaptive capacity and reduced the vulnerability of households and communities in the pilot sites. Project implementation, through the explanation of the causes of climate change has to a large extent attempted to change the attitude of stakeholders to become more friendly to the environment, for example, by

¹⁹Bubu J.P., 2015. Feedback on the impacts of the implementation of the climate change early warning system in the Gambia, December 2014.

promoting climate friendly actions such as tree planting, discouraging bushfires and indiscriminate dumping of waste.

140. In particular, the training of media agents on reporting on climate change issues in their media and the development of a communication strategy were very effective in disseminating climate information to the end users using appropriate channels and tools. In addition, knowledge sharing mechanisms were mainly based on the highly valued workshops which took place throughout the implementation of the project.

Immediate Outcome 3: Enhanced preparedness of communities and government to respond to climate risks and vulnerabilities.

141. In the perspective of this project, enhancing the preparedness of communities and government to climate risk and vulnerabilities depended on the existence of effective institutions and an enabling policy framework. The effectiveness of climate mainstreaming studies, lessons learnt and innovations resulted into core teams in sectors trained on integration of climate change into policy and development planning. This translated into the integration of climate change adaptation in sector policies and plans including (i) the Agriculture and Natural Resources (ANR) Policy, Forest Policy, and the Fisheries Strategic Action Plan. The ANR Policy (2009-2013) was revised in 2013 to address the impacts of climate change on the ANR sector (and sub-sectors) and ways of building climate resilience in the sector integrated in the policy. Consequently, a specific section on climate change was added to the ANR Policy. In the same vein, The Forest Policy (2010-2020) was also climate proofed by identifying the impacts of climate change on the sector and integrating this in the policy (sustainable land management, watershed management and REDD+); this was done in order to enhance a climate resilient forest sector that also promotes multiple use of forests and mitigates climate change. For the Integrated Fisheries Strategic action Plan (2012-2015), the impacts of climate change on fisheries are recognised (i.e. increased temperatures and rise in sea level could lead to loss of fish spawning grounds, loss of nesting grounds for turtles, submergence of diverse habitats and ecosystems, loss of mangrove and salt marsh vegetation). Actions for promoting a climate resilient fisheries sector are included in the action plan. However the Action Plans of the sectoral policies are yet to be revised and budget put in place to implement the prioritized adaptation interventions on the ground.

142. Overall by bringing together policy makers to integrate climate change into policy, the project was effective in enhancing the preparedness of government to respond to climate risks and vulnerabilities. Moreover, the establishment of a public-private platform for risk management to engage private sector in climate proofing is an effective way of enhancing preparedness for climate change risks. However this was not fully achieved due to time and financial limitations and further activities to strengthen the Public-Private Forum will be conducted under the planned Second Phase of the EWS project. In the same vein, assessment of vulnerability and production of climate hazard maps, sectoral risk and vulnerability maps was not conducted and this limits the preparedness of communities and government to address climate change risks, though this will be conducted during the TNC.

143. Although the project's intention was to enhance the adaptive capacity of communities and government, the project activities and outputs did not focus on identifying and piloting adaptation interventions. Since the project was not designed to guide community based adaptation activities, there is a possibility that, having been provided with climate information and early warnings, some households and communities could have responded with adaptation activities that are linked to the associated risks. In a way this could have increased their vulnerability by way of mal-adaptation.

The rating for overall achievement of outcomes is Satisfactory.

3.3.2 Likelihood of impact using the Review of Outcomes to Impact (ROtI) approach

144. The likelihood of impacts depends on an increasing number of external factors and conditions moving toward the higher-level objectives of the results chain. It is assessed in terms of the extent to which change is happening along the project results chains from immediate outcomes over the main outcome and intermediate states towards impacts, based on the reconstructed TOC (Section 2.9). The critical question is the extent to which the project is likely to achieve the intended impact. The details, observations, examples and highlights of moving toward main outcome and intermediate states pertaining to project activities 2011-2014 provided below are largely drawn from interviews and documented on the project through PMU, UNEP headquarters, and field visits.

145. The ROtI analysis is used to assess the likelihood of impact by building upon the concepts of TOC. The ROtI approach requires ratings to be determined for the outcomes achieved by the project and the progress made towards the 'intermediate states' at the time of the evaluation. The rating system is presented in Table 5 below and the assessment of the project's progress towards achieving its intended impacts is presented in Table 6.

Table 5: Rating Scale for Outcomes and Progress towards Intermediate States

Outcome Rating	Rating on progress toward Intermediate States
D: The project's intended outcomes were not delivered	D: No measures taken to move towards intermediate states.
C: The project's intended outcomes were delivered, but were not designed to feed into a continuing process after project funding	C: The measures designed to move towards intermediate states have started, but have not produced results.
B: The project's intended outcomes were delivered, and were designed to feed into a continuing process, but with no prior allocation of responsibilities after project funding	B: The measures designed to move towards intermediate states have started and have produced results, which give no indication that they can progress towards the intended long term impact.
A: The project's intended outcomes were delivered, and were designed to feed into a continuing process, with specific allocation of responsibilities after project funding.	A: The measures designed to move towards intermediate states have started and have produced results, which clearly indicate that they can progress towards the intended long term impact.

Table 6: Overall Likelihood of Achieving Impact

Results rating of project entitled:							
Outputs	Outcomes	Rating (D – A)	Intermediate states	Rating (D – A)	Impact (GEB)	Rating (+)	Overall
1.1 National hydro-meteorological network is strengthened 1.2 Human capacity in place to use the rehabilitated and upgraded network 1.3 System in place to couple climate and socio-economic assessments 2.1 Appropriate and effective channels for the	1. Enhanced capacity of hydro-meteorological services and networks for predicting climate change events and risk factors	B	1. Increased sharing and use of early warning information by the government and the affected population to inform adaptation planning and decision making.	C		+	BC+

<p>communication of relevant climate information</p> <p>2.2 Demonstration of effective communication and response strategies to warnings</p> <p>2.3 Lessons learned are collected from pilot projects and used to improve the system</p> <p>3.1 Capacity to initiate and undertake policy revision for climate sensitivity</p> <p>3.2 Policy revisions are undertaken and implementation plans are developed</p> <p>3.3 Policy makers are aware of climate risks</p> <p>3.4 A functional policy response system is developed to encourage preventative planning and decision making</p> <p>3.5 Establishment of a public-private platform for risk management to engage private sector in climate proofing</p>	<p>2. More effective, efficient and targeted delivery of climate information including early warnings</p> <p>3. Improved and timely preparedness and responses of various stakeholders to forecast climate linked risks and vulnerabilities</p>		<p>2. Enhanced capacity of the government, communities and private sector to adjust adaptation practices based on a changing climate and other emerging issues</p> <p>3. Increased preparedness and resilience of government, communities and private sector to climate change risks and disasters</p>		<p>A national development and communities that are more resilient to climate change</p>		
	Justification for rating:		Justification for rating:		Justification for rating:		
	<p>The project's intended outcomes were delivered, and were designed to feed into a continuing process, but with no prior allocation of responsibilities after project funding</p>		<p>The measures designed to move towards intermediate states have started, but have not produced results.</p>		<p>Project has not achieved documented changes in environmental status during the project's lifetime.</p>		

146. Although the project was a bit ambitious in terms of outputs and outcomes given the small budget, almost all the project outcomes were achieved. The outcomes achieved have implicit forward linkages to intermediate states and impacts as discussed in paragraphs 144-153. The improved capacity (upgraded hydro-meteorology networks and human capacity, communication channels) policy revisions and partnerships built should lead to better adaptation planning that will lead to resilience. **Rating of progress towards Outcomes is "B".**

147. Some progress has already started, with revised policies that are climate proofed, improved delivery of climate information and early warnings, institutionalization of the climate change adaptation working group, integration of climate change in national planning documents (the PAGE). There is therefore country ownership of the EWS, which is likely to translate into increased funding (national and international) and growing confidence in climate information and early warnings. **Rating of progress towards the Intermediate States is "C".**

148. The overall aggregate rating for this project is “BC”. Considering the high level of ownership of the project results at national and provisional levels and the partnerships built, and that the project has a second phase, a notation “+” is also attributed, producing a final rating “BC+”. The Project, with an aggregated rating of **BC+** as described in the Table 6 above, can therefore be rated as “Likely” to achieve the expected Impact. A further discussion and justification of the rating is presented in paragraphs 146-153 below.

149. The project assumes that achieving the project’s objective "to enhance adaptive capacity and reduce vulnerability to climate change through a strengthened early warning and information sharing mechanism for a better informed decision making by government and affected population" will lead to the desired impact of "national development and communities that are more resilient to climate change". As already mentioned in section 2.9, this is not an entirely correct assumption. There are many intermediate states and intervening variables between effective early warning and information sharing mechanisms, adaptive capacity, development and climate resilience.

150. While EWS and climate information sharing mechanisms may be a necessary element of a strategy to reduce vulnerability and enhance adaptive capacity and increase climate resilience, as has been recently demonstrated by experience, it is not necessarily sufficient. Therefore, utilizing the results and lessons derived from the medium term outcomes, such as knowledge and good practices generated from adopting EWS and implementing climate proofed policies and plans, the intermediate states and impacts illustrate the next and final high-level, tangible outcomes in the results chain. According to the reconstructed TOC, these results are probable if key impact drivers are addressed and assumptions managed leading to this stage.

151. According to the results framework in the reconstructed TOC, the three intermediate states are: (i) increased sharing and use of early warning information by the government and the affected population to inform adaptation planning and decision making; (ii) enhanced capacity of the government, communities and private sector to adjust adaptation practices based on a changing climate and other emerging issues, and; (iii) increased preparedness and resilience of government, communities and private sector to climate change risks and disasters.

152. In terms of perceived likelihood of impact of the project's early warnings and alerts, a survey conducted by PMU in project pilot sites at the end of the project finds a high likelihood of impact. Ninety five percent of the respondents in the project sites found early warning messages and climate information useful, and only 5% did not. However, the perceived impact may not be translated into real impact. For example, MOUs between the PMU and Community radio stations to relay climate information to users in communities expired in December 2014 and have not been renewed because the project ended. During the evaluation mission (March 2014), the farming communities and RLGs were not receiving climate information and early warning messages. The Community Radios visited, Kerewan in NBR and Brikama in WCR, confirmed that since January 2014 they have not been communicating climate information due to the expiry of MOU. Given that a second phase of the project is starting in April 2015, the MOUs could be renewed to ensure impact.

153. It is important to recognise that project's contributions are mainly in capacity development of hydro-meteorological services to provide climate information and early warnings. But many other factors come into play before these enhanced capacities can be translated into improved resilience of communities to climate change. The project has initiated many interventions that have already generated some changes that are likely to lead to anticipated impact (upgraded met. stations, trained met staff in place, improved delivery of climate information and early warnings, a functioning climate policy response system and climate proofed policies). However, the higher we go in the TOC, the more theoretical and speculative the assessment becomes. Attribution by tracing

back change to the project's specific outputs beyond immediate outcomes becomes increasingly difficult verging on the impossible at intermediate state and impact levels. Additionally, the vast number of ongoing and planned projects and programmes in the country makes it difficult to attribute progress towards building climate change resilience to any one intervention.

154. Nevertheless, the project's legacy and achievements provide a very strong foundation on which to continue to build such resilience. The increased capacity by the meteorological services to collect, package and deliver accurate and reliable climate information has increased the users' confidence in climate information and early warnings. The increased ability by users to correctly use the information in decision making, has the potential to deliver multiple co-benefits, help avoid mal-adaptation and contribute to a 'no regrets' approach to address climate change.

155. The effective communication and information sharing mechanisms (partnerships with media houses, RLGs, trained media agents, MDFTs) put in place by the project has increased climate change awareness in communities and government. In addition, the mechanisms have improved the delivery of climate information and early warnings. During the evaluation, the farming and fishing communities indicated that they rely on climate information and early warning message alerts to plan their daily activities and prepare extreme weather events. This achievement could translate into increased sharing and use of early warning information by users to inform adaptation planning and decision making, to adjusting adaptation practices based on a changing climate, and hence increased preparedness and resilience to climate change. Therefore, the replication and scaling up of the climate information sharing mechanisms initiated by the project is likely to translate to increased climate change preparedness and resilience in the Gambia.

156. The project's success in influencing the integration of climate in sectoral policies (agriculture, natural resources, forestry and fisheries) has a high likelihood of contributing to climate compatible development in the Gambia. Though many other factors come into play before such policies can be translated into improved climate resilience, the climate proofed policies have a high likelihood of impact for the following reasons: (i) the enhanced awareness of policy and decision makers, gained through the policy revision process and technical capacities gained, is likely to make national and local managers take climate change risks into account in their planning and decision making; (ii) policy instruments focusing on climate change adaptation are likely to attract public and foreign funding for concrete adaptation projects that will reduce climate vulnerability and increase resilience in the Gambia; and (iii) the above-mentioned reasons (i and ii) potentially make the sectors and communities in which these decisions are made become less vulnerable and more resilient to a changing climate.

The project is considered "Likely" to achieve impact.

3.3.3 Achievement of the formal project objectives as presented in the Project Document

157. Regarding the overall project objective "to enhance adaptive capacity and reduce vulnerability to climate change through a strengthened early warning and information sharing mechanism for a better informed decision making by government and affected population", analysis of project documentation and the results from the various interviews conducted confirm that the objective and main outcome was to a greater extent achieved due to the high rates of project activity completion. This achievement could also be attributed to basing on the analysis of log-frame indicators per output, which are already described as achievement of outputs in section 3.2. However, at immediate outcome level, the achievements differ slightly and some may have experienced greater success than others.

158. The indicator selected to measure achievement of the main objective and outcome was: "change (reduction) in average household sensitivity and adaptive capacity to climate change risks in the pilot project sites". Although this evaluation did not find any documentation on, or measure the average sensitivity and adaptive capacity indices for households in the project areas, there is evidence that the project conducted a lot of sensitization and training of community development agents, farmers, media and other stakeholders on climate change. The results of this evaluation indicate that as a result of trainings of the project, the knowledge of climate change risk factors among key stakeholders has increased and this is expected to translate into a reduction in average household sensitivity to climate change impacts. For example, already the benefits of the project are demonstrated through increased access and use of early warning messages and climate information by farming and fishing communities in their daily activities.

159. By the end of the project, the Gambia's hydro-meteorological networks had been strengthened to provide climate data and early warnings, staff capacity had been enhanced through trainings, and appropriate channels of communicating climate information and early warnings to users had been identified and developed. In addition, climate change adaptation has been integrated in key policies (agriculture, natural resources, fisheries and forestry). All will contribute to increased adaptive capacity and reduced vulnerability of households and communities to climate change risks. Farming communities interacted with reported increased crop yields resulting from early warning messages that advise them when to plant.

The overall rating for the achievement of project goals and objectives is Satisfactory.

3.4 Sustainability and Replication

160. Sustainability is assessed in terms of the extent to which there is persistence of benefits resulting from the implementation of the project activities; including replication, up scaling and catalytic effects. This involves assessing whether a strategy and a system exists to sustain results set out in project design. Replication and up-scaling of the project's direct results is essential to drive change beyond the relatively few partners and pilot sites. In addition, sustainability also depends on the learning mechanism put in place and the extent to which it was maintained throughout the project duration and could be maintained beyond the project.

161. The project design, as presented in the ProDoc, indicates that the project outcomes would be sustained through capacity building, infrastructural development, and integration of results into policy, use of a participatory approach, inter-institutional cooperation and strong leadership of the DRW/NMHS.

162. The project built on successful experience or lessons learnt from previous initiatives including preparation of the FNC and NAPA. There is evidence that the project was a top priority identified in both the FNC and NAPA. From the discussions with DWR and NMHS personnel, visits to hydro-meteorological installation sites and review of PIR, this evaluation finds that the project had strong capacity building and infrastructural development designed to strengthen EWS that are beneficial during and after the project implementation period. In addition, the project sensitized government officials on the importance of EWS and the need to mainstream climate risks issues into national policies and plans. The integration of climate change in sectoral policies and plans means that adaptation, and in particular EWS is likely to continue beyond the project's life span. Moreover the training and retention of hydro-meteorological staff by the GOTG (DWR) will mean continuance of collecting and processing of climate information and ensure a continued maintenance and improvement of the EWS. Thus the project incrementally reduces the level of international technical

assistance provided and emphasis was placed on capacitating national consultants which contributed to the sustainability of project interventions.

163. It should be noted that a significant part of that sustainability is dependent on the continued flow of financial assistance. However, a deliberate exit strategy was not mentioned in the ProDoc. The general assumption, at project design, seems to be that project outputs and outcomes will, by themselves, be sustainable or provide sustainability to higher-level changes. The opportunity, however, is that the project has been granted a second phase.

164. Taking into consideration both inherent factors constraining project sustainability, as well as the supporting network of project partners, donors, regional groupings (e.g. ECOWAS and AU), NGOs, government and private sectors (which existed previously and was further enhanced under the project), there is little to doubt the sustainability of the project, except for communication of climate information and early warnings with communities. The MOUs between the PMU and Community radio stations to relay climate information to users in communities expired in December 2014 and have not been renewed because the project ended. There are plans that the MOUs will be renewed in the planned second phase of the project. In order to properly assess the sustainability of the project and its potential for replication, four parameters are utilized as indicated in section 3.4.1 below.

The overall rating for project sustainability is Moderately Likely.

3.4.1 Socio-political sustainability

165. The project succeeded in generating political support and buy-in from the national and provincial governments. The involvement of the representatives of the Personnel Management Office under the Office of the President and the Ministry of Finance and Economic Affairs as lead agencies in the recruitment and training of personnel supported by the project is assurance of political support and sustainability of activities of the project. The two Offices created new positions and allocated funds in the 2014 national budget to the DWR to cater for the positions.

166. The project was implemented in a participatory manner with stakeholders participating actively in the mainstreaming processes, as well as in the piloting of on-the-ground adaptation interventions. This has resulted into increased ownership of results and it contributes to socio-political sustainability. The project achieved its objective of influencing national policy and planning, as sectoral policymakers and technicians were trained in the integration of climate change into development. Already climate change has been integrated into the PAGE, the ANR Policy, Forest Policy and the Fisheries Strategic Action Plan, implying that sustainability of adaptation interventions is high. However, no further development of adaptation programmes has taken place yet which reduces the likelihood of sustainability and replication.

167. The Project facilitated and encouraged creation of RLGs and communication agents who would receive climate information and early warning products from providers and disseminate the same information and products to users. Media Houses were also engaged and trained in climate change to enable effective reporting of climate change. This network enabled the translation of meteorological and hydrological terms into four local languages for ease of understanding and communication of weather and climate data and information. Though the MOUs with community radio stations to relay climate information and early warnings to the farming communities in the pilot sites expired in December 2014, government media (GRTS) and the print media continue to relay climate information to the public. In planned second phase of the project, there are expectations that the MOUs with community radios will be renewed and this will enable continuity in the relay of climate information and early warnings to communities.

168. The private sector entities were engaged and trained to enable them avoid risks and take opportunities of climate change investments. This network of stakeholders have enabled the identification and consideration of the social and economic dimensions of EWS, which have been integrated into the system under the current phase of the project and the process will continue into the proposed second phase of the project.

The rating for socio-political sustainability is likely.

3.4.2 Sustainability of Financial Resources

169. The continuation of project results, especially continued installation and maintenance of infrastructure, continued training and retention of staff, collection and dissemination of climate information, policy-making and activities on EWS and adaptation, are all dependent on continued financial support. In addition, the project succeeded in leveraging additional financial support (co-financing) from NWSR and ACPC: projects to sustain some its activities. However, additional financial support will be critical to sustaining the project results. The opportunity is that project has been given a second phase to continue and scale-up its activities. The phase two of the project started in April 2015 ensures financial sustainability for up-scaling project results beyond the pilot sites. Above all, financial and capacity sustainability is assured through the harvested political will and support at the highest level of government and inclusiveness of all major stakeholders, which are a basis for increased funding of climate change activities.

170. The capability to generate income by the climate information provider is one of the sure ways of sustaining the investments by the project as well as for reaching out to the various local stakeholders, who require sensitization, trust-building, etc., before a strong partnership could be built. Process is underway to create an autonomous Meteorological Authority, that will be able to generate its own resource for strengthening climate EWS. The provision of an automatic weather station at the country's only airport to boost aviation safety is expected to generate recognition of meteorological services nationally, with potential of cost recovery for the provision of meteorological services to civil aviation. The income thus generated would serve to sustain current investments in weather and climate services as well as make investments to keep up with developments in the sector.

The rating for the financial sustainability is likely.

3.4.3 Sustainability of Institutional Frameworks

171. This section assesses the likelihood that institutional and government structures will allow for the project outcomes/benefits to be sustained. The institutional framework of the project enabled project outcomes and benefits to be sustained during the life of the project, as reflected in the extent to which outcomes were in fact achieved. For example, the strengthening of the hydro-meteorological services achieved through enhancing the security of field equipment and instruments (through fencing, and the recruitment and training of additional staff to enable operations) will ensure the continuation of project outcomes in the form of provision of climate information and early warning by the relevant institutions that were strengthened during the life of the project.

172. The DWR's coordination and management role in administering, overseeing and implementing all project activities was essential to the achievement of outcomes and without which, project activities could not possibly continue. It is envisaged that this role will continue since most of the project activities were supporting the mandate of the NHMS in the DWR. The Project also enhanced coordination and capacities of stakeholders to effectively network and support the

implementation of each other's mandates, especially at the national, local and community levels. Furthermore, the continuation of the partnerships developed between the PMU, the Local Communities, RLGs, Non-Formal Education Unit and Media Houses is crucial in sustaining the project's activities.

173. The plans to create two autonomous institutions (as discussed in paragraphs 178-179) will increase the effectiveness and efficiency of hydro-meteorological services in sustaining an effective EWS. Furthermore, the mainstreaming of climate change adaptation in policy and planning (discussed in paragraph 179) will further ensure the sustainability of the project results. Climate change and early warning issues will be taken into consideration during the planning of activities of these sectors and hence availing an operational budget for the continued implementation of some of the activities. In addition, the EWS and environmental committees that were put in place at regional and communities levels can catalyse policy response at the local level that can be replicated in other parts of the country.

The rating for the institutional sustainability is moderately likely.

3.4.4 Environmental sustainability

174. Climate change is a serious problem in the Gambia. By strengthening early warning and information sharing mechanisms, the project contributes to increased preparedness and resilience to climate change. Effective climate EWS systems, lessons learned and best practices promoted should also assist communities and government in making appropriate decisions on adaptation options. For example, the Fisheries Strategic Action Plan 2012 – 2015 is designed to address, as a necessity, the issue of sustainable use of the country's fisheries resources, taking current and future climate change impacts fully into consideration. EWS and environmental committees have been established at regional level (NBR and WCR) and communities. These will enhance sustainability and scaling up of EWS beyond the end of the project. It is the opinion of the evaluators that there are no foreseeable negative environmental impacts which may occur as a result of the project being scaled-up.

The rating for the environmental sustainability element is likely.

3.4.5 Catalytic Role and Replication

175. As mentioned in Section 2.9 (reconstructed TOC), a number of drivers are essential for the project's outputs to be replicated or up-scaled within and beyond the directly supported pilot sites. Over the period under review, the project's interventions have been able to contribute to the drivers that have been identified in the reconstructed TOC, that are catalytic to replication and up-scaling of the project's results.

Catalysed behavioural changes

176. Overall, the piloting of EWS in the NBR, Greater Banjul and WCR of the Gambia has been largely successful. The success can be partly attributed to putting in place credible climate and information sharing mechanisms and tools. Effective communication channels built through engagement of local communities (RLGs), MDFTs, the media, the private sector and policy makers. Until December 2014 communities were receiving credible climate information and early warning alerts (this stopped with the expiry of MOUs with community radio stations) in their local languages and the practice is catalytic to behavioural changes towards adaptive management in communities that can be replicated and up-scaled to other communities in the Gambia. It is expected that the

renewal of MOU with community radio stations in the second phase of the project will entrench behavioural change.

177. The project succeeded in upgrading Gambia's hydro-meteorological networks, and essential equipment is in place and staff has been trained and retained to implement EWS. This is already translating into increased climate and early information sharing in government agencies and communities that is catalytic to increased adaptive capacity, preparedness and resilience. The partnerships built with RLGs, media agents, MDFTs and community radio stations has put in place a critical mass that raise climate information sharing to higher levels and trigger behavioural change towards adaptation in the project's sites and beyond. The trainers put in place and materials developed under the project can be used to sensitize, train and build the capacity of the other groups outside the pilot sites. Therefore catalytic effect of the EWS model in the pilot sites is recognised and can be replicated to strengthening the adaptive capacity of other communities.

178. However, although communities have increased interest and respond positively to improve EWS, adoption the right adaptation responses is yet to be achieved because the practices have not yet been identified and tested.

Incentives

179. Various incentives were an integral part of the project's EWS model. Incentives were put in place to facilitate climate information collection and dissemination, e.g. equipment and tools (radio sets, mobile/cell phones, motorcycles/bicycles, a vehicle to transport weather data collectors, public address systems). Weather information, forecasts and warning bulletins were translated into local languages (Fullah, Jola, Mandinka and Wollof). MOUs were signed with community radio stations, RLGs and media agents to disseminate climate information and early warning alerts. Community radio stations were provided with a computer with installed internet facilities to receive weather and climate alerts and forecasts for broadcast to the population. All these played a crucial role locally in strengthening the EWS model in pilot sites and could be used to replicate and up-scale project results.

Institutional changes

180. The development of networks and partnerships that undertake information sharing and capacity building activities (such as the capacitated DWR and NMHS, the partnerships with RLGs, MDFTs and media) is likely to enhance the replication of climate information sharing **mechanisms** as well as good adaptation practices. The human resources trained by the Project have remained in place in their respective institutions (NMHS) and have indicated that the conditions are conducive for them to work. This will translate into effectiveness through production of accurate and reliable climate information and early warnings. In addition key agencies and institutions (in sectors like agriculture and natural resources, fisheries, transport, disaster management, energy, finance etc.) in the Gambia now recognise the need for effective EWS and increase uptake of early warning information. These institutions and other stakeholders became committed in the implementation project interventions and provided necessary support. These institutions are also part of second phase of the project and have expressed commitment to make climate change one of the top priorities in their plans.

181. Plans are at an advanced stage to create two autonomous institutions by splitting the NMHS i.e. the National Meteorological Authority and the National Water Resource Management Authority. The need to create these two entities to increase their effectiveness and efficiency of hydro-meteorological services was realised through the EWS interventions. The creation of the two autonomous institutions will be effected with funding from the second phase of the project and co-financing from the NWSR project. It is expected that these institutional changes once effected will

further enhance climate information and early warning mechanisms (more meteorological stations, more staff and more finances) to cover the whole country. There are plans to institutionalize the Climate Change Adaptation Working Group; the TORs, the composition and the major policy and technical activities to be conducted by the Group are already in place. The group was set up by the project by expanding the mandate of the Vulnerability and Adaptation Taskforce under the National Communication process.

Policy changes

182. The evaluation of EWS project has already highlighted the importance of raising climate change awareness among policy and decision makers at the national and local levels. The increased awareness of policy makers on the need to address climate change and EWS challenges has catalyzed the mainstreaming of climate change adaptation in national planning and development processes. In addition it has enabled political buy-in and country ownership of the project results. The integration of climate change in the PAGE, ANR Policy, Forest Policy and the Fisheries Strategic Action Plan, if successfully implemented, is catalytic to increased climate financing which will result in replication and up scaling of climate change adaptation activities in the Gambia. For example, one of the priority actions in the PAGE is developing a National Climate Change Strategy which will catalyse climate change response. In addition, the EWS and environmental committees that were put in place at regional- and community-level in the project sites can catalyse policy response, such as mainstreaming climate change in local plans and budgets that can be replicated in other parts of the country.

Catalytic financing

183. The project received a LDCF grant worth USD 1,028,500 to implement its activities. Co-financing was provided by the NWSR project and ACPC projects. A second phase is planned and this will scale-up project results. The financing of the second project totals to USD 8 million and will be provided by UNEP and UNDP; co-financing amounting to USD 21.5 million will be provided by ECOWAS, FAO, AfDB, IFAD and the GOTG. The funding will be used to strengthen the climate monitoring capabilities, EWS and available information for responding to climate shocks and planning adaptation to climate change in the Gambia.

Champions to catalyse change

184. The project has created a number of champions (at the national level in sectors, at local level in provisional governments, at community level, and among the NGOs and private sector) who strongly believe in the effectiveness of the EWS in increasing the adaptive capacity and reducing the vulnerability of households, communities and socio-economic activities to the impacts of climate change. The sensitized and trained communities, RLGs, media agents and agriculture extension workers reach deeper into the rural farming and fishing communities that are most vulnerable to extreme weather events and climate risks. With increased confidence in weather forecasts and early warning alerts as well as effective communication channels are catalytic and could champion innovations in adaptation that can translate into increased resilience. The political buy-in and increased awareness of policy and decision makers to make and implement climate resilient policies and plans could increase preparedness and resilience to climate change translating into climate compatible development in the Gambia. However, the championing of climate compatible development will largely depend on climate finance to scale up project results.

Replication

185. There are high prospects for replication based on the project's outputs and results – the upgraded infrastructure, trained staff, climate proofed policies and effective communication channels, and lessons and best practices for EWS and adaptation interventions. The project has also

created awareness at the national and local levels (among the technocrats, policy makers, political leaders, and farming and fishing communities) through trainings and reliable climate information, and catalyzed action to integrate climate change adaptation into policy and planning frameworks. As already mentioned, climate change was integrated in the PAGE as well as in the ANR forest and fisheries policies.

186. The ProDoc indicates that in the Gambia, nearly all parts of the country and socio-economic activities are highly sensitive and vulnerable to a changing climate. During the visit to the NBR project sites, farming communities showed great enthusiasm about replicating the lessons from the demonstration projects and some of them had already shared experiences in adjacent communities. However, additional support is required by the communities for replication and up-scaling, which will be possible in the second phase of the project.

187. A survey²⁰ was conducted by the PMU at the end of project in the project sites in Greater Banjul Area and the NBR to assess the impacts of the implementation of the EWS. The findings of the study (whose respondents were policy makers, technocrats and households) indicates that many stakeholders in and outside the pilot sites are interested and want to share best practices in addressing climate change. Various NGOs, including Stay Green Foundation and WISDOM, have requested that sensitization of information intermediaries be conducted in other areas, outside the pilot areas. There is also increased cooperation between the private sector and the UNFCCC Focal Point in Gambia; this is another indicator that the project outcomes can be replication through interventions promoted by NGOs and the private sector. The CEO of the GCCI, having been encouraged by the training and information received by the private and business entities under this project, has requested closer working relations between his office and the Climate Change Focal Point to continue to build the capacity of members of the private sector on climate change adaptation. Building on this, the UNFCCC Focal Point has developed and submitted a Project Proposal to the African Development Bank for the access of funds from the Africa Climate Change Fund to support the Ministry of Finance and the GCCI to make them ready to access and program funds from the GCF.

188. The Gambia EWS model appears suitable for replication because it proposes solutions to overcome barriers to accessing effective and reliable climate information and early warnings to households, communities, private sector and government agencies in the Gambia and Africa in general. The project was designed to strengthen the capacity of hydro-meteorological services to provide climate information. By succeeding in doing so, the infrastructure can provide climate information for the whole country facilitating replication and up scaling of EWS to the whole country.

189. Piloting was a key driver to EWS capacity development to implement adaptation actions. During the second phase of the project, up-scaling and replicating the EWS countrywide through a partnership between UNEP, UNDP, and the Gambian government will be implemented. However, the NMHS is still uses GCM products which do not provide downscaled and detailed information that is crucial for use the local levels. Therefore, there is still need for further training in down-scaling climate scenarios to capture the true conditions in the Gambia.

190. However, the achievements of the pilot projects do not mean that the adaptation lessons and best practices can easily be transferred elsewhere, as there are many challenges in adapting to

²⁰Jallow P.B. 2014. Feedback on the impact of the implementation of the climate change early warning systems in the Gambia.

climate change²¹. Among such challenges are the high variability of environmental conditions; fragility of ecosystems; weak infrastructure and economies; poor agricultural performance; dependence on rain-fed agriculture high poverty and deteriorating livelihoods. Further, many farming communities are highly risk averse, which further limits their ability to accept adaptation measures such as changing crop varieties and planting patterns. They often prefer strategies with less risk but lower yields.

191. Therefore though there is a potential for replication of the project results, realization of significant impact requires that the lessons learned be replicated and up-scaled over sufficiently large areas, considering the geographic scale at which climate change impacts are likely to be experienced. The outputs of the project should be made easily available, including to local communities in their own languages, and capacity building extended to other stakeholders.

The project's catalytic role and replication is rated as Satisfactory.

3.5 Efficiency

192. This section examines the degree to which the implementation of the project was cost-effective and timely.

3.5.1 Cost effectiveness

193. In terms of cost-effectiveness, that is the degree to which the project funds were used in an optimal manner in order to achieve project results, the evaluation concludes that on the whole the project was cost effective. A number of measures to promote cost-efficiency were identified in the project document and adopted during implementation:

- i. Partnerships: Harnessing the comparative advantage of the partners and establishment of strategic partnerships with key organizations who already had a strong track record of experience in climate change adaptation in the countries;
- ii. Site selection: Pilot sites were selected in areas where potential partners and the Government were already conducting relevant projects and programmes;
- iii. Engaging local communities: Local communities were involved in communicating climate information and early warnings (RLGs) and executing the adaptation interventions. These communities are among the most vulnerable and are among the ultimate implementers and beneficiaries of adaptation interventions;
- iv. Building on the past and ongoing programmes of partners and utilization of existing information, equipment and data sets.

194. These cost-efficient measures contributed to the successful completion of the project within the budget. During the design of the project, there was an under-estimation of capacity building needs in the project that resulted in very ambitious targets both in terms of trained personnel and equipment that the project was expected to provide. To that end, effective management of the project by the PMU meant that activities were scaled to the available funds. The cost efficiency was good which resulted in small cost – big impact, supported by the high level of ownership. The cost-efficient measures adopted resulted in the successful completion of the project within the budget.

²¹Waithaka et al (eds). 2013. East African Agriculture and Climate Change: A Comprehensive Analysis. IFPRI, Washington. DC.

195. A key characteristic to be highlighted for this project is that it builds on successful experience or lessons learnt from prior projects or represent a scale-up of earlier successful activities. For example, the project builds on the country's experiences of the FNC and NAPA preparations. Similarly, evidence suggests that the project builds on the complementarities and synergies of other donor funded projects including those funded by GEF. For example, the project was linked to four ongoing GEF interventions and one planned non-GEF project in Gambia: (i) Support to the environment and energy sectors to attain the MDGs and PRSP; (ii) Adaptation to climate change- responding to coastline change in its human dimensions in West Africa through integrated coastal area management; (iii) Integrated coastal and marine biodiversity management project; Adoption of Ecosystem Approach for Integrated Implementation of Multi Environmental Agreements (MEA) at National and Divisional Levels, and; (iv) Disaster Risk Reduction and Climate Change Adaptation Programme (DRR-CCA) for The Gambia . In addition the project benefited from ongoing projects like the NWSR and ACPC projects. Through the ACPC, support worth USD 762,500 was obtained to procure and install hydrological and meteorological equipment. In addition to the ACPC support on the Enhanced National Climate Services (ENACTS), USD 90,000 was provided to both The Gambia and Mali to develop a map room for the EWS. In addition, by working directly with national institutions (like the DWR) and NCC, the project generated buy-in, and took advantage of pre-existing systems including the existing finance and procurement systems.

3.5.2 Timeliness

196. Generally, substantial effort went into the design process of the project, which put it in good stead for implementing its activities over its three year duration. The project was approved by GEF and UNEP in March 2011 and June 2011 respectively, and started on 1 August 2011. The planned project duration was 36 months, expected to be completed by 31 July 2014. The project underwent one minor budget revision in April 2013. The final PIR indicates that the main project activities (95%) were completed by 31 July 2014. However a few activities were still in progress and the project was extended up to end December 2014 to complete these activities.

197. Management response at UNEP was highly efficient and was instrumental towards timely achievements of project objectives and outcomes. The disbursement of funds was immediate once funding and reporting was approved. For example, the first disbursement was on 5 August 2011, only five days after the project started and by the completion date (31 July 2014), UNEP had disbursed 99% of the project funds.

The early PSC meetings placed great emphasis on timely implementation of the project activities as contained in the ProDoc and work plan. From January 2014, however, implementation was slowed down by the migration from one Accounting Software to another at the Treasury Department under the Ministry of Finance and Economic Affairs. Technicians did not have adequate knowledge of the software and could not easily address operational malfunctions and errors in a timely manner. This necessitated the engagement of original proprietors of the software to travel to The Gambia to solve problems. This arrangement is inappropriate and an alternative should be identified for the Second Phase of the Project and other GEF projects. A possible alternative is to have a Special Project Account at the Central Bank instead of working with the Department of National Treasury. Although Table 1 (Project Identification) presented in this report indicates that co-financing worth USD 969,175 (62% of the planned co-financing) was realised as at 31 December 2014, the figure is not broken down further to itemise the sources and amounts of this financing.

The overall rating for efficiency is Highly Satisfactory

3.6 Factors affecting performance

198. A number of factors contributed to the successful achievement of the project objective and outcomes namely: (i) the project design, (ii) the project coordination by PMU/DWR, (iii) the partnerships created amongst government ministries, departments and agencies, NGOs, and the private sector, and (iii) the level of ownership and dedication of project partners toward the individual project activities. This enabled a larger margin of buy-in at the technical and political level by demonstrating innovations in EWS. In this section the factors affecting the performance of the project are discussed in detail.

3.6.1 Preparation and readiness

199. The project's purpose, as stated in the ProDoc, to enhance adaptive capacity and reduce vulnerability to climate change through a strengthened early warning and information sharing mechanism for a better informed decision making by government and affected population is realistic. While the time frame of 36 months is fairly realistic, there was under estimation of the capacity building needs during project preparation. Some of the project activities and outputs, like equipment, training, recruitment and vulnerability mapping had too ambitious targets that could not be achieved in the available project budget. A Needs Assessment study²² conducted at the beginning of the project provided lessons learned (regarding the ambitious targets) that helped in the design of the second phase of the project.

200. The project's log-frame was well designed and detailed. The comprehensive nature of the Log-frame ensured that all likely activities to be needed were captured in the design and therefore could be taken into account in workplan and budgets. However, the nature of Log-frame is that it tends to be linear /sequential in nature and yet many project activities take place concurrently and feeding into each other.

201. The project sought to enhance adaptive capacity and reduced vulnerability through strengthened EWS for policy setting and planning, capacity building, as well as demonstration activities to provide support to climate change adaptation actions to be taken by communities, and divisional and national governments. This strategy was realistic and appropriate to achieve the stated outputs and outcomes. However, reducing vulnerability and achieving resilience require a longer timeframe to have any discernible impacts and to generate results for replication. The planned second phase of the project will entail scaling up of the first phase approach, including lessons learnt to additional project sites with concrete implementation on the ground.

202. Project stakeholders at the national and local levels were adequately identified in the ProDoc, and these included climate information providers and users. In particular, the most vulnerable communities highly dependent on ecological resources for food security and livelihoods were identified as the main stakeholders. Therefore, planning and implementing of project activities focused on information providers and users. A study on Engaging and Networking Stakeholders was also conducted.²³ The report on stakeholder engagement indicates that weather and climate information is highly needed by many stakeholders, both at private and public levels. Details on stakeholder participation are provided in section 3.6.3.

203. The project took account of previous and ongoing work and initiatives on climate change in the Gambia and built on this foundation. The choice of the Executing Agency and partners, based on

²²Peacock G.J et al, 2012. Needs Assessment report for an Effective Early Warning System in The Gambia

²³Ansumana A., 2013. Final Consultancy Report on Engaging and Networking Stakeholders

their respective competencies, contributed to the successful implementation of the project. The Implementing Agency (UNEP/DEPI), the executing agency (DWR), as well as implementation and institutional arrangements were clearly described in the ProDoc. Local partners for the demonstration projects were identified in consultation with the relevant Government Ministries, Divisional Governments and local communities.

204. However, an omission in project design was that it did not provide for a dedicated staff for Monitoring and Evaluation (M&E).

Overall, the project preparation and readiness was Satisfactory

3.6.2 Project implementation and management

205. The project was approved by UNEP in June 2011 and started on 1 August 2011. The first batch of funds was disbursed on 5 August 2011. A PSC to provide oversight and supervision was put in place and regular meetings were held. The PSC was multi-sectoral, chaired by the Permanent Secretary and Technical Head of the Ministry of Fisheries and Water Resources. The PSC was active throughout the project implementation period and the project management responded to direction and guidance provided by both the committee and UNEP supervision. This evaluation finds that PSC and project team performed very well in steering the project to great success in achievement of outputs and outcomes.

206. The Project Director and National Project Coordinator (hired by the project) were reporting to the PSC on a regular basis. The Chair of the PSC regularly briefed the Minister who is tasked with providing reports to Cabinet Sessions and at bi-annual Cabinet Retreats. A Chief Technical Advisor (CTA) was hired by the project. However the PC had took up another job at WMO a few months before project completion. The Project Administrator also left and another one was hired. However, the departure of the two staff did not significantly affect project implementation, as they left a few months to project completion.

207. The project management structure was very clear, and management was stable with roles and responsibilities clearly defined and understood. However, the absence of dedicated staff for M&E and for integrating recommendations of best practices from study (consultants) reports placed a heavy burden on Project Management, especially on the PC and the CTA. Moreover, the CTA was hired on a part-time basis. A mid-term review (MTR) and terminal evaluation were provided for in the project design to cover some of the M&E. However, a mid-term review (MTR) was not conducted because UNEP does not require a MTR for a medium size projects with three year duration. UNEP assigned a Project Task Manager who guided project implementation. The Task Manager understood the project well and worked excellently with the PMU. Annual work plans were reviewed and adjusted as needed in consultation with partners to ensure that all activities were completed and outputs achieved. Activities were well-managed, with responsibility and transparency at all levels.

208. The evaluation team concluded that project management was effective and efficient, with no major problems reported by executing partners. The role of the PMU in particular was praised by PSC members during interviews. Indeed the interviews suggested that there was a highly functional and rewarding relationship, based on mutual need and respect, in place throughout the life of the Project. It is the view of the evaluation team that the PMU performed well in guiding the project to its ultimate success. The professional and personal skills and dedication of the PC and CTA was of such a high standard. This comment was also made by members of the PSC.

The project's performance in implementation and management is rated as Highly Satisfactory.

3.6.3 Stakeholder participation, cooperation and partnerships

209. Participation of stakeholders at all levels from international, national and to local was high, and the partners are commended for this achievement. The project design recognized the benefit of adopting a participatory approach involving key stakeholders and communities in project activities. Engagement of local communities helped to ensure that their needs were taken into consideration in the development of EWS and ensured ownership and buy-in. Significant effort went into raising public awareness on climate change and EWS and a range of training and communication materials were prepared and sensitization and public awareness events convened as presented in 'Section 3.2.2 -Outputs of Component 2'.

210. The combination of partners was effective and efficient, with each partner making important contributions towards different project components and outputs. Based on interviews and examination of the progress reports and project accomplishments, it was clear that there was reasonably good collaboration among the partners and engagement with stakeholders throughout the duration of the project. In summary, communication and engagement strategies were vitally important elements of all project activities.

Stakeholder participation, cooperation and partnerships is rated Satisfactory.

3.6.4 Communication and public awareness

211. Significant effort went into raising public awareness. Outcome 2 of the project was devoted to effective communication and public awareness. A range of communication material was prepared and public awareness workshops convened and demonstration held. The involvement of the media (radios, TV and print media) regular meetings and training of media agents, MDFTs, and RLGs ensured that information about project results and progress were communicated and this kept the partners highly engaged.

212. Regular and clear communications between PMU, partners, UNEP and beneficiaries ensured that progress was on track. Clear and transparent communication between the EA and partners/ stakeholders also helped to avoid raised expectations that may result in disappointment, loss of hope and mistrust. There are also clear communication channels created by the project for disseminating climate information and EWS. The project, through its outputs and results, has produced an array of training materials, tools, study reports and policy briefs and plans (discussed in Section 3.2 – achievement of outputs), however many of these are not available in the public domain.

The project's performance in ensuring communication and public awareness is rated Satisfactory.

3.6.5 Country ownership and driven-ness

213. Country ownership and driven-ness was displayed and assured from the time of conceptualization to implementation of the project. The project's focus on EWS in the Gambia is made explicit in the project title, goal and objective, and is clearly described in the ProDoc which elaborates the project's consistency with national development priorities and plans as well as the climate change priorities and challenges. The ProDoc further elaborates that the project was designed to implement one of the ten priority adaptation programmes identified as urgent in both the NAPA and FNC, and aspirations towards achievement of MDGs.

214. The project was nationally implemented and the EA was the DWR. All the project institutions and technical experts were nationals, except for the Agro-meteorological Consultant who was from Mali. The use of national data and the involvement of national technical experts in the scientific work also promoted country ownership. Above all, the involvement of national and local stakeholders in the implementation of the project, and building capacity based on the capacity needs of stakeholders, generated ownership of the project by the main stakeholders. Implementation of the project activities has been country driven. A needs assessment was conducted at the beginning of the project. It also needs to be acknowledged that participation in EWS project involved some level of national funding commitment/co-financing.

215. It was obvious to the evaluators that the Government was fully supportive of the project during its implementation and is committed to incorporating the results in national programmes. In fact, all national level stakeholders interviewed expressed interest in a second phase. This interest was also expressed at the final workshops where the project results were presented. A noticeable challenge, however, was that the radio broadcasts with community radios stopped once the project expired mainly because of lack of support for relay of climate information to communities. However, there were indications that this activity will be covered by future government budgets.

Country ownership and driven-ness is rated as Highly Satisfactory

3.6.6 Financial planning and management

216. Financial planning and management was consistent with UNEP's procedures. Project funds were disbursed to the EA for the execution of specific activities. As at 31 March 2015, UNEP had disbursed all the funds for the project. Two project/budget revisions was carried out. In addition to this, a no-cost extension was granted to the project from 1 July to 31 December 2014. A second phase of the project, will build on the outputs and outcomes of the first phase. The statement of expenditure as at 31 March 2015 (See annex V.1)shows a cumulative total expenditure of USD1,028,500(100% of the planned budget) Financial records were maintained by a Fund Management Officer (FMO) who also provided oversight on the funds administration and financial expenditure reports were timely and regular. According to the FMO, this project was 'uneventful' in terms of the financial aspects, indicating that there were no irregularities and problems. Financial Audits were annually conducted by the Gambia's Auditor General Office Audit. However there was no evidence the audit recommendations were implemented.

217. The project design did not provide for a Finance Officer at the PMU. Therefore the project relied on the Finance systems and Accounts Officers at the DWR. As implementation proved, this was a serious omission. The government finance officer was overwhelmed with the both the government and project work, with priority given to government work which sometimes caused delays in payments. Moreover, with the migration to another Accounting Software at the Treasury Department under the Ministry of Finance and Economic Affairs in January 2014, implementation slowed down greatly. This is undesirable and an alternative will have to be found for the effective and efficient implementation of the Second Phase of the Project.

218. Procurement in terms of equipment and consultancies was managed by the Contracts Committee of the Ministry of Fisheries and Water Resources which is chaired by Deputy Permanent Secretary responsible for Administration and Financial aspects of the Ministry. Activities of the Contracts Committee and the procurement under the project were guided by the regulations of Gambia Public Procurement Authority (GPPA) and a project representative was always invited to participate in the proceedings of the Contract Committee. However, the government bureaucracy often delayed procurement of essential hydro-meteorological equipment. However, this did not

significantly affect the achievement of project outputs and outcomes. The summary of project expenditures is provided in Annex V.2.

Project co-financing

219. In terms of project co-financing a total of USD 1,555,000, as confirmed as being available from the Government of Gambia, of which \$ 500,000 was to be provided in cash and 1,055,000 in kind. As at 31 March 2014 realised co-financing was USD 969,175.00, which is 91% of the planned in-cash co-financing and 62% of the overall planned co-financing. However, this evaluation did not obtain the detailed breakdown of sources and amounts of co-financing (see annex V.2).

Overall project financial planning and management was Moderately Unsatisfactory²⁴

3.6.7 Supervision, guidance and technical backstopping

220. The ProDoc stated that the project would be implemented by UNEP through DEPI and laid out the responsibilities of UNEP as the implementing agency, including overseeing and monitoring the project implementation process as per UNEP rules and procedures, including technical backstopping. UNEP worked closely with the DWR (the EA) which houses the NMHS. A Project Task Manager was designated from UNEP to provide oversight and accountability during the life of the project. The UNEP Task Manager was highly regarded by the project management team.

221. As part of its supervision and backstopping role, UNEP closely monitored project progress and regularly communicated with the EA and provided guidance and ensured that any challenges were addressed. The good performance of the project did not create a need for a supervision mission to the Gambia by the Task Manager's. This is because UNEP prioritizes supervision missions to those projects that are not performing well, or that are significantly behind their work plan and budget. The Gambia project was performing very well and communications were dynamic hence the decision not to prioritize a mission there. Interviews and discussions with the project team and partners indicated that while UNEP did not attend any project meetings in Gambia, it provided effective project supervision and backstopping and no major issues in project implementation and execution were encountered. Furthermore, the local partners greatly appreciated the involvement of the CTA who assisted with the implementation and reporting.

222. Project supervision was also provided by the PSC which met regularly. The PSC provided important strategic guidance to the project management team. Over the course of the project, a good rapport and mutual trust was developed between the PSC and the project management team.

Overall UNEP supervision and backstopping was Satisfactory.

3.6.8 Monitoring and evaluation

Monitoring and Evaluation design

223. The Monitoring and Evaluation (M&E) is designed according to UNEP's standard monitoring and evaluation procedure. The project log frame (results framework) included SMART indicators for each expected outcome as well as mid-term and end-of-project targets. These indicators of

²⁴ Information on co-financing, disaggregated by source and amount, and expenditure information disaggregated by project component and subcomponent is pending. Input needed from FMO and CTA.

achievements also had means of verification for the project objective, outcomes and outputs. Though the indicators were ambitious for the project timeframe and budget, they were measurable and relevant to the objective. In addition, the baseline study conducted at the beginning of the project had a revised log frame with SMART indicators. A work plan is provided in the ProDoc that indicates outputs activities and timelines; this document was revised at the beginning of the project (and also annually), taking into account the revised targets and budget lines. The time frame to achieve the ultimate objective would depend very much on the impact drivers and assumptions (such as availability of financial resources for up-scaling/replicating) to move from project outcomes toward project impacts.

224. The ProDoc includes an M&E plan and budget consistent with both GEF and UNEP M&E Evaluation Policies. The ProDoc also makes provision for independent mid-term evaluation at the mid-point of project implementation (specifically July 2012). The Mid-Term Evaluation was expected to determine progress being made toward the achievement of outcomes and identify course correction if needed. Provisions are included in the ProDoc for an independent terminal evaluation to be conducted towards the end of the project. Periodic monitoring of progress was conducted through periodic monitoring through site visits and annual progress review reports.

225. However, the project design did not provide for a staff for M&E. The evaluation team considers this a serious omission. A dedicated staff should have been put in place for reporting and monitoring project as well as for integrating recommendations of best practices and lessons learned in the entire duration of the project.

The M&E design is rated as Moderately Satisfactory.

M&E plan implementation

226. The M&E system put in place was operational and facilitated timely tracking of results and progress towards project objectives throughout the project implementation period. The PMU (especially the PC and CTA) ensured the operationalization of the M&E system. M&E was conducted through PSC meetings, contracts committee meeting, audits, and visits to project sites by PMU and inspectors from meteorology and hydrology divisions. Two peer reviewed consultancy reports/documents were also accomplished. A baseline study, a Needs Assessment study and a Climate Change Awareness study provided good baseline information that supported monitoring and reporting of progress of implementation of project activities. The findings of the Needs Assessment facilitated to the conduct of other studies under the project that led to the prioritization of implementation of activities.

227. However, given that the project design did not take into account the need for a dedicated M&E staff, serious limitations were encountered in ensuring regular monitoring of progress against indicators and reporting. As a result the monitoring and reporting were left to the PC and the CTA, thus placing a heavy burden on them. This evaluation therefore finds that the project did not fully put in place adequate mechanism to incorporate recommendations/best practices from implementation and study reports. Both the Project Implementation Report and the Project final report confirm this find that the project did not give M&E its rightful attention. Moreover, the MTR that was provided for in the ProDoc was not conducted. This denied the project place a chance to assess the progress being made toward the achievement of outcomes and to identify lessons learned and course for correction.

228. Following the end of the project, a terminal PIR was prepared and was made available to the evaluators. In some instances the final report does not provide updated information and a few

activities are reported as still ongoing. A position of M&E Officer has been created for the second phase of the project to ensure regular monitoring against indicators.

The M&E plan implementation is rated as Moderately Unsatisfactory.

4 CONCLUSIONS, RECOMMENDATIONS & LESSONS LEARNED

4.1 Conclusions

229. The Gambia EWS project was designed to enhance adaptive capacity and reduce vulnerability to climate change through a strengthened early warning and information sharing mechanism for a better informed decision making by government and affected population. The project included three key components: (i) climate change information, monitoring and early warning systems, (ii) Climate change information dissemination and communication to end users, and (iii) Institutional capacity for climate change policies and protocols.

230. The major objective of the terminal evaluation is to assess the Gambia's EWS project performance (in terms of relevance, effectiveness and efficiency); determine outcomes and impacts (actual and potential) stemming from the project, including their sustainability; and promote learning, feedback, and knowledge sharing through results and lessons learned among UNEP and the executing partners.

231. In terms of ROtI analysis and the TOC, the project objectives and implementation remained relevant in the context of the issues it intended to address. Increased sharing and use of climate information, adjusting policies based on a changing climate, and increased preparedness and resilience to climate change as intermediate states in the TOC remain important. The project planned and implemented several activities at different levels, which helped to drive progress towards impact achievement, such as: putting in place essential equipment and training staff to collect and process climate information; providing credible climate information and information sharing mechanisms; improving technical capacity for integrating climate change into policies and plans; raising climate change awareness in government institutions and the public; and promoting learning-by-doing approaches to capacity building in order to enhance ownership and sustainability of the EWS and adaptation actions.

232. The project was consistent with Gambia's climate change challenges and needs, identified as priority in the FNC and NAPA, in that a strengthened EWS is critical to informing adaptation decisions at national and local levels. The project was also consistent with the Gambia development priorities and needs impacted upon by climate change - the need of reducing vulnerability and enhancing adaptive capacity through strengthened climate early warning and information sharing. The project is also relevant to GEF and UNEP's policies and programmatic objectives and expected accomplishments on climate change adaptation as priorities in the UNEP MTS 2010–2013, Climate Change Strategy and the Bali Strategic Plan for Technology Support and Capacity-building.

233. The project was successful in strengthening institutional, technical and individual capacity to collect, process, and disseminate climate information and early warnings. The project deployed capacity building approaches that was based on learning by doing and demonstrations in the pilot sites by directly involving staff, practitioners, extension and media agents, NGOs, and communities in demonstration. The project worked directly with both climate information providers and users, provided training, and used participatory methods (involving community RLGs and radio stations) to communicate climate information. The project also increased climate change awareness among the public and decision makers and hence providing policy relevant lessons and best practices in climate

change adaptation. Already climate change has been integrated in national policies and plans like the PAGE, ANR policy, Forestry policy and Fisheries Action Plan. Moreover, the project has promoted partnerships and dialogue at both low and high technical and political levels in the Gambia which fosters collaboration and in sharing of data and information among stakeholders, which is critical for fostering climate change adaptation. All these are key drivers towards the intermediate state. Based on the ROTI analysis, the overall likelihood that the intended impact will be achieved is rated on a six-point scale as 'moderately likely'.

234. The project set over-ambitious targets in terms of capacity building (equipment and training staff) given the project time frame (three years) and budget (USD 2.5 million). A longer time period and bigger budget would be required to obtain conclusive results about the success of some of the interventions and for any significant uptake of the lessons in policy and planning as well as for up-scaling and replication. To that end a second phase of the project is proposed and already approved. Nonetheless, in the relatively small budget, the planned capacity building activities to upgrade hydro-meteorological network and to create a core of trained staff for enhanced EWS was achieved. The delivery of climate information, including early warnings, to various users for effective adaptation decision making was also achieved. There have been promising cases where project results (climate information) are being applied in other areas within the communities of the Gambia to inform adaptation decision-making such as planting crops and fishing.

235. The overall impacts from the outcomes and intermediate states were to have a national development and communities that are more resilient to climate change. This impact is likely to be achieved based on the intermediate state assessments. The intermediate state of increased sharing and use of early warning information by the government and the affected population to inform adaptation planning and decision making was achieved. There has been an improved communication of climate information through translation of climate information into local languages, and communication agents like the RLGs, media agents MDFTs, and community radio stations. This is already translating enhanced capacity of the government, communities and private sector to adjust adaptation practices based on a changing climate and other emerging issues. Already tools and best practices for mainstreaming have resulted in climate proofing policies and plans. The generation of knowledge and lessons learnt for incorporation into national and regional strategies has not yet been entrenched.

236. Long term impacts will more likely accrue if EWS forms part of a wider framework for adaptation planning and socio-economic development. The early successes of the pilots showcase the project's concrete, on-the ground achievements, which will be instrumental in promoting further stakeholder buy-in and acceptance by households and communities of climate information and climate change adaptation actions.

237. Prospects for sustainability are moderate with respect to the four factors (financial, socio-political, institutional and environmental) conditioning sustainability of project outcomes. The availability of financial resources from the second phase will drive up scaling and replication through: supporting a financially viable Gambia Meteorological Agency; further upgrading of hydro-meteorological infrastructure; putting in place a critical mass of skilled human resources to operate the Gambia EWS and perform medium and long-term adaptation planning beyond the project; and enhancing efficient and effective use of hydro-meteorological and environmental information for making early warnings and long-term development plans.

238. In addition the project outcomes and planned initiatives under phase 2, in climate change adaptation supported by both the GOTG and bilateral donors provide excellent opportunities for sustaining project outcomes through uptake in some of them. Additionally, the political will within

the Gambia to support climate change response, and the climate change awareness amongst technical staff and communities, as well as the favourable policies and plans (i.e. PRSP, PAGE, ANR and Forest policies) are currently very conducive to sustaining project outcomes. Sustainability will be high if follow-up funding sources are secured, and ownership and enthusiasm at community and national level to keep momentum is kept high.

239. The evaluators, when visiting the project sites, found that there was still considerable enthusiasm and drive to move the project's results forward and that country ownership was very strong. The partnerships forged and high stakeholder participation were considered by the respondents and evaluators alike to be some of the greatest achievements. Engagement of national stakeholders at all levels and alignment of the project goals with national and regional priorities and needs with respect to climate change adaptation was instrumental in promoting a high level of country ownership and driven-ness.

240. Project implementation was generally cost-effective and timely. Project activities were low cost and relevant across a wide range of livelihoods. In this sense, the programme was very cost-effective. This was achieved through establishing strategic partnerships, selection of demonstration sites in areas with ongoing projects and programmes, involving local communities in implementation and utilization of existing information in planning for their farming activities.

241. By engaging many partners and having multi-sectoral representation on the PSC, the project helped to strengthen the institutional framework for climate change and directly helped institutions to overcome some capacity barriers and create opportunities for mainstreaming climate change into sectoral policies and national planning processes.

242. Nonetheless, by not providing for a position of M&E in the project design, the project did not perform well in monitoring and reporting progress, and documenting lessons learned and best practices. For example while the project conducted a number of studies, there is no documentation of lessons learned, and they remain hanging just as outputs. A mid-term review/evaluation was not conducted and the project missed a chance of reviewing progress and having remedial action.

243. Ratings for the individual criteria are given in Table 7 below. The overall rating for this project based on the evaluation findings is **Satisfactory**.

Table 7: Summary of Evaluation criteria, assessment and ratings

Criterion	Summary Assessment	Ref.	Rating
A. Strategic relevance	The project's goal, objective and components are highly aligned to the Gambia's development and climate change priorities, challenges and needs. The project is also relevant to GEF and UNEP's policies and programmatic objectives and expected accomplishments on climate change adaptation as priorities in the UNEP MTS 2010–2013, and the Bali Strategic Plan for Technology Support and Capacity-building.	3.1	Highly Satisfactory
B. Achievement of outputs	Almost all outputs were satisfactorily achieved based on the log-frame indicators. The technical outputs were high in quality.	3.2	Satisfactory
C. Effectiveness: Attainment of objectives and planned results	The project's objectives and planned results were achieved, and represent key steps towards the intermediate states. The objectives were achieved through improved collection and dissemination of climate information and early warnings to users.	3.3	Satisfactory

Criterion	Summary Assessment	Ref.	Rating
1. Achievement of direct outcomes as defined in the reconstructed TOC	The direct outcomes of the project were achieved. The core elements of the climate EWS are in place: the hydro-meteorological network was up-graded and is operational, trained meteorology personnel are in place, climate information and early warning data are being collected and disseminated to users, ANR, forest and fisheries policies were climate proofed, lessons learned were documented.	3.3.1	Satisfactory
2. Likelihood of impact using ROTl approach	Although the project was a bit ambitious in terms of outputs and outcomes with a small budget, the outcomes achieved have implicit forward linkages to intermediate states and impact. However, utilizing the results and lessons derived from the medium term outcomes is still low. Considering the high level of ownership of the project results at national and local levels and the planned second phase of the project, there is high likelihood of impact.	3.3.2	Likely
3. Achievement of formal project objectives as presented in the Project Document.	The project's formal objectives were achieved. The strengthened early warning and information sharing mechanisms are in place. There is increased knowledge and awareness of climate change risk factors among key stakeholders and this is expected to translate into a reduction in sensitivity to climate change impacts.	3.3.3	Satisfactory
D. Sustainability and replication	The project had strong capacity building and infrastructural development initiatives that are beneficial after the project implementation period. The second phase of the project will enhance flow of financial assistance for replicating the project's achievements. However there was no deliberate exit strategy in the project design (ProDoc).	3.4	Moderately Likely
1. Socio-political sustainability	The project was implemented in a participatory manner and succeeded in getting political buy-in and ownership. It generated considerable social and political support at national, local and community levels. It has also influenced policy revisions.	3.4.1	Likely
2. Financial resources	The project succeeded on leveraging additional financial support (co-financing) to achieve some its activities. There are plans of creating a Meteorological Authority which could generate income. The project has a second phase with assured financing and there are reasonably good prospects for continued financial support by the national government, regional institutions, bilateral and multilateral donors.	3.4.2	Likely
3. Institutional framework	The project built strong partnerships with a number of government institutions, private sector and NGOs by engaging them in the project activities and strengthening their adaptive capacity. Strengthening the capacity of NMMHS will ensure the continuation of project outcomes.	3.4.3	Moderately Likely
4. Environmental sustainability	Strengthening EWS increases preparedness and resilience to climate change effects. This will result in implementation of adaptation projects that promote environmental sustainability. But human and natural pressures could potentially undermine ecological sustainability.	3.4.4	Likely
5. Catalytic role and replication	The project has raised climate change awareness and increased confidence in climate information and EWS. The project has produced a number of lessons and best practices as well as tools that will facilitate replication. Examples of replication are already evident. However greater support and financial resources are required for	3.4.5	Satisfactory

Criterion	Summary Assessment	Ref.	Rating
	scaling up.		
E. Efficiency	A number of cost efficient measures were adopted during implementation. The cost efficiency was good which resulted in small cost – big impact, supported by the high level of ownership. The project did not experience unnecessary delays in its implementation.	3.5	Highly Satisfactory
F. Factors affecting project performance		3.6	
1. Preparation and readiness	Project preparation and readiness were good and the project begun and was completed in time. The project's log-frame was well designed and detailed. However some project activities and outputs had too ambitious targets that could not be achieved in the available project budget.	3.6.1	Satisfactory
2. Project implementation and management	The implementation approach was highly effective and the project went fairly smoothly. Adaptive management measures were taken when needed to ensure that the project remained on track.	3.6.2	Highly Satisfactory
3. Stakeholders participation, cooperation and partnerships	A participatory approach was deployed and wide range of stakeholders, from local communities to divisional and national governments were involved in project execution implementation or were targeted for capacity building.	3.6.3	Satisfactory
4. Communication and public awareness	Significant effort went into raising public awareness. A range of communication materials were prepared and public awareness workshops convened and demonstrations held. Clear communication between the PMU, partners and beneficiaries was critical to the project's success.	3.6.4	Satisfactory
5. Country ownership and driven-ness	The project responded to the needs of the Gambia for increased adaptive capacity. There was a high level of country ownership and driven-ness resulting from the fact that the project was consistent to with national development priorities and plans.	3.6.5	Highly Satisfactory
6. Financial planning and management	Financial planning and management was in accordance with UNEP's requirements but information on co-financing and expenditure as per components is missing. However, there were no irregularities. Implementation was slowed down by the migration from one Accounting Software to another at the Treasury Department under the Ministry of Finance and Economic Affairs.	3.6.6	Moderately Unsatisfactory
7. Supervision, guidance and technical backstopping	UNEP played an adequate role in supervision and backstopping with great team commitment. No major issues in project implementation and execution were encountered.	3.6.7	Satisfactory
8. Monitoring and evaluation	The overall rating on M & E is based on rating for M&E Implementation.	3.6.8	Moderately Unsatisfactory
i. M&E design	The M&E was designed according to UNEP's standard M&E procedures. The project log frame included SMART indicators. However there was no provision for M&E officer.	3.6.8	Moderately Satisfactory
ii. M&E plan implementation	In the absence of an M&E Officer, serious limitations were encountered in ensuring regular monitoring of progress against indicators, reporting and documenting lessons learned. Regular reporting was done.	3.6.8	Moderately Unsatisfactory
Overall project rating			Satisfactory

4.1 Lessons Learned

The following key lessons learned emerged in the implementation of the project:

Finding	The Theory of Change (TOC) approach was not yet in use during the project design phase and was not used in the planning and implementation of the projects. The logical framework approach was the tool used to represent the project's causality and guide project planning, management and monitoring. (Sections 1.4.1 - Evaluation Limitations, and 2.9 - Reconstructed TOC). Both the TOC and logic models can improve project design but in different ways. The TOC is a causal model that illustrates how and why desired outcomes and impacts are expected to come about, including the preconditions necessary for this to occur.
Lesson 1	The TOC approach is a useful tool for articulating drivers and assumptions and explaining the causal relationship between intended actions, outputs, outcomes, intermediate states and impact of projects. In order to depict the causal pathways from outputs to outcomes over intermediate states towards impact, it is ideal that the TOC be envisaged at the project design stage.
Application	UNEP project design
Finding	The project had ambitious targets at design; it was not realistic to expect that the EWS of the Gambia would be strengthened in three years and with USD 2.5 million. It was also not realistic that increased adaptive capacity and reduced vulnerability would be achieved only through effective EWS. In addition, increasing resilience is a long process. The design did not take into account of (and was not flexible enough to take care of) the sequential arrangement of activities and outputs; for example, adaptation actions depend on effective meteorological networks, reliable climate information and effective delivery mechanisms. Some substantial parts of the capacity building (upgrading met. networks) and community preparedness were undertaken toward the end of the project (Sections 3.2.1 – Component 1 outputs, 3.5.1 – cost-effectiveness, and 3.6.1 preparation and readiness).
Lesson 2	The design of projects in climate change adaptation needs to be realistic in terms of targets, time and resources, mindful of the sequential arrangement where some outputs are dependent on the results of preceding activities and outputs. In addition, a number of factors and uncertainties come into play in project implementation and hence flexibility and adaptiveness in project design can save it from such risks and uncertainties.
Application	UNEP project design and implementation, taking into account the need for flexibility and adaptive management.
Finding	The project was largely successful because it was country driven, aligned to the country's climate change and development needs and priorities, and implemented with the existing institutional frameworks that ensured a strong coordination and management mechanism (Section 3.1.4 - Relevance to national development and environmental needs and priorities).
Lesson 3	Alignment of projects with national and local needs and priorities enhances ownership and strong coordination, and should therefore be promoted in design and implementation of projects. Strong coordination at country level enhances ownership and opens channels for future collaboration and knowledge sharing.
Application	Design and implementation of Projects.
Finding:	Building partnerships and stakeholder engagements were critical to the success of the project. Leveraging on the work and finances of the NWSR project and ACPC, and taking advantage of synergies with other organizations increased project efficiency (Section 3.6.3 - Stakeholder participation, cooperation and partnerships).
Lesson 4:	Engagement of a cross-section of stakeholders, including local communities and beneficiaries, is important for the successful implementation of projects in which the long term impact is highly dependent on their actions.
Application:	Building partnerships (during project design and implementation) that are essential to enhancing adaptive capacity and reduced vulnerability to climate change.
Finding	The project's major strategy to adaptive capacity building comprised of learning-by-doing approach and demonstrations. The sensitization of the public and training of technical staff, policy makers, practitioners, communities and media change agents enabled them to be directly involved in implementation. The involvement of technical staff, media and communities in the delivering of climate information and early warnings helped enhance the EWS capacity of the

Gambia, which was translated into day-to-day work with a strong sense of ownership (Sections 3.1.4 relevance to national development needs, 3.2.2 outputs of component 2, and 3.4.5 catalytic role and replication).

Lesson 5:	Learning-by-doing capacity building results in ownership of project results and impact.
Application	Building capacity through learning-by-doing and demonstrations.
Finding	One of the project's strengths lay in the involvement of the local communities (especially RLGs), who are among the most vulnerable and are the key project beneficiaries, in the selection and execution of the pilots on climate information and early warning communication/dissemination. The communities are the main users of EWS and use them in decision making on appropriate adaptation actions (Sections 3.4.5 - Catalytic role and replication, and 3.6.3 - stakeholder participation, cooperation and partnerships).
Lesson 6:	Involvement of key beneficiaries (local communities) at an early stage of project design, selection of pilots and implementation promotes acceptance of project results which increases the likelihood that project outcomes will be sustained.
Application	Involvement of the ultimate beneficiaries in the design and execution of pilots and demonstrations.
Context	The project operated alongside other organisations, sectors, programmes and initiatives on the GAMBIA climate change landscape to contribute towards climate change resilience. Therefore, attribution by tracing back change to the project's specific outputs beyond immediate outcomes is difficult because of the many actors and programmes in the country that are contributing to the intended impact i.e. increased climate resilience. In this regard, impact cannot be attributed to one intervention (Sections 1.4.1 Evaluation Limitations and 3.3.2 Likelihood of impact)
Lesson 7	Since the impact (increased climate resilience) cannot be attributed to a single intervention (the project), outcome mapping, from project design to implementation and M&E, should not only focus on measuring behavioural changes exhibited by primary and secondary beneficiaries, but also on attribution and contribution of other actors and programmes on behavioural change exhibited by the beneficiaries.
Application	Design and implementation of projects
Finding:	Some challenges were experienced in the monitoring and reporting of project activities, arising from the omission of an M&E Officer position in the project design. The absence of M&E officers resulted in inadequate regular monitoring of progress against indicators, and lack of documentation of lessons learned. While a number of studies (through consultancies) were conducted, there is no documentation of lessons learned from them; consequently, despite being planned project outputs, their effectiveness in contributing towards outcomes is limited. A mid-term review evaluation was not conducted, which undermined the assessment of progress made and the identification of corrective action in project implementation (Section 3.6.8 M&E).
Lesson 8:	Projects should take M&E seriously at both project design and implementation. The M&E officer position should always be catered for in the ProDoc. In addition Project Management should keep track of targets that are likely to be missed and then appropriately adjust to achievable targets by the end of the project.
Application:	Design of all UNEP projects
Finding:	The evaluation finds that the PMU was very effective in implementing the project and maintaining clear communication between Project Management, Project Proponents and Project Beneficiaries; this enhanced the success of the project. The PSC was also very effective in providing direction and supervision of project activities (Sections 2.5 - Implementation arrangements, 3.6.2-Project implementation and management, and 3.6.6 - Financial planning and management).
Lesson #9:	Effective project management that promotes clear and transparent communication is key to creating strong working relationships and avoiding raised expectations resulting in disappointment, loss of hope and mistrust.
Application:	Implementation of all UNEP projects

4.2 Recommendations

The following is a presentation of the main recommendations that have been generated from the evaluation findings:

Context	The project has created a considerable interest and confidence in climate information and EWS, and for climate change adaptation. It has enhanced the capacity for hydro-meteorological services and improved delivery of climate information. Through this, the project has generated useful lessons and best practices in developing and implementing EWS and adaptation interventions (Section 3.3.1 achievement of direct outcomes).
Recommendation 1:	The planned phase two of the project, and other similar interventions in the country, should implement follow-on activities for replicating and up-scaling the project results, and for integration of climate change adaptation into policy, plans, budgets and institutional frameworks.
Responsibility	UNEP and the Government of the Gambia
Time Frame	Implementation of Phase Two of the project - 2015-2018
Context:	The project design had very ambitious capacity building targets and milestones (Sections 3.2.1 – Component 1 outputs, 3.5.1 – cost-effectiveness, and 3.6.1 preparation and readiness).
Recommendation 2:	In designing projects of a similar nature as this one, UNEP should ensure that a needs assessment is conducted and that the log-frame is robust and includes ‘SMART’ indicators, baselines and time-bound targets.
Responsibility:	UNEP and Government of The Gambia
Time-frame:	Design of follow-up projects.
Context:	Although communities have increased interest in climate information and have responded positively to improved EWS, the adoption of the right adaptation responses is yet to be achieved because the practices have not yet been identified and tested (Section 3.4.5 Catalytic role and replication).
Recommendation 3:	The design and implementation of EWS projects should be built in the overall context of adaptation planning and actions at the national, local and community levels. This is because building resilience will more likely accrue if EWS forms not only wider response to climate risks, but incorporates community based adaptation interventions. The government should integrate climate change adaptation into broader development programmes in which the needs of the most vulnerable communities are addressed.
Responsibility:	UNEP and Government of the Gambia
Time-frame:	Design and follow up projects
Context:	The projects results and lessons learned were not well communicated and documented (Section 3.6.6 M&E).
Recommendation 4:	There is need to better document lessons learned from project implementation, not only to better inform policy processes and planning at national and local level, but also to inform replication and up-scaling processes. UNEP and the Government of Gambia could channel some funds (may be from phase two) to conduct a study on lessons learned in the EWS to inform policy and planning on adaptation.
Responsibility:	UNEP and the Government of Gambia
Time-frame:	Phase two of the project
Context:	Though the project's intention was enhancing adaptive capacity, there was no clear focus on adaptation actions and decisions made based on the climate change risks identified. It is possible that communities could have responded with adaptation activities that were not always linked to associated risks (Section 3.3.1 Achievement of direct outcomes).
Recommendation 5:	By linking climate information and risks with adaptation options, learning processes could produce useful capacity building outcomes for future adaptation interventions.
Responsibility:	UNEP
Time-frame:	Future programming

Context: The likelihood for project sustainability is high with the planned phase two of the project. However, counterpart funding is very necessary to ensure that project benefits are not lost after phase two (Section 3.4.2 sustainability of financial resources).

Recommendation 6: **Implementation of the project's second phase should build on the achievements and partnerships built in the phase one. In particular, climate modelling and prediction (down scaling) should be taken into account. Building the capacity of meteorological services to generate income, as planned in phase two is a sure way ensuring financial sustainability of EWS.**

Responsibility: UNEP and the Government of the Gambia

Time-frame: Design and implementation of phase and other follow-up projects.

Context: The project design did not provide for a Finance Officer at the PMU and thus relied on the Accountant at the government's Department of Water Resources (DWR). As a result the Accountant was overwhelmed by project work and government work and this caused unnecessary delays. In addition, the project did not have a separate bank account and used the DWR bank account. In January 2014, the migration to another Accounting Software at the Treasury Department under the Ministry of Finance and Economic seriously delayed project implementation (Section 3.6.6 – Financial Planning and Management).

Recommendation 7: **In the second phase of the project a Project Finance Officer should be hired and a separate project account opened to enhance efficiency in project implementation.**

Responsibility: UNEP, DRW

Time-frame: Second phase of the project

Context: The M&E design did not provide an M&E position and this translated in inadequacies on monitoring, reporting and evaluation during project implementation (Section 3.6.8 M&E).

Recommendation 8: **Strengthen M&E at project design and implementation. The M&E position should always be catered for in project design. PMU should ensure that monitoring and reporting activities are adequately facilitated and followed up. Appropriate mechanisms should be put in place to document and share lessons learned.**

Responsibility: UNEP, Project Executing Agency and PMU.

Time-frame: Project design and implementation

5 ANNEXES

ANNEX I. TERMS OF REFERENCE FOR THE EVALUATION²⁵

1. Objective and Scope of the Evaluation

1. In line with the UNEP Evaluation Policy²⁶ and the UNEP Evaluation Manual²⁷, the Terminal Evaluation is undertaken at completion of the project to assess project performance (in terms of relevance, effectiveness and efficiency), and determine outcomes and impacts (actual and potential) stemming from the project, including their sustainability. The evaluation has two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote operational improvement, learning and knowledge sharing through results and lessons learned among UNEP and the key project partners. Therefore, the evaluation will identify lessons of operational relevance for future project formulation and implementation and will provide recommendations for the planned second phase of the project.

2. It will focus on the following sets of **key questions**, based on the project's intended outcomes, which may be expanded by the consultants as deemed appropriate:

- i. Has the project been successful in enhancing the capacity of The Gambian hydro-meteorological services and networks for predicting climate change events and risk factors?
- ii. To what degree has the project succeeded in promoting more effective, efficient and targeted delivery of climate information including early warnings?
- iii. Have project activities contributed to improved and timely preparedness and responses of various stakeholders to climate linked risks and vulnerabilities forecasts.
- iv. What contribution has the project made to the development of enhanced adaptive capacity and reduced vulnerability to climate change in The Gambia.

2. Overall Approach and Methods

3. The Terminal Evaluation of the Project will be conducted by independent consultants under the overall responsibility and management of the UNEP Evaluation Office in consultation with the UNEP Task Manager and the Climate Change Sub-programme Coordinator.

4. It will be an in-depth evaluation using a participatory approach whereby key stakeholders are kept informed and consulted throughout the evaluation process. Both quantitative and qualitative evaluation methods will be used to determine project achievements against the expected outputs, outcomes and impacts. It is highly recommended that the consultant(s) maintains close communication with the project team throughout the evaluation implementation phase in order to increase their ownership of the evaluation findings.

5. The findings of the evaluation will be based on the following:

(a) A **desk review** of:

- Relevant background documentation, inter alia [list];
- Project design documents; Annual Work Plans and Budgets or equivalent, revisions to the project (Project Document Supplement), the logical framework and its budget;
- Project reports such as six-monthly progress and financial reports, progress reports from collaborating partners, meeting minutes, relevant correspondence etc.;
- Project outputs: [list];

²⁵ Annexes excluded

²⁶ <http://www.unep.org/eou/StandardsPolicyandPractices/UNEPEvaluationPolicy/tabid/3050/language/en-US/Default.aspx>

²⁷ <http://www.unep.org/eou/StandardsPolicyandPractices/UNEPEvaluationManual/tabid/2314/language/en-US/Default.aspx>

- Evaluations/reviews of similar projects
- (b) **Interviews(individual or in group) with:**
- UNEP Task Manager, Ms Nina Raasakka
 - Project management team(Chief Technical Advisor, Mr BubuJallow, National project coordinator, Mr Bernard Gomez, Mr Pa OusmanJarju, former project director.
 - UNEP Fund Management Officer, Ms Shakira Khawaja.
 - Project partners, including DWR,
 - GEF Climate Change Adaptation Unit
- (c) **Field visits**
- The project team will visit the Gambia where they will visit the project sites and meet with the project team and key stakeholders.
- (d) **Other data collection tools**
- Data collection tools will be determined by the Evaluation team as part of the inception report development.

3. Key Evaluation principles

6. Evaluation findings and judgements should be based on **sound evidence and analysis**, clearly documented in the evaluation report. Information will be triangulated (i.e. verified from different sources) to the extent possible, and when verification was not possible, the single source will be mentioned. Analysis leading to evaluative judgements should always be clearly spelled out.

7. The evaluation will assess the project with respect to **a minimum set of evaluation criteria** grouped in six categories: (1) Strategic Relevance; (2) Attainment of objectives and planned result, which comprises the assessment of outputs achieved, effectiveness and likelihood of impact; (3) Sustainability and replication; (4) Efficiency; (5) Factors and processes affecting project performance, including preparation and readiness, implementation and management, stakeholder participation and public awareness, country ownership and driven-ness, financial planning and management, UNEP supervision and backstopping, and project monitoring and evaluation; and (6) Complementarity with the UNEP strategies and programmes. The evaluation consultants can propose other evaluation criteria as deemed appropriate.

8. **Ratings.** All evaluation criteria will be rated on a six-point scale. However, complementarity of the project with the UNEP strategies and programmes is not rated. Annex 3 provides guidance on how the different criteria should be rated and how ratings should be aggregated for the different evaluation criterion categories.

9. In attempting to attribute any outcomes and impacts to the project, the evaluators should consider the difference between *what has happened with and what would have happened without the project*. This implies that there should be consideration of the baseline conditions and trends in relation to the intended project outcomes and impacts. This also means that there should be plausible evidence to attribute such outcomes and impacts to the actions of the project. Sometimes, adequate information on baseline conditions and trends is lacking. In such cases this should be clearly highlighted by the evaluators, along with any simplifying assumptions that were taken to enable the evaluator to make informed judgements about project performance.

10. As this is a terminal evaluation but a follow-up project is planned, particular attention should be given to learning from the experience. Therefore, the *"Why?"* question should be at front of the consultants' minds all through the evaluation exercise. This means that the consultants need to go beyond the assessment of *"what"* the project performance was, and make a serious effort to provide a deeper understanding of *"why"* the performance was as it was, i.e. of processes affecting attainment of project results (criteria under category F – see below). This should provide the basis for the lessons that can be drawn from the project. In fact, the usefulness of the evaluation will be determined to a large extent by the capacity of the consultants to explain *"why things happened"* as they happened and are likely to evolve in this or that direction, which goes well beyond the mere review of *"where things stand"* at the time of evaluation.

11. A key aim of the evaluation is to encourage reflection and learning by UNEP staff and key project stakeholders. The consultant should consider how reflection and learning can be promoted, both through the evaluation process and in the communication of evaluation findings and key lessons.

12. Once the consultant(s) has obtained evaluation results, the evaluation office will share the findings and lessons with the key stakeholders. Evaluation results should be communicated to the key stakeholders in a brief and concise manner that encapsulates the evaluation exercise in its entirety. There may however be several intended audiences, each with different interests and preferences regarding the report. The Evaluation Manager will plan with the consultant(s) what audiences to target and the easiest and clearest way to communicate the key evaluation findings and lessons to them. This may include a webinar, and/or conference calls with relevant stakeholders.

4. Evaluation criteria

4.1.1 Strategic relevance

13. The evaluation will assess, in retrospect, whether the project's objectives and implementation strategies were consistent with global, regional and national environmental issues and needs.

14. The evaluation will also assess the project's relevance in regards UNEP's mandate and alignment with UNEP's policies and strategies at the time of project approval. UNEP's Medium Term Strategy (MTS) is a document that guides UNEP's programme planning over a four-year period. It identifies UNEP's thematic priorities, known as Sub programmes (SP), and sets out the desired outcomes of the SPs, also known as Expected Accomplishments (EAs). The evaluation will assess whether the project makes a tangible contribution to any of the EAs specified in the MTS (2010 – 2014). The magnitude and extent of any contributions and the causal linkages should be fully described.

15. The evaluation should assess the project's alignment with UNEP's policies and strategies. The evaluation should provide a brief narrative of the following:

1. *Alignment with the Bali Strategic Plan (BSP)*²⁸. The outcomes and achievements of the project should be briefly discussed in relation to the objectives of the UNEP BSP.
2. *Gender balance*. Ascertain to what extent project design, implementation and monitoring have taken into consideration: (i) possible gender inequalities in access to and the control over natural resources; (ii) specific vulnerabilities of women and children to environmental degradation or disasters; and (iii) the role of women in mitigating or adapting to environmental changes and engaging in environmental protection and rehabilitation. Appreciate whether the intervention is likely to have any lasting differential impacts on gender equality and the relationship between women and the environment. To what extent do unresolved gender inequalities affect sustainability of project benefits?
3. *Human rights based approach (HRBA) and inclusion of indigenous peoples issues, needs and concerns*. Ascertain to what extent the project has applied the UN Common Understanding on HRBA. Ascertain if the project is in line with the UN Declaration on the Rights of Indigenous People, and pursued the concept of free, prior and informed consent.
4. *South-South Cooperation*. This is regarded as the exchange of resources, technology, and knowledge between developing countries. Briefly describe any aspects of the project that could be considered as examples of South-South Cooperation.

16. It will further assess whether the project was in line with the GEF [name] focal area, strategic priorities and operational programme(s).

17. Based on an analysis of project stakeholders, the evaluation should assess the relevance to key stakeholder groups.

4.1.2 Achievement of Outputs

18. The evaluation will assess, for each component, the project's success in producing the programmed outputs and milestones as presented in Table 2 (Logical Framework), both in quantity and quality, as well as their usefulness and timeliness.

19. Briefly explain the reasons behind the success (or failure) of the project in achieving its different outputs and meeting expected quality standards, cross-referencing as needed to more detailed explanations provided under Section F (which covers the processes affecting attainment of project results).

20. Have key stakeholders been appropriately involved in producing the programmed outputs?

4.1.3 Effectiveness: Attainment of Objectives and Planned Results

21. The evaluation will assess the extent to which the project's objectives were effectively achieved or are expected to be achieved.

22. The ToC of a project depicts the causal pathways from project outputs (goods and services delivered by the project) through outcomes (changes resulting from the use made by key stakeholders of project outputs) towards impact (long term changes in environmental benefits and living conditions). The ToC will also depict any intermediate changes required between project outcomes and impact, called 'intermediate states'. The ToC further defines the external factors that influence change along the major pathways, whether one result can lead to the next. These external factors are either drivers (when the project has a certain level of control) or assumptions (when the project has no control). It also clearly identifies the main stakeholders involved in the change processes.

²⁸<http://www.unep.org/GC/GC23/documents/GC23-6-add-1.pdf>

23. The evaluation will reconstruct the **Theory of Change (ToC)** of the project based on a review of project documentation and stakeholder interviews. The consultant will be expected to discuss the reconstructed TOC with the stakeholders during evaluation missions and/or interviews in order to ascertain the causal pathways identified and the validity of impact drivers and assumptions described in the TOC. This exercise will also enable the consultant to solve some of the key evaluation questions and make adjustments to the TOC as would be found appropriate.

24. The assessment of effectiveness will be structured in three sub-sections:

- (a) Evaluation of the **achievement of outcomes as defined in the reconstructed ToC**. These are the first-level outcomes expected to be achieved as an immediate result of project outputs. For this project, the main question will be to what extent the project has contributed to the three project components.
- (b) Assessment of the **likelihood of impact** using a Review of Outcomes to Impacts (ROtI) approach²⁹. The evaluation will assess to what extent the project has to date contributed, and is likely in the future to further contribute, to the intermediate states identified in the theory of change.
- (c) Evaluation of the **achievement of the formal project overall objective, overall purpose, goals and component outcomes** using the project's own results statements as presented in the Project Document. This sub-section will refer back where applicable to the preceding sub-sections (a) and (b) to avoid repetition in the report. To measure achievement, the evaluation will use as much as appropriate the indicators for achievement proposed in the Logical Framework (Logframe) of the project, adding other relevant indicators as appropriate. Briefly explain what factors affected the project's success in achieving its objectives, cross-referencing as needed to more detailed explanations provided under Section F.
- (d) The evaluation should disaggregate outcomes and impacts for the key project stakeholders.

4.1.4 Sustainability and replication

25. Sustainability is understood as the probability of continued long-term project-derived results and impacts after the external project funding and assistance ends. The evaluation will identify and assess the key conditions or factors that are likely to undermine or contribute to the persistence of benefits. Some of these factors might be direct results of the project while others will include contextual circumstances or developments that are not under control of the project but that may condition the sustainability of benefits. The evaluation will ascertain that the project has put in place an appropriate exit strategy and measures to mitigate risks to sustainability. The evaluation should ascertain to what extent follow-up work has been initiated and how project results will be sustained and enhanced over time. The reconstructed ToC will assist in the evaluation of sustainability, as the drivers and assumptions required to achieve higher-level results are often similar to the factors affecting sustainability of these changes.

26. Four aspects of sustainability will be addressed:

- (a) *Socio-political sustainability*. Are there any social or political factors that may influence positively or negatively the sustenance of project results and progress towards impacts? Is the level of ownership by the main stakeholders sufficient to allow for the project results to be sustained? Are there sufficient government and other key stakeholder awareness, interests, commitment and incentives to [add as relevant]? Did the project conduct succession planning and implement this during the project life? Was capacity building conducted for key stakeholders?
- (b) *Financial resources*. To what extent are the continuation of project results and the eventual impact of the project dependent on financial resources? What is the likelihood that adequate financial resources³⁰ will be or will become available to use capacities built by the project? Are there any financial risks that may jeopardize sustenance of project results and onward progress towards impact?
- (c) *Institutional framework*. To what extent is the sustenance of the results and onward progress towards impact dependent on issues relating to institutional frameworks and governance? How robust are the institutional achievements such as governance structures and processes, policies, sub-regional agreements, legal and accountability frameworks etc. required to sustaining project results and to lead those to impact on human behaviour and environmental resources?
- (d) *Environmental sustainability*. Are there any environmental factors, positive or negative, that can influence the future flow of project benefits? Are there any project outputs or higher level results that are likely to affect the

²⁹ Guidance material on Theory of Change and the ROtI approach is available from the Evaluation Office.

³⁰ Those resources can be from multiple sources, such as the national budget, public and private sectors, development assistance etc.

environment, which, in turn, might affect sustainability of project benefits? Are there any foreseeable negative environmental impacts that may occur, as the project results are being up-scaled?

27. **Catalytic role and replication.** The *catalytic role* of UNEP interventions is embodied in their approach of supporting the creation of an enabling environment and of investing in pilot activities which are innovative and showing how new approaches can work. UNEP also aims to support activities that upscale new approaches to a national, regional or global level, with a view to achieve sustainable global environmental benefits. The evaluation will assess the catalytic role played by this project, namely to what extent the project has:

- (a) *catalyzed behavioural changes* in terms of use and application by the relevant stakeholders of capacities developed;
- (b) provided *incentives* (social, economic, market based, competencies etc.) to contribute to catalyzing changes in stakeholder behaviour;
- (c) contributed to *institutional changes*, for instance institutional uptake of project-demonstrated integrated environmental assessment approaches;
- (d) contributed to *policy changes* (on paper and in implementation of policy);
- (e) contributed to sustained follow-on financing (*catalytic financing*) from Governments, private sector, donors etc.;
- (f) created opportunities for particular individuals or institutions ("*champions*") to catalyze change (without which the project would not have achieved all of its results).

28. *Replication* is defined as lessons and experiences coming out of the project that are replicated (experiences are repeated and lessons applied in different geographic areas) or scaled up (experiences are repeated and lessons applied in the same geographic area but on a much larger scale and funded by other sources). The evaluation will assess the approach adopted by the project to promote replication effects and determine to what extent actual replication has already occurred or is likely to occur in the near future. What are the factors that may influence replication and scaling up of project experiences and lessons?

5. Efficiency

29. The evaluation will assess the cost-effectiveness and timeliness of project execution. It will describe any cost- or time-saving measures put in place in attempting to bring the project as far as possible in achieving its results within its (severely constrained) secured budget and (extended) time. It will also analyse how delays, if any, have affected project execution, costs and effectiveness. Wherever possible, costs and time over results ratios of the project will be compared with that of other similar interventions. Evaluations/reviews of other large assessments may provide some comparative information on efficiency.

30. The evaluation will give special attention to efforts by the project teams to make use of/build upon pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects etc. to increase project efficiency. For instance, the evaluation will consider how well other information sources (on global and regional environmental status and trends, and on the costs and benefits of different policy options) accessible to the different target audiences have been tapped, and how the project ensured the complementarity of its process and products to other assessment processes and information sources, to avoid duplication of efforts? Was there sufficient information about the assessment capacity of collaborating institutions and experts and about other capacity building initiatives, to limit and target training and technical support to what was really needed, avoiding duplication?

6. Factors and processes affecting project performance

31. **Preparation and readiness.** This criterion focuses on the quality of project design and preparation. Were project stakeholders³¹ adequately identified and were they sufficiently involved in project development and ground truthing e.g. of proposed time frame and budget? Were the project's objectives and components clear, practicable and feasible within its timeframe? Were the capacities of executing agencies properly considered when the project was designed? Was the project document clear and realistic to enable effective and efficient implementation? Were the partnership arrangements properly identified and the roles and responsibilities negotiated prior to project implementation? Were counterpart resources (funding, staff, and facilities) and enabling legislation assured? Were adequate project management arrangements in place? Were lessons from other relevant projects properly incorporated in the project design? What factors influenced the quality-at-entry of the project design, choice of partners, allocation of financial resources etc.?

³¹ Stakeholders are the individuals, groups, institutions, or other bodies that have an interest or 'stake' in the outcome of the project. The term also applies to those potentially adversely affected by the project.

32. **Project implementation and management.** This includes an analysis of implementation approaches used by the project, its management framework, the project's adaptation to changing conditions (adaptive management), the performance of the implementation arrangements and partnerships, relevance of changes in project design, and overall performance of project management. The evaluation will:

- (a) Ascertain to what extent the project implementation mechanisms outlined in the project document have been followed and were effective in delivering project milestones, outputs and outcomes. Were pertinent adaptations made to the approaches originally proposed?
- (b) Evaluate the effectiveness and efficiency of project management and how well the management was able to adapt to changes during the life of the project.
- (c) Assess the role and performance of the teams and working groups established and the project execution arrangements at all levels.
- (d) Assess the extent to which project management responded to direction and guidance provided by the UNEP Task Manager and project steering bodies.
- (e) Identify operational and political / institutional problems and constraints that influenced the effective implementation of the project, and how the project partners tried to overcome these problems. How did the relationship between the project management team and the collaborating partners (institutions and individual experts) develop?

33. **Stakeholder participation and public awareness.** The term stakeholder should be considered in the broadest sense, encompassing both project partners and target users (such as [list]) of project products. The TOC and stakeholder analysis should assist the evaluators in identifying the key stakeholders and their respective roles, capabilities and motivations in each step of the causal pathway from activities to achievement of outputs, outcomes and intermediate states towards impact. The assessment will look at three related and often overlapping processes: (1) information dissemination to and between stakeholders, (2) consultation with and between stakeholders, and (3) active engagement of stakeholders in project decision making and activities. The evaluation will specifically assess:

- (a) the approach(es) used to identify and engage stakeholders (within and outside UNEP) in project design and implementation.

What were the strengths and weaknesses of these approaches with respect to the project's objectives and the stakeholders' motivations and capacities? Were there mechanisms in place to enable stakeholders to participate in project, implementation and monitoring? What was the achieved degree and effectiveness of collaboration and interactions between the various project partners and stakeholders during design and implementation of the project? (This should be disaggregated for the main stakeholder groups identified in the inception report).

- (b) The degree and effectiveness of any public awareness activities that were undertaken during the course of implementation of the project to communicate the project's objective, progress, outcomes and lessons. (this should be disaggregated for the main stakeholder groups identified in the inception report). Did the project identify and make use of existing communication channels and networks used by key stakeholders? Did the project provide feedback channels?
- (c) Do the results of the project (strategic programmes and plans, monitoring and management systems, sub-regional agreements etc.) promote participation of stakeholders, including users, in decision making.

34. **Country ownership and driven-ness.** The evaluation will assess the performance of government agencies involved in the project, participants to the Intergovernmental and Multi-stakeholder Consultation and High Level Intergovernmental Advisory Panel in particular:

- (a) To what extent have Governments assumed responsibility for the project and provided adequate support to project execution, including the degree of cooperation received from the various public institutions involved in the project?
- (b) How well did the project stimulate country ownership of project outputs and outcomes?
- (c) [Any other project-specific questions]

35. **Financial planning and management.** Evaluation of financial planning requires assessment of the quality and effectiveness of financial planning and control of financial resources throughout the project's lifetime. The assessment will look at actual project costs by activities compared to budget (variances), financial management (including disbursement issues), and co-financing. The evaluation will:

- (a) Verify the application of proper standards (clarity, transparency, audit etc.) and timeliness of financial planning, management and reporting to ensure that sufficient and timely financial resources were available to the project and its partners;
- (b) Assess other administrative processes such as recruitment of staff, procurement of goods and services (including consultants), preparation and negotiation of cooperation agreements etc. to the extent that these might have influenced project performance;
- (c) Present the extent to which co-financing has materialized as expected at project approval (see Table 1). Report country co-financing to the project overall, and to support project activities at the national level in particular. The evaluation will provide a breakdown of final actual costs and co-financing for the different project components (see tables in Annex 4).
- (d) Describe the resources the project has leveraged since inception and indicate how these resources are contributing to the project's ultimate objective. Leveraged resources are additional resources—beyond those committed to the project itself at the time of approval—that are mobilized later as a direct result of the project. Leveraged resources can be financial or in-kind and they may be from other donors, NGO's, foundations, governments, communities or the private sector.
36. Analyse the effects on project performance of any irregularities in procurement, use of financial resources and human resource management, and the measures taken UNEP to prevent such irregularities in the future. Determine whether the measures taken were adequate.
37. **Supervision, guidance and technical backstopping.** The purpose of supervision is to verify the quality and timeliness of project execution in terms of finances, administration and achievement of outputs and outcomes, in order to identify and recommend ways to deal with problems which arise during project execution. Such problems may be related to project management but may also involve technical/institutional substantive issues in which UNEP has a major contribution to make.
38. The evaluators should assess the effectiveness of supervision, guidance and technical support provided by the different supervising/supporting bodies including:
- (a) The adequacy of project supervision plans, inputs and processes;
- (b) The realism and candour of project reporting and the emphasis given to outcome monitoring (results-based project management);
- (c) How well did the different guidance and backstopping bodies play their role and how well did the guidance and backstopping mechanisms work? What were the strengths in guidance and backstopping and what were the limiting factors?
39. **Monitoring and evaluation.** The evaluation will include an assessment of the quality, application and effectiveness of project monitoring and evaluation plans and tools, including an assessment of risk management based on the assumptions and risks identified in the project document. The evaluation will assess how information generated by the M&E system during project implementation was used to adapt and improve project execution, achievement of outcomes and ensuring sustainability. M&E is assessed on three levels:
- (a) *M&E Design.* The evaluators should use the following questions to help assess the M&E design aspects:
- (i) Did the project have a sound M&E plan to monitor results and track progress towards achieving project objectives?
- (ii) How well was the project logical framework(original and possible updates) designed as a planning and monitoring instrument?
- (iii) SMART-ness of indicators: Are there specific indicators in the log frame for each of the project objectives? Are the indicators measurable, attainable (realistic) and relevant to the objectives? Are the indicators time-bound?
- (iv) Adequacy of baseline information: To what extent has baseline information on performance indicators been collected and presented in a clear manner? Was the methodology for the baseline data collection explicit and reliable? For instance, was there adequate baseline information on pre-existing accessible information on global and regional environmental status and trends, and on the costs and benefits of different policy options for the different target audiences? Was there sufficient information about the assessment capacity of collaborating institutions and experts etc. to determine their training and technical support needs?
- (v) Arrangements for monitoring: Have the responsibilities for M&E activities been clearly defined? Were the data sources and data collection instruments appropriate? Was the time frame for various M&E activities specified? Was the frequency of various monitoring activities specified and adequate? To

what extent did the project engage key stakeholders in the design and implementation of monitoring? Which stakeholders (from groups identified in the inception report) were involved. If any stakeholders were excluded, what was the reason for this?

- (vi) Arrangements for evaluation: Have specific targets been specified for project outputs? Has the desired level of achievement been specified for all indicators of objectives and outcomes? Were there adequate provisions in the legal instruments binding project partners to fully collaborate in evaluations?
 - (vii) Budgeting and funding for M&E activities: Determine whether support for M&E was budgeted adequately and was funded in a timely fashion during implementation.
- (b) *M&E Plan Implementation.* The evaluation will verify that:
- (i) the M&E system was operational and facilitated timely tracking of results and progress towards projects objectives throughout the project implementation period;
 - (ii) Half-yearly Progress & Financial Reports were complete and accurate;
 - (iii) the information provided by the M&E system was used during the project to improve project performance and to adapt to changing needs.

The Consultants' Team

For this evaluation, the evaluation team will consist of a Team Leader and one Supporting Consultant. Details about the specific roles and responsibilities of the team members are presented in Annex 1 of these TORs. The Team Leader should have extensive evaluation experience, including using a Theory of Change approach. The Supporting Consultant will have a solid environmental education and professional experience; adequate monitoring and evaluation experience. Between them, the team members should have skills and experience in meteorology, hydrology, socioeconomics, policy analysis, information and communication.

40. The Team Leader will coordinate data collection and analysis, and the preparation of the main report for the evaluation, with substantive contributions by the Supporting Consultant. Both consultants will ensure together that all evaluation criteria and questions are adequately covered.

41. By undersigning the service contract with UNEP/UNON, the consultants certify that they have not been associated with the design and implementation of the project in any way which may jeopardize their independence and impartiality towards project achievements and project partner performance. In addition, they will not have any future interests (within six months after completion of the contract) with the project's executing or implementing units.

Evaluation Deliverables and Review Procedures

42. The evaluation team will prepare an **inception report** (see Annex 2(a) of TORs for Inception Report outline) containing a thorough review of the project context, project design quality, a draft reconstructed Theory of Change of the project, the evaluation framework and a tentative evaluation schedule.

43. It is expected that a large portion of the desk review will be conducted during the inception phase. It will be important to acquire a good understanding of the project context, design and process at this stage. The review of design quality will cover the following aspects (see Annex 7 for the detailed project design assessment matrix):

- Strategic relevance of the project
- Preparation and readiness;
- Financial planning;
- M&E design;
- Complementarity with UNEP strategies and programmes;
- Sustainability considerations and measures planned to promote replication and up-scaling.

44. The inception report will present a draft, desk-based reconstructed Theory of Change of the project. It is vital to reconstruct the *ToCbefore* most of the data collection (review of progress reports, in-depth interviews, surveys etc.) is done, because the ToC will define which direct outcomes, drivers and assumptions of the project need to be assessed and measured– based on which indicators – to allow adequate data collection for the evaluation of project effectiveness, likelihood of impact and sustainability.

45. The inception report will also include a stakeholder analysis identifying key stakeholders, networks and channels of communication. This information should be gathered from the Project document and discussion with the project team.

46. The evaluation framework will present in further detail the overall evaluation approach. It will specify for each evaluation question under the various criteria what the respective indicators and data sources will be. The evaluation

framework should summarize the information available from project documentation against each of the main evaluation parameters. Any gaps in information should be identified and methods for additional data collection, verification and analysis should be specified. Evaluations/reviews of other large assessments can provide ideas about the most appropriate evaluation methods to be used.

47. Effective communication strategies help stakeholders understand the results and use the information for organisational learning and improvement. While the evaluation is expected to result in a comprehensive document, content is not always best shared in a long and detailed report; this is best presented in a synthesised form using any of a variety of creative and innovative methods. The evaluator is encouraged to make use of multimedia formats in the gathering of information e.g. video, photos, sound recordings. Together with the full report, the evaluator will be expected to produce a 2-page summary of key findings and lessons.

48. The inception report will also present a tentative schedule for the overall evaluation process, including a draft programme for the country visit and tentative list of people/institutions to be interviewed.

49. The inception report will be submitted for review and approval by the Evaluation Office before the any further data collection and analysis is undertaken.

50. [Optional] When data collection and analysis has almost been completed, the evaluation team will prepare a short **note on preliminary findings and recommendations** for discussion with the project team and the Evaluation Reference Group. The purpose of the note is to allow the evaluation team to receive guidance on the relevance and validity of the main findings emerging from the evaluation.

51. **The main evaluation report** should be brief (no longer than 40 pages – excluding the executive summary and annexes), to the point and written in plain English. The report will follow the annotated Table of Contents outlined in Annex 2. It must explain the purpose of the evaluation, exactly what was evaluated and the methods used (with their limitations). The report will present evidence-based and balanced findings, consequent conclusions, lessons and recommendations, which will be cross-referenced to each other. The report should be presented in a way that makes the information accessible and comprehensible. Any dissident views in response to evaluation findings will be appended in footnote or annex as appropriate. To avoid repetitions in the report, the authors will use numbered paragraphs and make cross-references where possible.

52. **Review of the draft evaluation report.** The evaluation team will submit a zero draft report to the UNEP EO and revise the draft following the comments and suggestions made by the EO. Once a draft of adequate quality has been accepted, the EO will share this first draft report with the Task Manager, who will alert the EO in case the report would contain any blatant factual errors. The Evaluation Office will then forward the first draft report to the other project stakeholders, in particular [list] for their review and comments. Stakeholders may provide feedback on any errors of fact and may highlight the significance of such errors in any conclusions. It is also very important that stakeholders provide feedback on the proposed recommendations and lessons. Comments would be expected within two weeks after the draft report has been shared. Any comments or responses to the draft report will be sent to the UNEP EO for collation. The EO will provide the comments to the evaluation team for consideration in preparing the final draft report, along with its own views.

53. The evaluation team will submit the final draft report no later than 2 weeks after reception of stakeholder comments. The team will prepare a **response to comments**, listing those comments not or only partially accepted by them that could therefore not or only partially be accommodated in the final report. They will explain why those comments have not or only partially been accepted, providing evidence as required. This response to comments will be shared by the EO with the interested stakeholders to ensure full transparency.

54. **Submission of the final evaluation report.** The final report shall be submitted by Email to the Head of the Evaluation Office. The Evaluation Office will finalize the report and share it with the interested Divisions and Sub-programme Coordinators in UNEP. The final evaluation report will be published on the UNEP Evaluation Office web-site www.unep.org/eou.

55. As per usual practice, the UNEP EO will prepare a **quality assessment** of the zero draft and final draft report, which is a tool for providing structured feedback to the evaluation consultants. The quality of the report will be assessed and rated against the criteria specified in Annex 3.

56. The UNEP Evaluation Office will assess the ratings in the final evaluation report based on a careful review of the evidence collated by the evaluation consultants and the internal consistency of the report. Where there are differences of opinion between the evaluator and UNEP Evaluation Office on project ratings, both viewpoints will be clearly presented in the final report. The UNEP Evaluation Office ratings will be considered the final ratings for the project.

Logistical arrangements

57. This Terminal Evaluation will be undertaken by two independent evaluation consultants contracted by the UNEP Evaluation Office. The consultants will work under the overall responsibility of the UNEP Evaluation Office and will consult with the EO on any procedural and methodological matters related to the evaluation. It is, however, the consultants'

individual responsibility to arrange for their travel, visa, obtain documentary evidence, plan meetings with stakeholders, organize online surveys, and any other logistical matters related to the assignment. The UNEP Task Manager and project team will, where possible, provide logistical support (introductions, meetings etc.) allowing the consultants to conduct the evaluation as efficiently and independently as possible.

Evaluation timeline

Milestone	Deadline
Consultant's contracts signed	1 March 2015
Inception Report finalised shared with UNEP	5 March 2015
Inception Report finalised	10 march 2015
Evaluation Mission – Gambia	11 - 20 March 2015
Zero draft report	30 April 2015
Draft Report shared with UNEP and UNDP Task Manager	8 May 2015
Draft Report shared with stakeholders	22 May 2015
Final Report	15 June 2015

ANNEX II. EVALUATION PROGRAM AND STAKEHOLDERS CONSULTED

A: Gambia EWS Project Terminal Evaluation Programme - Main Timelines

Milestone	Deadline
Consultant's contracts signed	1 March 2015
Inception Report finalized and shared within UNEP	5 March 2015
Inception Report finalized	10 March 2015
Evaluation Mission in The Gambia	11 - 20 March 2015
Zero draft report	15 May 2015
Draft Report shared with UNEP and UNDP Task Manager	20 May 2015
Draft Report shared with stakeholders	25 May 2015
Final Report	15 June 2015

B: Evaluation Program - Evaluation mission to Gambia 11-20 March 2015

Day, Date	Activity	Details	Responsible/Participants
Wednesday 11 March	Travel	Travel and arrival in the Gambia	
Thursday 12 March	Meeting with Project Director, project Team	<ul style="list-style-type: none"> Introduction of the evaluation Finalization the programme of the Evaluation Mission. 	<ul style="list-style-type: none"> LaminJawara, MOWCCWW, Deputy Permanent Secretary Mr. Lamin Mai Touray, DWR - project Director Bubu P Jellow, CTA AbdeeuJarju, DWR - Project Accountant George Stafford, NMHS, Head Forecasting Lisa Jarju, Project Administrative Assistant
	Meeting the with the PSC	<ul style="list-style-type: none"> Introducing the evaluation mission, discussion of the TOC, brief on project achievements 	PSC members
	Meeting with National Meteorological Services	<ul style="list-style-type: none"> Evaluation of the technical aspects of the EWS - climate data collection, processing, packaging and dissemination 	<ul style="list-style-type: none"> George Stafford, NMHS - Head Forecasting Omar Gaye Cham, NMHS - Meteorology Assistant Landing Bonjang, Hydrology officer SulayimaJabang, Aviation Meteorology Officer
		<ul style="list-style-type: none"> Visit to the Banjul International airport Met Station 	<ul style="list-style-type: none"> George Stafford, NMHS - Head Forecasting Omar Gaye Cham, NMHS - Meteorology Assistant Landing Bonjang, Hydrology officer SulayimaJabang, Aviation Meteorology Officer
Friday 13 March	Field visit to North Bank region (NBR) project sites	Meeting with NBR Technical Advisory Committee	NBR Technical Advisory Committee members
		Group Discussion with KebbaKinthe Fishing Community/Association	KebbaKinthe Fishing Association members

		Group discussion with SwarehKunda Radio listening Group	SwarehKunda Radio listening Group members
		Meeting at SwarehKunda Community Radio	<ul style="list-style-type: none"> Ebrima Sandy Khan, Director DembiCeeseey, Assistant Director
		Visit SwarehKunda Met Station	<ul style="list-style-type: none"> FatouSima, Principal Meteorologist Landing Bonjang, Hydrology officer PatehBaldeh, NMHS
Saturday 14 March	Field visit to North Bank region (NBR) project sites	Visit to Balinghor Hydrological Station	<ul style="list-style-type: none"> FatouSima, Principal Meteorologist Landing Bonjang, Hydrology officer PatehBaldeh, NMHS
		Visit to Kanjibat District Automatic weather station	<ul style="list-style-type: none"> FatouSima, Principal Meteorologist Landing Bonjang, Hydrology officer PatehBaldeh, NMHS
		Visit to Sibanol Met Station	<ul style="list-style-type: none"> FatouSima, Principal Meteorologist Landing Bonjang, Hydrology officer PatehBaldeh, NMHS
		Visit Tanene underground water observation borehole	<ul style="list-style-type: none"> FatouSima, Principal Meteorologist Landing Bonjang, Hydrology officer PatehBaldeh, NMHS
Monday 16 March	Visit Project Sites in West Coast Region (WCR)	Meeting ToubaManduar Radio Listening Group	ToubaManduar Radio Listening Group members
		Visit to Brikama Community Radio Station	ModuTouray, senior Presenter Weather Forecasts
	Meeting Women's Bureau	Meeting with Women's Bureau	NenehTouray, Assistant Director
	Meeting the NWSRP	Discussion on co-financing aspects	OusmanJarjusey, Project director
Tuesday 17 March	Meeting with National Environment agency	Discussion on achievement and challenges of the EWS project	<ul style="list-style-type: none"> MomodouJamaSuwareh, Director Mohammad J. JallomJabang, Head environmental Quality
	Meeting National Disaster Management Agency (NDMA)	Discussion on achievement and challenges of the EWS project	<ul style="list-style-type: none"> SerignModuJoof, Deputy Director Lamin S. Tamba, Programme Manager BibhutiBhusanGadanayak, DDR and CCA Specialist
	Meeting Forestry Department	Discussion on achievement and challenges of the EWS project	<ul style="list-style-type: none"> Malang Jassy, Assistant Director Malang Jatta, Senior Forestry Officer BabadingSanyang, Senior Forestry Officer, Communications and Extension Senior Forestry Officer, Head Participatory Management Unit
	Meeting Fisheries Department	Discussion on achievement and challenges of the EWS project	<ul style="list-style-type: none"> Ebou Mass Mbye, Senior Fisheries Officer Ebou Mass Mbye, Fisheries Officer
Wednesday 18 March	Meeting with Banjul City Council	Discussion on achievement and challenges of the EWS project	<ul style="list-style-type: none"> All. Abdoulie Bah, Mayor Aji Awa SillahNjie, Deputy Mayor Kawsu Barrow, administrative Assistant
	Meeting with Ministry Of Agriculture	Discussion on achievement and challenges of the EWS project	Musa M. Dampha, Deputy Director

	Meeting NGO - Stay Green Foundation	Discussion on participation of NGOs, as well as the achievement and challenges of the EWS project	BaboucarrMbye, Executive Director
	Meeting with NGOs - WISDOM	Discussion on participation of NGOs, as well as the achievement and challenges of the EWS project	MariatuKassim-Loum
	Meeting Ministry of Finance and Economic affairs	Discussion on the achievement and challenges of the EWS project	<ul style="list-style-type: none"> LaminCamara, Deputy Permanent Secretary Bui MadiCeesay, Budget Director Amie KollehJeng, Principal Economist
	Meeting UNDP, Gambia	Discussion on participation in project, achievements and shortcomings	AlmamyCamara, Programme Analyst - Environment and Energy
	Meeting GRTS	Communication aspects	IsmaillaSaghon, Manager FM
Thursday 19 March	Final Meeting with PSC	Presentation and discussion of preliminary finding of the terminal evaluation	PSC members
	Final meeting with project Team	Discussion on way forward and receipt of project documents	Project Team
Friday 20 March	Travel	Evaluators Departure from Gambia	

C: Stakeholders Consulted from the UNEP - Nairobi

S.No	Names	Organization	Title	Contact
	UNEP			
1	Harriet Matsaert	UNEP	Evaluation Office	
2	Pauline Marima	UNEP	Evaluation Office	
3	Nina Raasakka	UNEP	Task Manager	
4	Shakira Khawaja	UNEP	Fund Management Officer	

C: Stakeholders Consulted in the Evaluation mission in Gambia

	Names/Subgroup	Organization	Title/Rank	E-mail contact
	Project Steering Committee			
1	LaminJawara	MOECCWW	Deputy Permanent Secretary	Lfjawara@yahoo.co.uk
2	Lamin Mai Touray	DWR	Director/Project Director	lintouray@mofwrnam.gov.gm
3	Bubu P Jellow	CCEWS Project	CTA	bubupateh@yahoo.com
4	FatouSima	DWR	Ag. Principal Meteorologist	Sima-fatou@yahoo.com
5	Ali Mbye	DWR	Meteorology assistant	Alimbye55@yahoo.com
6	NenehTouray	Women's Bureau	Assistant Director, IEC	nenehtouraysy@yahoo.com
7	SainabonSague	DRW	IT	saijagne@gmail.com
8	BuacarJallow	MOECCWW	Principal Climate Change Officer	bubazj@gmail.com
9	Malang Jatta	Ministry of Forestry	Senior Forestry Officer	Mjattaforest@yahoo.com
10	Ali Jobe	Ministry of Finance and Economic Affairs		Ali24jobe@gmail.com
11	Lamin Fatty	Gambia Tourism Board	Manager	lfatty@gtbord.gm

	Names/Subgroup	Organization	Title/Rank	E-mail contact
12	Moussa Ndour	Gambia City Council		
13	Ousman Jarjusey	DWR/NWSR Project	Project Manager	ojarjusey@yahoo.com
14	MomodouJamaSuwareh	NEA	Director of Inter-sectoral Services Network	
15	Mohammad J. JallomJabang	NEA	Head, Environmental Quality Programme	Jallom2@hotmail.co.uk
16	SerignModulofoof	NDMA	Deputy Director	serignmodulofoof@yahoo.com
17	Lamin S. Tamba	NDMA	Programme Manager	lstamba@hotmail.com
18	BibhutiBhusanGadanayak	NDMA	DRR and CCA Specialist	Bibhuti.undmt@gmail.com
19	IsmaillaSaghon	Gambia Radio and Television Services (GRTS)	Manager FM	isenghre@hotmail.co.uk
20	TombongKomma	DWR	PCO	kamakine@yahoo.com
21	Omar Gaye Cham	DWR	Meteorology Assistant	ogcham@hotmail.com
22	PatehBaldeh	DWR		Paterkuma4@hotmail.com
23	Lisa Jarju	CCEWS Project	Administrative Assistant	Lisa.jarju@yahoo.com
24	AmmetSallah	Directorate of Agriculture	Senior Planner	ametsallah@gmail.com
25	George Stafford	DWR	Head Forecasting Unit/Meteorologist	staffordmaria@yahoo.co.uk
26	Landing Bonjang	DWR	Hydrological Officer	imalickchi@gmail.com
27	Malang Jassy	Forestry Department	Assistant Director	Malangjassy1@yahoo.co.uk
28	Malang Jatta	Forestry Department	Senior Forestry Officer	sanyangbaba@yahoo.com
29	BabadingSanyang	Forestry Department	Senior Forestry Officer, Communication and Extension	Chernogy71@yahoo.com
30	Cherno Gaye	Forestry Department	Senior Forestry Officer, Head Participatory Management Unit	Emmbye@gmail.com
31	Ebou Mass Mbye	Fisheries Department	Senior Fisheries Officer	Saloumjatta7@yahoo.com
32	SaloumJatta	Fisheries Department	Fisheries Officer	staygreenthegambia@yahoo.co.uk
33	BaboucarrMbye	Stay Green Foundation - NGO	Executive Director	ajarju22@yahoo.com
34	Abdeeu Jarju	DWR	Project Accountant	
35	LaminCamara	Ministry of Finance and Economic Affairs	Deputy Permanent Secretary	
36	Bui MadiCeesay	Ministry of Finance and Economic Affairs	Budget Director	
37	Amie KollehJeng	Ministry of Finance and Economic Affairs	Principal Economist	
38	AlmamyCamara	UNDP, Gambia	Programme Analyst - Environment and Energy	Mayor-banjul@live.com
39	All. Abdoulie Bah	Banjul City Council	Lord Mayor	sillahnjieajie@gmail.com
40	Aji Awa SillahNjie	Banjul City Council	Deputy Mayor	Kawsu2010@yahoo.com
41	Kawsu Barrow	Banjul City Council	Administrative Assistant	
42	Musa M. Dampha	Directorate of Agriculture	Deputy Director, CEE	
43	SulayimaJabang	Air Navigation Service	Aviation/Meteorology Coordinator	
44	DembiCeesay	NBR - North Bank Community Radio	Assistant Director	
45	Ebrima Sandy Khan	NBR - North Bank Community Radio	Director	
46	ModuTouray	WCR - Brikama Community Radio	Senior Presenter - Weather Forecasts	
47	MariatuKassim-Loum	Women in Services, Development Organization and Management (WISDOM)	NGO	
48	Mama M.K. Manneh	NBR - Technical Advisory	NBR - Njawara Agricultural	

	Names/Subgroup	Organization	Title/Rank	E-mail contact
		Committee	Training Centre	
49	MomodauDardae	NBR - Technical Advisory Committee	NBR - Department of Livestock Services	
50	LaminJaju	NBR - Technical Advisory Committee	NBR - National Environment Agency	
51	Momodou B.K. Ceesay	NBR - Technical Advisory Committee	NBR - NDMA	
52	LaminManneh	NBR - Technical Advisory Committee	NBR - Kelwau Area Council	
53	Alasau GMB. Bali	NBR - Technical Advisory Committee	NBR - Regional Agriculture Directorate	
54	SalienSampa	NBR - Technical Advisory Committee	NBR - Njawara Agricultural Training Centre	
55	AlhajJaminCeesay	NBR - Technical Advisory Committee	NBR - Kelwau Area Council	
56	Batch Samba Njie	NBR - Technical Advisory Committee	NBR - DOA	
	Community Groups			
57	KebbaKinte	NBR - Miniminyang Fishing Association/Community	President	
58	FatouChoor	NBR - Miniminyang Fishing Association/Community	Vice President/Female Leader	
59	SulaymanSanno	NBR - SuwarehKunda Radio Listening Group/Cummunit Farmers		
60	Yaya Fofana	NBR - SuwarehKunda Radio Listening Group/Cummunit Farmers		
61	Yaya Suwarea	NBR - SuwarehKunda Radio Listening Group/Cummunit Farmers		
62	KabifaSuwarea	NBR - SuwarehKunda Radio Listening Group/Cummunit Farmers		
63	SambouKnifea	NBR - SuwarehKunda Radio Listening Group/Cummunit Farmers		
64	PodaySuwarea	NBR - SuwarehKunda Radio Listening Group/Cummunit Farmers		
65	EbrimaSanno	NBR - SuwarehKunda Radio Listening Group/Cummunit Farmers		
66	JarraSuwarea	NBR - SuwarehKunda Radio Listening Group/Cummunit Farmers		
67	Mait Fatty	NBR - SuwarehKunda Radio Listening Group/Cummunit Farmers		
68	AlhagiSamno	NBR - SuwarehKunda Radio Listening Group/Cummunit Farmers		
69	KebbaSamno	NBR - SuwarehKunda Radio Listening Group/Cummunit Farmers		
70	AlhagiSuwarea	NBR - SuwarehKunda Radio Listening Group/Cummunit Farmers		
71	AlhagiDlikaliKnifea	NBR - SuwarehKunda Radio Listening Group/CummunitFarmers		
72	Jai Ceesay	WCR - ToubaManduar Radio Listening Group		
73	Fanna Tope	WCR - ToubaManduar Radio Listening Group		

	Names/Subgroup	Organization	Title/Rank	E-mail contact
74	HaddyCeesay	WCR - ToubaManduar Radio Listening Group		
75	AgieCeesay	WCR - ToubaManduar Radio Listening Group		
76	YasinCeesay	WCR - ToubaManduar Radio Listening Group		
77	JamaCeesay	WCR - ToubaManduar Radio Listening Group		
78	DawdaNjie	WCR - ToubaManduar Radio Listening Group		
79	JullyJufe	WCR - ToubaManduar Radio Listening Group		
80	Fall Boge	WCR - ToubaManduar Radio Listening Group		
81	HoguCeesay	WCR - ToubaManduar Radio Listening Group		
82	Mama Welah	WCR - ToubaManduar Radio Listening Group		
83	FatouSeaka	WCR - ToubaManduar Radio Listening Group		
84	SohnaMbaye	WCR - ToubaManduar Radio Listening Group		
85	FatimCeesay	WCR - ToubaManduar Radio Listening Group		
86	Fanta Mbalo	WCR - ToubaManduar Radio Listening Group		
87	Ndumbeh Gaye	WCR - ToubaManduar Radio Listening Group		
88	FatouSaneh	WCR - ToubaManduar Radio Listening Group		
89	MaramCeesay	WCR - ToubaManduar Radio Listening Group		
90	AjieHaddySeaka	WCR - ToubaManduar Radio Listening Group		

ANNEX III. BIBLIOGRAPHY

- Ansumana Ali Cham, Sunray Development Corporation Ltd, 2013, Report on Engaging and Networking the Stakeholders.
- C4 EcoSolutions, 2011. Baseline information and indicators for the Gambia LDCF project, November 2011
- Gambia's EWS Project Final Report, 2014. Appendix III- Institutionalization of a National Climate Change Adaptation working Group
- Government of The Gambia, 2003. First National Communication to UNFCCC, 2003
- Government of The Gambia, 2007. Gambia National Adaptation Programmes of Action (NAPA) on Climate Change, November 2007
- Government of The Gambia, 2007. Poverty Reduction Strategy Programme II - 2007-2011
- Government of The Gambia, 2008. Gambia Environmental Action Plan (GEAP).
- Government of the Gambia, 2011. Programme for Accelerated Growth and Employment (PAGE) - 2012-2015
- Government of the Gambia, 2011. Programme for Accelerated Growth and Employment (PAGE) - Priority Action Plan 2012-2015,
- Government of The Gambia, 2012. Second National Communication to UNFCCC, November 2012
- Jallow P.B. 2014. Feedback on the impact of the implementation of the climate change early warning systems in the Gambia
- Peacock G.J, *et al*, 2012. Needs Assessment report for an Effective Early Warning System in The Gambia
- UNEP Evaluation Policy <http://www.unep.org/eou/StandardsPolicyandPractices/UNEP>
- UNEP Evaluation Manual <http://www.unep.org/eou/StandardsPolicyandPractices/UNEP>
- UNEP/GEF, 2013, EWS Project Implementation Report (PIR)
- UNEP, 2005. Bali Strategic Plan for Technology Support and Capacity-building
- UNEP, 2005. The Stakeholder engagement Manual Volumes I and II, July 2005
- UNEP, 2006. Programme Performance Report 2006-07. Programme Performance Report for the 2006-2007 Biennium. Part II. Report No. 2, January 2006 – December 2006, January 2007- December 2007.
- UNEP, 2010. Medium-Term Strategy 2010-2013
- UNEP, 2010. Climate Change Strategy 2010-2011
- United National Evaluation Group (UNEG), 2012. Integrating Human Rights and Gender, Equality in Evaluation
- Waithaka et al (eds). 2013. East African Agriculture and Climate Change: A Comprehensive Analysis. IFPRI, Washington. DC.

ANNEX IV. PROJECT COSTS AND CO-FINANCING TABLES


Annex V.1: Cumulative Project Expenditure as 31 March 2015

QUARTERLY EXPENDITURE STATEMENT (US\$)

Project executing partner:		Department of Water Resources, Ministry of Fisheries and Water Resources									
Project implementation period:		From:		08-01-11				To:		31-03-15	
Reporting period:		From:		01-01-15				To:		31-03-15	
UNEP Budget Line		GEF-approved budget		Actual expenditures incurred*							Cumul. unspent balance to-date
		Total project budget	Current year budget (2014)	Cumulative expenditures from previous period	Jan-Mar Qtr 1	Apr-Jun Qtr 2	Jul-Sep Qtr 3	Oct-Dec Qtr 4	Current year total	Cumulative expenditures to-date	
		A	B	C	D	E	F	G	H=D+E+F+G	I=C+H	J=A-I
1101	PCU - Project Coordinator	15,728.79	0.00	15,728.79					0.00	15,728.79	0.00
1201	Hydrometeorologist	6,000.00	0.00	6,000.00					0.00	6,000.00	0.00
1202	Socio-economist	6,996.20	0.00	6,996.20					0.00	6,996.20	0.00
1203	Information & communication	5,667.60	0.00	5,667.60					0.00	5,667.60	0.00
1204	Agrometeorological Extension Expert	25,000.00	0.00	25,000.00					0.00	25,000.00	0.00
1205	Policy Analyst	12,673.02	0.00	12,673.02					0.00	12,673.02	0.00
1206	Climate Expert	11,335.20	0.00	11,335.20					0.00	11,335.20	0.00
1207	Climate modeling/programming expert	71,325.00	0.00	71,325.00					0.00	71,325.00	0.00
1208	Chief Technical Adviser	101,793.25	0.00	101,793.25					0.00	101,793.25	0.00
1209	Baseline Assessment	17,474.00	0.00	17,474.00					0.00	17,474.00	0.00
1301	PCU - Finance Assistant	5,485.55	0.00	5,485.55					0.00	5,485.55	0.00
1302	PCU - Admin Assistant & Support Staff	16,958.75	0.00	16,958.75					0.00	16,958.75	0.00
1601	PCU field missions	1,146.79	1,173.82	1,146.79					0.00	1,146.79	0.00
1602	Technical support staff	37,089.47	0.00	37,089.47					0.00	37,089.47	0.00
2101	Hydrometeorological data generation	4,630.44	1,738.82	4,006.18	624.26				624.26	4,630.44	0.00
2102	Early warning information generation	7,785.14	0.00	7,785.14					0.00	7,785.14	0.00
2201	Early warning information packaging	5,067.84	0.00	5,067.84					0.00	5,067.84	0.00
2202	Early warning information transmission	7,448.36	0.00	7,448.36					0.00	7,448.36	0.00
2301	Information dissemination media	9,592.67	0.00	9,592.67					0.00	9,592.67	0.00
3201	Local sub-professional training	33,534.23	0.26	33,534.23					0.00	33,534.23	0.00
3202	Professional training overseas	231,248.76	0.00	227,574.23	3,674.53				3,674.53	231,248.76	0.00
3203	Local stakeholders training	21,239.39	0.00	21,239.39					0.00	21,239.39	0.00
3301	REG - Inception workshop	6,945.88	0.00	6,945.88					0.00	6,945.88	0.00
3302	Steering Committee meetings	9,155.37	2,520.20	8,333.02	822.35				822.35	9,155.37	(0.00)
3303	Sensitization/stakeholder meetings	36,777.09	0.00	36,777.09					0.00	36,777.09	0.00
4201	Computer & accessories	10,498.81	0.00	10,498.81					0.00	10,498.81	0.00
4202	Office furniture	2,947.24	0.00	2,947.24					0.00	2,947.24	0.00
4203	Office equipment	3,513.57	0.00	3,513.57					0.00	3,513.57	0.00
4204	Meteorological equipment	55,830.00	0.00	55,830.00					0.00	55,830.00	0.00
4205	Hydrological equipment	25,349.90	0.00	25,349.90					0.00	25,349.90	0.00
4206	Field vehicles	47,981.00	0.00	47,981.00					0.00	47,981.00	0.00
4207	Rehabilitation of network infrastructure	89,043.43	4,358.44	84,373.03	4,670.40				4,670.40	89,043.43	0.00
5101	Operation & maintenance of office equipment	10,555.72	0.00	10,555.72					0.00	10,555.72	0.00
5102	Operation & maintenance of field equipment	5,416.51	0.00	5,416.51					0.00	5,416.51	0.00
5103	Operation & maintenance of vehicles	25,994.54	0.00	25,994.54					0.00	25,994.54	0.00
5201	Workshop reports	183.99	0.00	183.99					0.00	183.99	0.00


5202	Publications	2,499.19	0.00	2,499.19					0.00	2,499.19	0.00
5301	Communication (PCU)	4,346.93	0.00	4,346.93					0.00	4,346.93	0.00
5401	Hospitality & entertainment	2,740.37	0.00	2,740.37					0.00	2,740.37	0.00
5501	Audit	3,500.00	500.00	3,000.00	500.00				500.00	3,500.00	0.00
5581	Mid-term evaluation	0.00	0.00	0.00					0.00	0.00	0.00
5582	Final evaluation	30,000.00	30,000.00	0.00	30,000.00				30,000.00	30,000.00	0.00
GRAND TOTAL		1,028,500.00	40,291.54	988,208.46	40,291.54	0.00	0.00	0.00	40,291.54	1,028,500.00	(0.00)

EXPLANATION FOR EXPENDITURES REPORTED IN QUARTERLY EXPENDITURE STATEMENT			
From:	01-01-15	Total expenditure for QUARTER 1	EXPLANATION
To:	31-03-15		
BL**	Budget Line description		
2101	Hydrometeorological data generation	624.26	Payment of Dongles and Internet used for data generation and communication from providers to users and to Community Radios
3202	Professional training overseas	3,674.53	Payment for Ticket and Accommodation for Ms. Naffie Saidykhan in the UK Met Office Training Centre in Exeter, UK in line with training in Outcome 1 as already reported in the Terminal Reports
3302	Steering Committee meetings	822.35	Final two meetings of the PSC
4207	Rehabilitation of network infrastructure	4,670.40	Payment for materials and construction of Office at the Relocated Met. Station at Yundum
5501	Audit	500.00	Final payment to Auditors
999	Total as per Expenditure Statement	10,291.54	<i>Equals total of column 1</i>

Name:	Mr. Lamin Mai Touray	Title:	Director	Name:	Bubu Pateh Jallow	Title:	Project Manager
	Authorized official of Executing Agency	Date:		Signature:		Date:	04-06-2015
Signature:							

Annex V.2 – In Kind Co-financing

REPORT OF PLANNED AND ACTUAL CO-FINANCE BY BUDGET LINE								ANNEX 8	
Name: (Please prepare one worksheet per source of co-finance)		IN KIND							
Project title:		Strengthening of the Gambia's Climate Change Early Warning Systems							
Project number:		LDL - 2328 - 2724 - 4A69							
Project executing partner:		Ministry of Fisheries and Water Resources							
Project reporting period:		US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$
From:		Prior Year	Cash Co-finance		In-kind Co-finance		Total for year		Cumulative
To:		Actual Total	Planned	Actual	Planned	Actual	Planned	Actual	Actual Total
UNEP BUDGET LINE*		A	B	C	D	E	F=B+D	G=C+E	H=A+G
1100	Project personnel				40,000	40,000	40,000	0,000	40,000
3301	Meetings/conferences				10,000	10,000	10,000	0,000	10,000
TOTAL COSTS		-	-	-	50,000	50,000	50,000	50,000	50,000
* The actual expenditures should be reported in accordance with the specific budget lines of the approved budget in Appendix 2									

Name:	Mr. Lamin Mai Touray	Title:	Director	Name of Interim Project Manager:	Mr. Bubu Pateh Jallow
	Duly authorized official of Executing Agency	Date:		Signature:	
Signature:		Date:		Date:	04-06-2015

ANNEX V. SUMMARY OF EVALUATION FINDINGS AND LESSONS

About the project

The Gambia LCDF project was implemented to enhance adaptive capacity and reduce vulnerability of The Gambia to climate change through a strengthened early warning and information sharing mechanism for a better informed decision making by government and affected population. The project was launched in August 2011 to address three core issues:

- climate change information, monitoring and early warning systems
- climate change information dissemination and communication to end users
- institutional capacity for climate change policies and protocols

The project was implemented by was implemented by the UNEP's Division of Environmental Policy Implementation (DEPI) on behalf of GEF. The project's Executing Agency was Department of Water Resources, Ministry of Ministry of Environment, Climate Change, Water and Wildlife. The main implementation partners included Ministry of Agriculture, Ministry of Finance and Economic Affairs, Ministry of Environment, Parks and Wildlife, National Environment Agency, National Disaster Management Agency, Department of Forestry (UNCCD Focal Point). The project duration was 3 years, 2011 - 2014) and the budget was USD 2,583,500, of which GEF Allocation was USD USD 1,028,500 and co-financing USD 1,555,000. The evaluation took place one at the end of the project, March - June 2015.

Relevance

The project's intended impacts, a national development and communities that are more resilient to climate change, were highly relevant to global, regional and national issues and needs. The project is aligned to UNEP's Midterm strategy 2010 – 2013 and contributes to UNEP's expected accomplishments relating to climate change. In addition, the project was aligned to The Gambia's development, environment and climate change needs and priorities as documented in the framework Vision 2020 and the country's Poverty Reduction Strategy Programme and the Gambia Environmental Action Plan Economic Development and Poverty Reduction Strategy. The project also addressed the top adaptation priorities identified in The Gambia's NAPA.

Performance

The project was highly successful in strengthening institutional, technical and individual capacity to collect, process and disseminate climate information and early warnings. Gambia's hydro-meteorological network was rehabilitated, equipped and upgraded. Meteorology staff was recruited and trained. The project worked directly with both climate information providers and users, provided training, and used participatory methods (involving community Radio Listening Groups and radio stations) to communicate climate information. Through this climate change awareness among the public and decision makers was increased. In addition, the project supported the integration of climate change in national policies and plans like the Programme for Accelerated growth and Employment (PAGE), Agriculture and Natural Resources Policy, Forestry Policy and Fisheries Action Plan.

Factors affecting performance:

Project performance was very good and the evaluation team was happy with the work of the EA, the Project Steering Committee and the project team for successfully implementing the project by engaging key partners and stakeholder, more especially deep engagement with the local governments and communities in the pilot sites. The project started on time and did not experience significant delays. The implementation of the project was cost effective and helped build synergies and leverage on other programmes and projects.

However, the project had ambitious targets at design that it was not realistic to expect that the EWS of the Gambia would be strengthened in three years and with USD 2.5 million. In addition, the project design did not have a dedicated M&E Officer. This led to challenges in ensuring regular monitoring of progress against indicators, reporting and documenting lessons learned.

Key lessons learned

- The TOC approach is a useful tool for identifying drivers and assumptions and explaining the causal relationship between intended actions, outputs, outcomes, intermediate states and impact of projects. In order to depict the causal pathways from outputs to outcomes over intermediate states towards impact, it is ideal that the TOC be envisaged at the project design stage.
- The design of projects in climate change adaptation needs to be realistic in terms of targets, time and resources, mindful of the sequential arrangement where some outputs dependent on the results of preceding activities and outputs.
- Alignment of projects with national and local needs and priorities to enhance ownership and strong coordination, and should be promoted in design and implementation of projects. Strong coordination at country level enhances ownership and opens channels for future collaboration and knowledge sharing.
- Engagement of a cross-section of stakeholders, including local communities and beneficiaries, is important for the successful implementation of projects in which the long term impacts is highly dependent on their actions.
- Learning by doing capacity building results in ownership of project results and impact.
- Effective project management that promotes clear and transparent communication is key to creating strong working relationships and avoiding raised expectations that may result in disappointment, loss of hope and mistrust.
- The M&E officer position should always be catered for in the ProDoc. In addition Project Management should keep track of targets that are likely to be missed and then appropriately adjust to achievable targets by the end of the project. Mid-term reviews or internal reviews should always be conducted for projects (like this one) that attract a second phase.

ANNEX VI. EVALUATION MATRIX

Review Criteria	Evaluation Questions	Indicators	Data Collection and Analysis Method	Information Sources
Strategic Relevance:				
How does the project relate to the main objectives, outputs, outcomes, and to the needs, issues and challenges at the local, national, regional and international levels?				
<p><i>Complementarity/Relevance (Alignment) of the project to UNEP mandate, strategies and programmes.</i></p> <p><i>Relevance to GEF focal areas, strategic priorities and operational project?</i></p>	<ul style="list-style-type: none"> How is the project aligned (supporting) to the objectives of the UNEP, GEF and partners? Does the project support other international environmental and climate change conventions? 	<p>Nature and extent of link between expressed needs by UNEP, GEF and partners and project objectives</p> <ul style="list-style-type: none"> at country level across project intervention areas 	<ul style="list-style-type: none"> Key informant interviews Documentary review 	<ul style="list-style-type: none"> Project documents UNEP, GEF documents and websites UNEP MTS at the time the project was designed. UNEP Climate change strategy.
<p><i>Relevance (alignment) of project to the Government of the Gambia's environmental and sustainable development goals and objectives</i></p>	<ul style="list-style-type: none"> How does the project support the environmental and sustainable development objectives of The Gambia? Is the project aligned with other donor or government projects and projects in the project areas and in which way? Is the project country-driven? What was the level of stakeholder participation in project design? What is the level of stakeholder ownership in implementation? Does the project adequately take into account the national realities, both in terms of institutional and policy framework in its design and its implementation? Are the implementation strategies appropriate (is the log-frame logical and complete)? Is the project responsive to threats and opportunities that emerge during the course of implementation? 	<ul style="list-style-type: none"> Degree to which the project supports national environmental/development objectives Degree of coherence between the project and national priorities, policies and strategies Appreciation from national stakeholders with respect to adequacy of project design and implementation to national realities and existing capacities Level of involvement of government officials and other partners in the project design process 	<ul style="list-style-type: none"> Key informant interviews Documentary review 	<ul style="list-style-type: none"> Project documents National policies and strategies Key project partners
<p><i>Does the project address the needs of target beneficiaries at the local levels?</i></p>	<ul style="list-style-type: none"> How did the project support the climate information and early warning needs of relevant stakeholders? Has the implementation of the project been inclusive of all relevant stakeholders? Were local beneficiaries and stakeholders adequately involved 	<ul style="list-style-type: none"> Degree to which the project supports objectives of national and local government and communities regarding climate information and EWS Degree to which the project supports local needs and aspirations 	<ul style="list-style-type: none"> Key informant interviews Documentary review 	<ul style="list-style-type: none"> Project Documents Planning documents of Gambia Local partners and beneficiaries

Review Criteria	Evaluation Questions	Indicators	Data Collection and Analysis Method	Information Sources
	<p>in project design and implementation?</p> <ul style="list-style-type: none"> Does the project have buy-in and support from all stakeholder levels, i.e. has it met stakeholder expectations and how? 	<ul style="list-style-type: none"> Degree to which the project meets expectations 	<ul style="list-style-type: none"> Group discussions 	
<i>Relevant lessons and experiences for the project and other similar projects in the future</i>	Has the experience of the project provided relevant lessons for the future of the project and other future projects targeted at similar objectives	Extent of lessons learned documentation	<ul style="list-style-type: none"> Key informant interviews Group discussions Documentary review 	<ul style="list-style-type: none"> Project Documents Local partners and beneficiaries
Attainment of objectives and planned results				
(a) Effectiveness				
To what extent have the outputs and expected outcomes of the project been achieved?				
<i>Outputs delivery (goods and services produced through project activities); Immediate Outcomes/results achievement (direct changes resulting from the use made by stakeholders of project outputs) Main Project Outcome achievement</i>				
<p><i>Effectiveness of the project in achieving its intended purpose, outputs, and immediate outcomes</i></p> <p><i>Extent to which the project contributes to the overall goal and main outcome</i></p>	<ul style="list-style-type: none"> How has the project performed against its indicators and targets (given in the log-frame)? What have been the key factors leading to project achievements? To what extent can observed results be attributed the project or not? Has the project failed in any respect? Have there been notable changes in the enabling environment for the project? How has the project contributed to raising capacity of government, communities, and other partners to produce, disseminate and share climate information and early warnings How has the project contributed to the capacity of government, communities and other partners to effectively use climate information and early warnings to for adaptation and vulnerability reduction? What are the views of the various stakeholders on the achievements of the project? How well has the project documented its achievements? 	<ul style="list-style-type: none"> Achievement of milestones and targets as laid out in the log-frame and monitoring plan Extent of support from government/political staff Extent to which government technical staff actively participate in the project Evidence of early uptake of project documentation and results within planning/thinking 	<ul style="list-style-type: none"> Documentary review Key informant interviews Focus Group Discussions 	<ul style="list-style-type: none"> Project documents/reports Minutes of Project Coordination Unit and Committees Local partners and beneficiaries Weather/climate observation installations/infrastructure Samples/Case studies of early warnings being disseminated
<i>Lessons that can be drawn regarding effectiveness for the future of the project and</i>	<ul style="list-style-type: none"> What lessons have been learned from the project regarding achievement of outputs and outcomes What changes can be made to the design of similar projects in 	<ul style="list-style-type: none"> Extent of lessons learned documentation Evidence of early application of lessons learned 	<ul style="list-style-type: none"> Key informant interviews Group Discussions 	<ul style="list-style-type: none"> Project reports Local partners and beneficiaries

Review Criteria	Evaluation Questions	Indicators	Data Collection and Analysis Method	Information Sources
<i>other similar projects in the future</i>	order to improve the achievement of the expected results?		<ul style="list-style-type: none"> Document review 	
<i>Management of risks and risk mitigation</i>	<ul style="list-style-type: none"> How well are risks, assumptions and impact drivers being managed? What is the quality of risk mitigation strategies developed? Are these sufficient? Are there clear strategies for risk mitigation related with long-term sustainability of the project? 	<ul style="list-style-type: none"> Extent to which project responds to identified and emerging risks (particularly risks of low participation due to perceived needs for immediate action rather than planning) Level of attention paid to up-dating risks log 	<ul style="list-style-type: none"> Group Discussion/Focus Groups Document review Key informant interviews 	<ul style="list-style-type: none"> Project risk log Project reports
(b) Likelihood of impact: Review of Outcomes to Impacts (ROtI)				
In light of achievements and limitations during the project implementation period, what is the likelihood of the project reaching intended impacts?				
Likelihood of impact relative to execution of design	<ul style="list-style-type: none"> What is the extent to which the changes along causal pathways from outputs through outcomes to impacts happen as anticipated What was the accuracy of originally identified impact drivers? What was the accuracy of originally identified assumptions? 	<ul style="list-style-type: none"> Evidence of changes from outputs through outcomes Evidence of deviations from planned pathway; nature/type of the deviation, why deviations happened, results of this deviation (positive, negative, neutral) 	<ul style="list-style-type: none"> Documentary review Key Informant interviews Group Discussions 	<ul style="list-style-type: none"> Project documents Project Partners
Planning impact	<ul style="list-style-type: none"> To what extent has knowledge and appreciation of project intent improved? What impact has the project had on policy and institutional frameworks relating to EWS, climate information sharing and climate change as a whole? Is there a clear link between the planning interventions and the actions carried out under the project? 	<ul style="list-style-type: none"> Evidence of uptake of project/new knowledge and ideas Extent to which government (national/local) planning supports project interventions 	<ul style="list-style-type: none"> Documentary review Key Informant interviews Group Discussions 	<ul style="list-style-type: none"> Project reports Minutes of Committee meetings Discussions with Project Partners
On ground impact	<ul style="list-style-type: none"> What impact has the project had so far or is likely to have on the Gambian people and communities (in terms of preparedness and adaptation to the impacts of climate change) What impact has the project had so far or is likely to have on reducing the vulnerability of the Gambian people and communities (including livelihoods improvement and income generation)? Has the project had any impact on gender equality and economic empowerment for women and other marginalized groups? Was this impact intended? How well has the project met the expectations of stakeholders/beneficiaries? 	<ul style="list-style-type: none"> Evidence of early uptake (replication) of the interventions Level of satisfaction of project interventions (the demand for large-scale intervention) Evidence of gender equity in selection and implementation of project activities Disaggregated baseline data to understand characteristics and needs of different user groups, and disaggregated by gender. Evidence of using gender analysis in 	<ul style="list-style-type: none"> Document review Key informant interviews Group Discussions/Focus Groups 	<ul style="list-style-type: none"> Reports from stakeholders involved in project activities Project reports Local partners and beneficiaries User groups (disaggregated focus groups by gender).

Review Criteria	Evaluation Questions	Indicators	Data Collection and Analysis Method	Information Sources
	<ul style="list-style-type: none"> How well are project interventions on stakeholders/beneficiaries documented? What lessons are likely to be learnt and how will this inform policy processes. 	<ul style="list-style-type: none"> development of communication strategy. Disaggregated baseline data to understand characteristics and needs of different user groups, and disaggregated by gender. Evidence of using gender analysis in development of communication strategy. 		
<i>Lessons that can be drawn regarding efficiency for the project and other similar projects in the future</i>	<ul style="list-style-type: none"> Has the project documented lessons learned? What lessons have been learned from the project regarding likelihood of impact? What changes can be made to the design of similar projects in order to improve the likelihood of impacts? 	<ul style="list-style-type: none"> Evidence of documentation 	<ul style="list-style-type: none"> Documentary review Key informant interviews 	<ul style="list-style-type: none"> Project reports and technical documents Local partners
Efficiency:				
To what extent has the project been implemented in a cost-effective and timely manner?				
<i>Cost-effectiveness and financial efficiency</i>	<ul style="list-style-type: none"> Were the accounting and financial systems in place adequate for project management and for producing accurate and timely financial information? Were funds made available or transferred efficiently to address the project purpose, outputs and planned activities? Were funds used correctly – (explain any over- or under-expenditures)? Were financial resources utilized efficiently (converted into outcomes)? Could financial resources have been or be used more efficiently? Were procurements carried out in a manner making efficient use of project resources? Were project audits conducted? Were issues raised in audit reports efficiently addressed? Was the project implementation as cost effective as originally proposed (planned vs. actual) Did the leveraging of funds (co-financing) happen as planned? 	<ul style="list-style-type: none"> Extent to which funds were converted into outcomes as per the expectations of the Project proposal Level of transparency in the use of funds Level of satisfaction of partners and beneficiaries in the use of funds 	<ul style="list-style-type: none"> Documentary review Key informant interviews 	<ul style="list-style-type: none"> Project financial records Discussions with FMO (UNEP) and Finance Officer Project audit reports Project work plans and reports
<i>Implementing efficiency (including monitoring)</i>	<ul style="list-style-type: none"> Were the project logical framework and work plans (and any changes made to them) used as management tools during implementation? Was the project implemented as planned, including the proportion of activities in work plans implemented? 	<ul style="list-style-type: none"> Extent to which project activities are conducted on time Extent to which project delivery matches the expectation of the proposal and the expectations of partners 	<ul style="list-style-type: none"> Key informant interviews Group Discussions/Focus group Document review 	<ul style="list-style-type: none"> Project work plans and reports Local partners

Review Criteria	Evaluation Questions	Indicators	Data Collection and Analysis Method	Information Sources
	<ul style="list-style-type: none"> Was monitoring data collected as planned, analysed and used to inform project planning? Was project implementation responsive to issues arising (e.g. from monitoring or from interactions with stakeholders)? What learning processes have been put in place and who has benefited (e.g. training, exchanges with related projects) and how did this influence project outcome? Were progress reports produced accurately, timely and responded to including adaptive management changes? Did the project experience any capacity gaps (e.g. staffing gaps)? Were internal and external communications effective and efficient? How efficiently have resources and back-up been provided by donors, including quality assurance 	<ul style="list-style-type: none"> Level of satisfaction expressed by partners in the responsiveness (adaptive management) of the project Level of satisfaction expressed by project implementing agency and in regard to technical back-stopping 		
<i>Efficiency of partnership arrangements for the project</i>	<ul style="list-style-type: none"> To what extent are partnerships/ linkages between institutions/ organizations encouraged and supported? Which partnerships/linkages were facilitated? Which ones can be considered sustainable? What was the level of efficiency of cooperation and collaboration arrangements? Which methods were successful or not and why? 	<ul style="list-style-type: none"> Extent to which project partners committed time and resources to the project Extent of commitment of partners to take over project activities 	<ul style="list-style-type: none"> Key informant interviews Group Discussions/Focus group Document review 	<ul style="list-style-type: none"> Project work plans and reports Local partners
<i>Lessons that can be drawn regarding efficiency for the project and other similar projects in the future</i>	<ul style="list-style-type: none"> What lessons can be learnt from the project regarding efficiency? How can/could the project have been more efficiently implemented (in terms of management structures and procedures, partnerships arrangements etc.)? What changes can/could have been made (if any) to the project in order to improve its efficiency? 	<ul style="list-style-type: none"> Level of satisfaction in project implementation arrangements Suggestions put forward by partners for possible improvement 	<ul style="list-style-type: none"> Key informant interviews Group Discussions/Focus group Document review 	<ul style="list-style-type: none"> Project reports Local partners
Sustainability and Replication:				
To what extent is there persistence of benefits resulting from the implementation of project activities? Including (possibilities of) replication, up-scale and catalytic effects?				
<i>Enabling environment</i>	<ul style="list-style-type: none"> Is the social, legal and political environment conducive to enhance sustainability? Are there signs of activities being taken up by project partners, and plans being developed to sustain them? 	<ul style="list-style-type: none"> Evidence to which planning supports project interventions Evidence of discussion or revision of policies and plans to include project targets 	<ul style="list-style-type: none"> Documentary review Key Informant interviews Group 	<ul style="list-style-type: none"> Minutes of Committee meetings Local partners and beneficiaries

Review Criteria	Evaluation Questions	Indicators	Data Collection and Analysis Method	Information Sources
		<ul style="list-style-type: none"> Extent to which in-coming Government projects are in line with and provide support to project targets 	Discussions/Focus Groups	
<i>Project sustainability measures</i>	<ul style="list-style-type: none"> What project sustainability measures exist? What factors are likely to negatively affect project sustainability? What are the key constraints to sustainability of project interventions? Have partners and stakeholders successfully enhanced their capacities and do they have the required resources to make use of these capacities? Does the project have a clear exit strategy or transformational strategy to another phase? 	<ul style="list-style-type: none"> Extent to which local technical staff and stakeholders are applying new ideas outside of the immediate project context Extent to which other local stakeholders are liaising with the project for information sharing 	<ul style="list-style-type: none"> Documentary review Key Informant interviews Group Discussions/Focus Groups 	<ul style="list-style-type: none"> Project reports Local partners and beneficiaries
Factors Affecting performance:				
What factors have facilitated or constrained the performance of the project to achieve its intended outcome and impact?				
<i>Project Design and Structure</i>	<ul style="list-style-type: none"> Was the design and structure of project activities conducive to the achievement of the objectives and outcomes? 	<ul style="list-style-type: none"> Quality of causal logic linking project outputs and outcomes Number and quality of impact drivers, assumptions and risks identified Sufficiency of resources set aside for project implementation Extent and quality of planned activities related to communication and knowledge management Incorporation of gender into outcomes/design elements 	<ul style="list-style-type: none"> Documentary review Key informant interviews Group discussions 	<ul style="list-style-type: none"> Project reports Minutes of Committee meetings Partners and beneficiaries
<i>Project Coordination and Management</i>	Have the project coordination and management arrangements been conducive to the achievement of its objectives?	<ul style="list-style-type: none"> Level of clarity of roles and responsibilities of different project partners and staff Nature and relative weight of factors within or between project partners that enabled/inhibited project implementation Quality of supervision/oversight by the project coordination unit Perceptions on the quality of UNEP project supervision, guidance and technical backstopping provided 	<ul style="list-style-type: none"> Documentary review Key informant interviews Group discussions 	<ul style="list-style-type: none"> Project reports Minutes of Committee meetings Partners and beneficiaries
<i>Human and Financial Resources Administration</i>	Did the project have sufficient and appropriate human and financial resources available for planning and implementation of the project activities	<ul style="list-style-type: none"> Evidence of gaps in competencies or profile of persons required to execute specific project activities Project staff turn-over rate and level of satisfaction with work: Difference between allocated funds and expenditure by 	<ul style="list-style-type: none"> Documentary review Key informant interviews 	<ul style="list-style-type: none"> Project reports Minutes of Committee meetings

Review Criteria	Evaluation Questions	Indicators	Data Collection and Analysis Method	Information Sources
	To what extent did the project ensure cost-effectiveness of its interventions?	<ul style="list-style-type: none"> intervention Financial management systems and processes at HQ and field: quality, transparency and effectiveness Perceptions on administrative processes in terms of enabling execution of project activities 	<ul style="list-style-type: none"> Group discussions 	<ul style="list-style-type: none"> Partners and beneficiaries
<i>Stakeholder involvement</i>	<ul style="list-style-type: none"> Did the project involve the relevant stakeholders through information sharing and consultation and by seeking their participation in project design, implementation, and M&E? For example, did the project implement appropriate outreach and public awareness campaigns? Did the project consult with and make use of the skills, experience, and knowledge of the appropriate government entities, nongovernmental organizations, community groups, private sector entities, local governments, and academic institutions in the design, implementation, and evaluation of project activities? Were the perspectives of those who would be affected by project decisions, those who could affect the outcomes, and those who could contribute information or other resources to the process taken into account while taking decisions (including relevant vulnerable groups and powerful supporters and opponents)? 	<ul style="list-style-type: none"> Number, fluency, type, and quality of stakeholder engagement at each stage of project design, implementation and M&E Changes in public awareness as a result of outreach/ communication by project Quality of consultations/feedback mechanisms/ meetings/ systems in place for project implementers to learn the opinions of <ul style="list-style-type: none"> Community groups Local government National government Non-government groups Other Extent of beneficiary needs integrated into project design (appropriateness of strategies chosen, site selection, degree of vulnerability of targeted HHs, etc) Evidence of participation from a wide range of stakeholder groups (in support and opposed to the project) 	<ul style="list-style-type: none"> Documentary review Key informant interviews Group discussions 	<ul style="list-style-type: none"> Project reports Local implementing partners Community members, groups Government stakeholders Other local stakeholder groups (non-government) UNDP/UNEP staff Workshop reports/attendance
<i>Partnerships and collaborations</i>	Did the project build effective partnerships and collaborations?	<ul style="list-style-type: none"> Number and types of partners (internal and external) identified and involved in project implementation Perceptions on level of collaboration between project stakeholders and partners Relative level of complementarity between the project and other related projects (internal and external) Extent of joint activities and pooling of resources with other organizations and networks 	<ul style="list-style-type: none"> Documentary review Key informant interviews Group discussions 	<ul style="list-style-type: none"> Project reports Minutes of Committee meetings Partners and beneficiaries

Review Criteria	Evaluation Questions	Indicators	Data Collection and Analysis Method	Information Sources
<i>Country ownership and driven-ness</i>	<p>Was the project concept in line with development priorities and plans of The Gambia?</p> <p>Were the relevant country representatives from government and civil society involved in project implementation, including being part of the Project Steering Committee?</p> <p>Is there a functional intra-governmental committee to liaise with the project team and connect various ministries/government offices involved in or affected by the project?</p>	<ul style="list-style-type: none"> • Coherence between project objectives and national development objectives • Coherence between project objectives and community-level needs • Number and titles of representatives from government and civil society present at workshops, planning meetings • Proportion of steering committee members who represent government and civil society • Existence of a communications/coordination body within the government to oversee and link various government offices relevant to project planning, implementation and intended outcomes • Extent of influence and control of coordinating body to prompt/encourage convening or decision-making 	<ul style="list-style-type: none"> • Documentary review • Key informant interviews • Group discussions 	<ul style="list-style-type: none"> • The Gambia Government strategy and planning documents • Project reports • Partners • UNDP/UNEP staff • Community members • CSOs and local non-government stakeholders • Government partners • Local implementing partners • Project monitoring and reporting information (workshop summaries, attendance lists, action items etc)
<i>Project monitoring and evaluation</i>	<p>Were there appropriate and effective arrangements for reporting, monitoring and evaluating the project?</p>	<ul style="list-style-type: none"> • Quality (and volume) of reporting on the project: on outputs, outcomes, impact, and regularity of reporting • Number and types of quality assurance processes to ensure reliability of reporting and accuracy of reporting • Perceptions of project monitoring and internal review systems • Clarity of roles and responsibilities among involved staff for data collection, data analysis, and information sharing, monitoring and reporting • Resources available for monitoring, reporting and evaluation • Performance indicators accurately capture achievements of project outputs and outcomes. • Tools, systems and structures in place for use in monitoring and reporting, adaptive management and to improve project performance • Proportion and evidence of independent evaluation • Difference between resources required for independent evaluations and amount available. 	<ul style="list-style-type: none"> • Documentary review • Key informant interviews • Group discussions 	<ul style="list-style-type: none"> • Project reports • Minutes of Committee meetings • Partners and beneficiaries

ANNEX VII. COMPLETED MATRIX OF THE OVERALL QUALITY OF PROJECT DESIGN

Relevance		Evaluation Comments	ProDoc reference
Are the intended results likely to contribute to UNEPs Expected Accomplishments and programmatic objectives?		Though the ProDoc does not refer to the UNEP's Expected Accomplishments (EAs) and Strategic/Programmatic objectives, the project was designed to fully respond to one of the UNEP's strategic direction in the MTS 2010-2013 i.e. climate change. Climate change adaptation has been recognized as priority within UNEP's Climate Change Strategy with a focus on building resilience of ecosystems and economies. The project contributes to UNEP's Programme of Work (2010-2011) sub-programme 1: Climate Change: <i>To strengthen the ability of countries, in particular developing countries, to integrate climate change responses into national development processes</i>	Section 2.5 Global significance Appendix 21 - UNEP's Comparative Advantage
Does the project form a coherent part of a UNEP-approved programme framework?		Again this is not explicitly mentioned in the ProDoc. However, the project conforms with / is part of a global UNEP Programme regarding climate change, in compliance with the implementation of the UNFCCC. The project is also in line with UNEP's mandate of providing policy advice and early warning information, based upon sound science and assessments. As mentioned above project forms a coherent part of UNEP approved programme framework related to climate change and ecosystem management (medium term strategy 2010-2013) and Programme of Work (2010-2011) sub-programme 1.	Section 3 Intervention strategy; the UNEP MTS 2010-2013
Is there complementarity with other UNEP projects, planned and ongoing, including those implemented under the GEF?		Yes, There is complementarity with other UNEP (and GEF) projects related to climate change impacts and adaptation. The project is expected to build on/ add to other UNEP projects and initiatives. For example, the project is linked to four ongoing GEF interventions and one planned non-GEF project in Gambia from which this LDCF project could benefit.	Section 2.9 Linkages with other GEF and non-GEF interventions
Are the project's objectives and implementation strategies consistent with:	i) Sub-regional environmental issues and needs?	Africa is highly vulnerable to the impacts of climate change, partly caused by lack of effective and reliable early warning systems for preparedness. The need to strengthen climate EWS, increase preparedness and adaptive capacity is identified as a priority by West African countries and The Gambia in particular.	Section 2.4 Project Focus and Site Description. Section 3.6 Consistency with National Priorities and Plan.
	ii) the UNEP mandate and policies at the time of design and implementation?	Though not explicitly mentioned, the project is framed in line within UNEP's mandate and policies (MTS 2010-2013). It consistent with UNEP's mandate on climate change (adaptation), which was established at the 22nd session of UNEP's Governing Council(2003). UNEP's niche in climate change adaptation in the UN system has been defined as <i>adapting by building resilience</i>	3.1Project rationale Appendix 21 - UNEP's Comparative Advantage

Relevance		Evaluation Comments	ProDoc reference
		<i>of ecosystems and economies.</i>	
	iii) the relevant GEF focal areas, strategic priorities and operational programme(s)? (if appropriate)	Yes. The project is framed in GEF Portfolio for Climate Change. GEF serves as financial mechanism for the UNFCCC, supports both climate change mitigation and adaptation, and manages the LDCF. The project takes into account overall GEF conformity (sustainability, replicability, M&E, stakeholder involvement).	GEF website Section 3.1 Project rationale, policy conformity and expected global patterns (Overall GEF conformity)
	iv) Stakeholder priorities and needs?	Yes. The need to address vulnerability to climate change was identified as a priority by the Gambian government and stakeholders. The Gambia is committed to strengthening EWS and enhancing preparedness and adaptive capacity, and reducing vulnerability as demonstrated by the NAPA and First National Communication. Further, this project is expected to contribute to poverty reduction in Gambia as defined in its national poverty reduction strategies.	Section 2.1.4 climate change impacts on Gambia Sections 2.7 and 5 Stakeholder analysis and participation
<i>Overall rating for Relevance</i>		HS (Highly Satisfactory) The project is closely aligned with the objectives and strategies of UNEP and with regional and national stakeholder priorities and needs in respect to climate change adaptation.	
Intended Results and Causality			
Are the objectives realistic?		The project intent to enhance adaptive capacity and reduce vulnerability to climate change through a strengthened early warning and information sharing mechanism for a better informed decision making by government and affected population is realistic. However, enhancing climate change adaptive capacity and reducing vulnerability requires much more than strengthening EWS and information sharing mechanisms, a longer timeframe and is contingent on a number of conditions many of which are not within the control of the project and its partners. In addition, adaptive capacity is not a static condition because climate change is a dynamic phenomenon associated with many uncertainties.	Section 3.2 Project Goal and Objective Appendix 4- Results framework

Relevance	Evaluation Comments	ProDoc reference
Are the causal pathways from project outputs [goods and services] through outcomes [changes in stakeholder behaviour] towards impacts clearly and convincingly described? Is there a clearly presented Theory of Change or intervention logic for the project?	The causal pathways and intervention logic are fairly described. However, some inconsistencies exist in cause-effect correlations and some outcomes look like outcomes and vice versa (as described in section 5.2 of this document). The project objective is based on the premise that strengthened EWS and information sharing mechanisms, and their use in policy setting and planning, will enhance the adaptive capacity and reduce vulnerability of Gambia's economy, population and communities to climate change. An important aspect of the project is also to bridge science to policy and sensitize various national policy making bodies to main stream climate change and climate proof relevant policies.	Section 3.4- Intervention logic and key assumption Appendix 4 - Results Framework
Is the timeframe realistic? What is the likelihood that the anticipated project outcomes can be achieved within the stated duration of the project?	The timeframe for the three anticipated outcomes (36 months) is realistic. However, this does not take into account unforeseen events that would delay implementation. However some interventions that would enhance the adaptive capacity require a longer timeframe to have any discernible impacts and to generate results for replication. The planned second phase of the project will entail scaling up of the first phase approach, including lessons learnt to additional project sites with concrete implementation on the ground.	Section 3.3 - Project components and expected results Appendix 4 - Results Framework
Are the activities designed within the project likely to produce their intended results	Yes. The main activities (upgrading and acquisition of infrastructure, training, collecting and disseminating climate information and early warning, policy revision) can be effective to build adaptive capacity, though not sufficient. Again, this does not take into account any unforeseen circumstances and whether other conditions are present. However, integration into national policy setting and planning may not be realistic within the timeframe.	Appendix 4: Results Framework Appendix 5 -Workplan Appendix 6 - Key deliverables and benchmarks
Are activities appropriate to produce outputs?	Yes, activities are appropriate to produce the expected outputs. However, the effect of training may be overestimated to trigger the complex institutional and organizational processes needed to achieve the ambitious results. Effectiveness of training depends on factors mainly related to the institutional and organizational environment where the trainees work.	Appendix 4: Results Framework Appendix 5 - Workplan Appendix 6 - Key deliverables

Relevance	Evaluation Comments	ProDoc reference
		and benchmarks
Are activities appropriate to drive change along the intended causal pathway(s)	Most of the activities are appropriate to drive change, based on the premise that other required conditions would be present. However, institutional up-taking is needed for that. Equipment and Infrastructure, training, and policy revision activities may not, by themselves, be sufficient to drive changes.	Appendix 4: Results Framework
Are impact drivers, assumptions and the roles and capacities of key actors and stakeholders clearly described for each key causal pathway?	Overall, the ProDoc presents assumptions and risks, as well an exhaustive stakeholders mapping and analysis. Drivers are not explicitly described but are implicit in the ProDoc.	Section 3.4- Intervention logic and key assumption Section 3.5 Risk analysis and risk management measures Appendix 4 - Results Framework
<i>Overall rating for Intended Results and causality</i>	MS (Moderately Satisfactory) Building adaptive capacity and reducing vulnerability through effective EWS and information sharing mechanisms is realistic. However, many more interventions are required to build adaptive capacity. Uncertainty remains to whether improved EWS and information sharing mechanisms will be used for adaptation. Further, building adaptive capacity to climate change requires a longer timeframe and is contingent on a number of external conditions	
Efficiency		
Are any cost- or time-saving measures proposed to bring the project to a successful conclusion within its programmed budget and timeframe?	A number of cost- and time-saving measures were adopted e.g. a cost-benefits ratio was used as one of the criteria to select priority actions, building on existing government policies and programmes to generate multiple benefits, building on existing agencies from global to local, projects (GEF projects) and programmes; using the comparative advantage of partners; and involvement of multiple stakeholder groups including civil society and local communities	Section 7.3 - Project cost-effectiveness Section 2.9 Linkages with other GEF and non-GEF interventions

Relevance	Evaluation Comments	ProDoc reference
Does the project intend to make use of / build upon pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects etc. to increase project efficiency?	Yes. The project built on pre-existing institutions (DRW), agreements and partnerships and relevant ongoing initiatives. The project foresees strong partnerships with different stakeholders in order to maximise human resources, infrastructures and equipment. For instance, the cooperation with another GEF funded projects.	Sections 2.4, 2.5 and 2.9
<i>Overall rating for Efficiency</i>	S (Satisfactory) The project is closely linked with existing institutions actively involved in relevant activities and builds on existing infrastructure, data sources, projects and programmes.	
Sustainability / Replication and Catalytic effects		
Does the project design present a strategy / approach to sustaining outcomes / benefits?	Yes. Capacity Building, infrastructural development, integration of results into policy, use of a participatory approach, inter-institutional cooperation and strong leadership of the DRW/NMHS are considered crucial elements of sustainability. However, the ProDoc does not discuss in details the different aspects of sustainability (institutional, political and financial).	Section 3.8 - Sustainability
Does the design identify the social or political factors that may influence positively or negatively the sustenance of project results and progress towards impacts? Does the design foresee sufficient activities to promote government and stakeholder awareness, interests, commitment and incentives to execute, enforce and pursue the programmes, plans, agreements, monitoring systems etc. prepared and agreed upon under the project?	Partially. The Project foresees many training and awareness raising activities among government bodies and stakeholders. The project also underlines the need of an effective communication between experts and decision-makers in order to achieve political commitment and sustainability.	Section 5: Stakeholder participation Appendix 4: - results Framework
If funding is required to sustain project outcomes and benefits, does the design propose adequate measures / mechanisms to secure this funding?	Not precisely. A strategy for financing is not explicitly addressed in the ProDoc, but a second phase of the project is anticipated to scale up the first phase. However, project co-financing is foreseen and consistent (60%).	Section 7: Budget
Are there any financial risks that may jeopardize sustenance of project results and onward progress towards impact?	Sustainability is highly dependent on linkage with other programmes and initiatives, replication and up-scaling, and uptake in policies, etc., all of which imply availability of funds. The project also aims to build key adaptive capacity and pilot adaptation, including financial interventions. Though not mentioned in the ProDoc, there are certain financial risks associated with these approaches.	

Relevance		Evaluation Comments	ProDoc reference
Does the project design adequately describe the institutional frameworks, governance structures and processes, policies, sub-regional agreements, legal and accountability frameworks etc. required to sustain project results?		Yes. The project is very exhaustive in describing the institutional framework. The Decision making and organisation flowchart (Appendix 10) is simple and clear. Linkage with specific agencies and institutions is described, as a strategy to sustain project results.	Sections 2.6, 4, Figure 8 Appendix10
Does the project design identify environmental factors, positive or negative, that can influence the future flow of project benefits? Are there any project outputs or higher level results that are likely to affect the environment, which, in turn, might affect sustainability of project benefits?		The design does not explicitly identify these environmental factors but recognizes that even if the most stringent mitigation measures were put in place today, the impact of climate change would continue beyond this Century. Climate change could have severe and large scale impacts that could wipe out project benefits. Further, the project recognizes the inherent uncertainty as regards precipitation, sea level changes, and the implications for ecosystems and livelihoods.	Section 2.2 -Threats, etc. Section 2.5 -Global significance, 3.1 (Project rationale, etc.
Does the project design foresee adequate measures to catalyze behavioural changes in terms of use and application by the relevant stakeholders of (e.g.):	i) technologies and approaches show-cased by the demonstration projects;	The project includes pilot demonstration sites for adaptation with the involvement of local communities (farmers) and organizations. Increased use of early warning is expected to lead to positive attitude towards adaptation options among stakeholders.	Appendix 4 - Results Framework
	ii) strategic programmes and plans developed	Among the project activities are: creation of a data coordination network for EWS, revision of policies to integrate climate change, creation of a climate change website, production of climate risk and vulnerability maps.	Section 3.3 and Tables 7,9 and10
	iii) assessment, monitoring and management systems established at a national and sub-regional level	The project foresees a M&E system including Tracking Tools	Section 6 Appendix 7 - CostedM&E Plan Appendix 15 -Tracking Tools
Does the project design foresee adequate measures to contribute to institutional changes? [An important aspect of the catalytic role of the project is its contribution to institutional uptake or mainstreaming of project-piloted approaches in any regional or national demonstration projects]		Yes. The main focus of the project is strengthening the technical and institutional capacity of NMHS (equipment, infrastructure, human resource), training and awareness raising which can catalyse institutional uptake, while the wide range of potential stakeholders can also contribute to adoption of adaptation interventions and mainstreaming climate change into development policies and agenda.	Sections 2.7, 3.3, and 5
Does the project design foresee adequate measures to contribute to policy changes (on paper and in		Yes. It is envisaged that the information produced will be used into policy setting and planning - project intent is to use information generated to integrate climate change adaptation into	Section 3 – Intervention

Relevance	Evaluation Comments	ProDoc reference
implementation of policy)?	policies and plans. However, policy changes may require a longer timeframe than the duration of the project.	Strategy
Does the project design foresee adequate measures to contribute to sustain follow-on financing (catalytic financing) from Governments, the GEF or other donors?	Government co-financing is foreseen, but financial sustainability is not discussed. A second phase is anticipated with financing GEF/UNEP.	Sections 7.1, 7.2
Does the project design foresee adequate measures to create opportunities for particular individuals or institutions ("champions") to catalyze change (without which the project would not achieve all of its results)?	The role of the DRW/NMHS in the Project is central and its "championing" role is fostered by the Project.	Section 4 and 5
Are the planned activities likely to generate the level of ownership by the main national and regional stakeholders necessary to allow for the project results to be sustained?	Overall, yes. Involvement of national and local, stakeholders in the project; strengthening and upgrading early warning infrastructure and Generally building capacity based on the capacity needs of stakeholders are among the measures that are expected to generate ownership by the main stakeholders. However, it has to be recognised that national ownership and project sustainability are complex processes, where onward and backward steps are recurrent and no achievement is acquired once for all.	Sections 4 and 5
<i>Overall rating for Sustainability / Replication and Catalytic effects</i>	MS (Moderately Satisfactory) Availability of lessons and experiences from the pilots, strengthened Technical and institutional capacity and increased awareness should catalyze uptake of results. However, the prospects for sustainability and replication are based on a number of premises, including establishing linkages with other planned and on-going initiatives and key national institutions. Financial sustainability largely depends on external funding and national initiatives.	
Risk identification and Social Safeguards		
Are critical risks appropriately addressed?	A detailed risks analysis is included in the ProDoc. Critical risks are identified and mitigation measures are identified accordingly.	Section 3.5, Table 10 - risk identification and mitigation matrix
Are assumptions properly specified as factors affecting achievement of project results that are beyond the	Assumptions are mentioned in the result framework but not specified as factors affecting achievement of project results that are beyond the project's control. In addition risks are	Section 3.5 risk analysis Appendix 4 -Results

Relevance	Evaluation Comments	ProDoc reference
control of the project?	analyzed and mitigation measures identified.	Framework
Are potentially negative environmental, economic and social impacts of projects identified?	Overall, potentially negative environmental, economic and social impacts are not identified (perhaps because the project is not expected to have negative impacts?). The ProDoc contains a description of the Global Environmental Benefits derived from a robust early warning system that predicts climate linked threats and triggers the implementation of adaptive and protective actions and policies thereby contributing significantly towards managing potential negative impacts of climate change on these ecosystems of global significance. Section 3.11 on Environment and Social safeguards indicates that care will be taken to ensure accuracy of forecast information in order to avoid untoward social and environmental fallouts.	Section 2.2 - Global significance ; Section 3.11 -Environmental and social safeguards
<i>Overall rating for Risk identification and Social Safeguards</i>	S (Satisfactory): The project design includes a detailed risk analysis and identifies mitigation measures.	
Governance and Supervision Arrangements		
Is the project governance model comprehensive, clear and appropriate?	Clearly described, appropriate for a project of this nature. The ProDoc and two Annexes describes overall governance of the project	Section 4 Appendix 10 - (Organisation Chart Appendix11 (ToR)
Are roles and responsibilities clearly defined?	The execution arrangements are clear	Section 4
Are supervision / oversight arrangements clear and appropriate?	The roles and responsibilities of internal and external partners are properly specified in The ProDoc	Section 4 Institutional Framework
<i>Overall rating for Governance and Supervision Arrangements</i>	HS (Highly Satisfactory) The governance and supervision arrangements are considered adequate	
Management, Execution and Partnership Arrangements		
Have the capacities of partner been adequately assessed?	Partners are selected based on their particular expertise and comparative advantage. They were exhaustively described.	Section 4 and 5
Are the execution arrangements clear?	The execution arrangements are clear. However, the Work Plan could have been more detailed	Section 4

Relevance	Evaluation Comments	ProDoc reference
	and appoint responsibility for each activity.	Appendix 11 -ToR Appendix 5 - Workplan
Are the roles and responsibilities of internal and external partners properly specified?	The roles and responsibilities of internal and external partners are properly specified in the project document	Sections 4 and 5
<i>Overall rating for Management, Execution and Partnership Arrangements</i>	HS (Highly Satisfactory) The management, execution and partnership arrangements described are satisfactory, taking into account all levels from global to local, which is appropriate for a project of this nature.	
Financial Planning / budgeting		
Are there any obvious deficiencies in the budgets / financial planning?	No specific deficiencies in financial planning were identified. The budget is detailed and clear. It is specified that co-financing is both in kind or cash.	Section 7 Appendix 1
Cost effectiveness of proposed resource utilization as described in project budgets and viability in respect of resource mobilization potential	Proposed resource utilization satisfactory	Results frameworks and project budget
Financial and administrative arrangements including flows of funds are clearly described	Financial and administrative arrangements, and flow of funds are described in the project document	Section 7, Appendix 1
<i>Overall rating for Financial Planning / budgeting</i>	S (Satisfactory): An adequate financing plan and detailed instructions for financial reporting and budgeting are presented	
Monitoring		
Does the logical framework: <ul style="list-style-type: none"> capture the key elements in the Theory of Change for the project? have 'SMART' indicators for outcomes and objectives? have appropriate 'means of verification'? adequately identify assumptions? 	In general the log frame (results framework) captures some key elements in the project's TOC but does not indicate how these are expected to ultimately result in enhanced adaptive capacity. Indicators, baselines and targets(s) have been given. The log frame includes assumptions, but there are other important assumptions/risks such as availability of financial resources for up-scaling/replicating.	Appendix 4 - Result Framework.

Relevance	Evaluation Comments	ProDoc reference
Are the milestones and performance indicators appropriate and sufficient to foster management towards outcomes and higher level objectives?	The table in annex (Key deliverables and milestones) is not populated. Specific milestones and performance indicators are not included in the project document	Appendix 4
Is there baseline information in relation to key performance indicators?	Yes, though they are not quantified and as precise as it should be	Appendix 4
Has the method for the baseline data collection been explained?	No explanation is given for the method of collecting baseline data.	
Has the desired level of achievement (targets) been specified for indicators of Outcomes and are targets based on a reasoned estimate of baseline?	Mid-point targets and end targets are identified in the Results Framework.	Appendix 4
Has the time frame for monitoring activities been specified?	The time frame for progress reporting and monitoring is specified. There is a detailed and costed M&E Plan in Appendix 7, and tracking tools in appendix 15. However, the Work Plan does not include Monitoring activities	Section 6, Appendix 7 Appendix 5 - Work plan, Appendix 15 - Tracking tools
Are the organisational arrangements for project level progress monitoring clearly specified	The time frame for progress reporting and monitoring is specified	Section 6 and Appendix 7
Has a budget been allocated for monitoring project progress in implementation against outputs and outcomes?	Appendix 7 specifies the cost of M&E. The Project Budget contains a Budget Line for Monitoring & Evaluation	Section 7 Appendices 1 and 7
Overall, is the approach to monitoring progress and performance within the project adequate?	In general, the approach reasonably follows the standard requirements of UNEP	Section 7 Appendices 1 and 7
<i>Overall rating for Monitoring</i>	MS (Moderately Satisfactory) . There are some weaknesses in the log frame and monitoring design.	
Stakeholder participation and public awareness		
Has there been adequate socio economic analysis, identification and assessment of stakeholders in project design (including key channels of communication and	An adequate stakeholder mapping and analysis was conducted. The project design also recognizes the benefit of adopting a participatory approach involving local stakeholders in project activities. The ProDoc further recognizes the need for developing a robust and effective	Sections 2.7 and 5; Section 3.10 Public awareness, communications and

Relevance	Evaluation Comments	ProDoc reference
networks that can be used for communicating and dissemination of information)?	communication and awareness raising strategy in the inception period to ensure the general public is fully aware of the contribution and benefits of the project.	mainstreaming strategy
<i>Overall rating for Stakeholder participation and public awareness</i>	MS (Moderately Satisfactory): A stakeholder mapping and analysis was conducted and a communication strategy will be developed in inception phase that will provide for channels of communication and dissemination.	
Learning, Communication and outreach		
Has the project identified appropriate methods for communication with key stakeholders during the project life?	The ProDoc provides for development of a Communication and Awareness Strategy (CAS) during the inception phase	Section 3.10 Public awareness, communications and mainstreaming strategy
Are plans in place for dissemination of results and lesson sharing?	Outcome 2 of the project is on climate change information dissemination and communication to end users. The ProDoc indicates that lessons learned during local level adaptation interventions will be shared with community based organizations (CBO) and Non-Government Organizations (NGO), government agencies and Ministries through the media and NCC outreach activities so that they could be replicated elsewhere in the country.	Section 3.9 (Replication); Section 3.10; section Appendix 4: results framework
Do learning, communication and outreach plans build on analysis of existing communication channels and networks used by key stakeholders?	There is no explicit indication that learning, communication and outreach plans build on analysis of existing communication channels and networks used by key stakeholders.	
<i>Overall rating on Learning, Communication and outreach</i>	U (Unsatisfactory): There are no explicit tools and medium for learning, communication and outreach. The section on public awareness, communications and mainstreaming strategy is rather weak.	
Evaluation		
Is there an adequate plan for evaluation?	Yes. An independent mid-term evaluation and an independent terminal evaluation are provided for in the ProDoc.	Section 6
Has the time frame for Evaluation activities been specified?	Yes, for both.	Section 6

Relevance	Evaluation Comments	ProDoc reference
Is there an explicit budget provision for mid-term review and terminal evaluation?	The Project Budget contains a Budget Line for Monitoring & Evaluation	Appendix 7
Is the budget sufficient?	A total indicative cost of USD 62,000 of which USD 50,000 is for the two evaluations. Other funds for Inception Workshop, Audits, Monitoring. This is inadequate.	Appendix 7
<i>Overall rating for Evaluation</i>	MS (Moderately Satisfactory): There are provisions for is provision for the mid-term and terminal evaluation, but budget is considered insufficient. The budget determines the evaluation quality to a large extent.	

ANNEX VIII. PROJECT LOGICAL FRAMEWORK

Components	Activities	Outputs	Output Indicators	Outcomes	Outcome Indicators
1. Climate change information, monitoring and early warning systems	<p>1.1.1 Develop acquisition and rehabilitation plans based on existing and refined needs assessments.</p> <p>1.1.2. Repair/upgrade existing, acquire, install and test run new infrastructure including synoptic automated stations, higher capacity data processing and storage equipment as required, including visits to project sites (NMHS weather stations, and local ground level sites)</p>	1.1 National network is strengthened to provide vital inputs for climate monitoring, prediction and generation of adequate data for climate impacts' assessment at appropriate geographical scales.	<p>Number of fully operational meteorological networks in the national territory.</p> <p>Number of operational surface water-level stations/network</p> <p>Number of ground water level stations</p> <p>Type, number and quality of essential equipment for data collection, processing, transmission and storage</p>	Enhanced capacity of hydro-meteorological services and networks for predicting climate change events and risk factors	<p>Percentage of national territory covered by fully operational hydro-meteorological networks.</p> <p>Accuracy and timeliness of issued climate early warnings</p> <p>Number of skilled technical staff trained and retained by NMHS by the end of the project.</p>
	<p>1.2.1. Develop terms of reference and launch a recruitment campaign for additional staff at local, regional and national levels</p> <p>1.2.2 Undertake procedures for the gradual integration / transition of staff into regular Public Service after project completion.</p> <p>1.2.3. Develop a comprehensive training needs assessment for key institutions and stakeholders based on identified capacity needs</p> <p>1.2.4. Develop a training programme to meet these requirements including for maintaining archives and the digitization of historical data to enable provision of solid evidence based climate related information</p> <p>1.2.5. Deliver priority elements of the training programme, guided by available resources, contributions from relevant projects.</p>	1.2 Human capacity in place to use the rehabilitated and upgraded network	Number of trained technical staff for quality data collection, analyses, synthesis and packaging into early warning messages		

Components	Activities	Outputs	Output Indicators	Outcomes	Outcome Indicators
	<p>1.3.1 Provide training for field data collectors and participating local communities on the type of socio-economic data and information required, the importance of such data, and procedures for collection.</p> <p>1.3.2 Collect and analyze climate and socio-economic data from the field</p> <p>1.3.3. Acquisition of data treatment software and modeling capacity and training of staff in modeling applications, vulnerability mapping and downscaling methods</p> <p>1.3.4 Use accurate data to enrich climate risk assessment and develop targeted early warning messages and weather forecasts</p>	1.3 System in place to couple climate and socio-economic assessments for more relevant predictions and better informed recommendations.	Climate change risk assessed and vulnerability maps developed (Yes/No)		
2. Climate change information dissemination and communication to end users	<p>2.1.1. Design and carry out a study to:</p> <p>a) identify the most appropriate and effective channels of communication for the various users of the NMHS products;</p> <p>b) Receive and evaluate feedback from the users on the effectiveness and appropriateness of the channels;</p> <p>c) Establish long-term mechanisms for subsequent dissemination of products using the most appropriate channels for specific end users.</p>	2.1 Appropriate and effective channels for the communication of relevant climate information	2.1 Number/types of communication products developed and used to deliver messages to end users	More effective, efficient and targeted delivery of climate information including early warnings	<p>Percentage of communities/population accessing improved climate information and early warning messages in pilot sites</p> <p>Percentage of farmers and communities using climate early warning messages to adapt to climate risks.</p>
	<p>2.2.1. Develop and test appropriate models of communication of information in the 5 selected project sites (districts) in the North Bank.</p> <p>2.2.2. Provide training on climate change risk (translate models to briefing notes that highlight risks and opportunities for farmers)</p> <p>2.2.3. Develop decision making support tools that farmers living in the selected sites could</p>	2.2 Demonstration of effective communication and response strategies to warnings are implemented.	Percentage of targeted population (men and women) expressing preference for and usefulness of communication media used to deliver weather related messages, and early warnings		

Components	Activities	Outputs	Output Indicators	Outcomes	Outcome Indicators
	<p>use to manage climate linked risks.</p> <p>2.2.4. Train district level decision makers in the application and maintenance of the tool.</p> <p>2.2.5. Collect feedback from the community end-users (farmers and fisher folks) on the usefulness of the messages and advice.</p> <p>2.2.6 Engage and use the press for raising awareness on climate change and its potential impacts on various facets of livelihoods and commercial activities.</p>				
	<p>2.3.1. Document and analyze the outputs of the above activities for future use and improvement of the dissemination of NMHS products.</p> <p>2.3.2. Develop a communication and awareness strategy (CAS) of informing and raising awareness of end users.</p>	2.3 Lessons learned are collected from pilot projects and used to improve the system (adaptive management)	Percentage of farmers responding to climate related messages through a change in the choice of crops planted.		
3. Institutional capacity for climate change policies and protocols	<p>3.1.1 Production of climate hazard maps, sectoral risk and vulnerability maps including relevant socio-economic data;</p> <p>3.1.2 Creation of a coordination mechanism such as ad-hoc group on climate change adaptation with representatives from sectoral relevant ministries that involves NEA, Agriculture, NDMA, Finance, MEPID etc.</p> <p>3.1.3 Training of the ad-hoc working group on climate change vulnerability and adaptation , including for socio- economic aspects of vulnerability;</p> <p>3.1.4 Identification of sectoral and/or environmental regulatory frameworks for a climate sensitive review</p>	3.1 Capacity to initiate and undertake policy revision for climate sensitivity	Number of relevant national plans and/or policy documents that integrate climate change risks	Improved and timely preparedness and responses of various stakeholders to forecast climate linked risks and vulnerabilities	<p>Completion of the process of integrating climate change in key national policies and plans.</p> <p>Number of climate proofed policies and plans that are being used to guide planning and decision making on national and local development, allocation of resources and climate change response in the country.</p>

Components	Activities	Outputs	Output Indicators	Outcomes	Outcome Indicators
	<p>3.2.1 Undertake reviews and analyses of selected national development (PRSP, DRR) and sectoral (Environmental, Agriculture) policy documents, for climate sensitive content;</p> <p>3.2.2 Use dedicated briefings, dialogue sessions and workshops to present outputs of the reviews to decision makers.</p> <p>Make recommendations, draft proposals to amend the relevant policies including for altering respective budgets for their implementations.</p> <p>3.2.4 Revise policy documents to incorporate climate risks.</p>	3.2 Policy revisions are undertaken and implementation plans are developed	Mechanism for coordinating climate monitoring and EWS data and information		
	<p>3.3.1 Organize bi-annual workshops, seminars and dialogue sessions for senior policy makers to raise awareness of the climate change issues</p> <p>3.3.2 Creation of a climate change website for the GOTG</p> <p>3.3.3. Engage and use the media for raising awareness on climate change and its potential impacts on various facets of livelihoods and commercial activities in order to sensitize decision makers to mainstream it into various sector policies and development programmes</p>	3.3 Policy makers are aware of climate risks	Percentage of persons (men and women from project sites) and decision makers aware of climate change		

Components	Activities	Outputs	Output Indicators	Outcomes	Outcome Indicators
	<p>3.4.1 Sensitize appropriate government agencies/department with the outputs and recommendations for specific policy changes, using a variety of tools including inter alia: workshops, policy briefs and press conferences.</p> <p>3.4.2. Establish a data coordination network for EWS and climate monitoring through inter-ministerial coordination mechanism</p>	3.4 A functional policy response system is developed to encourage preventative planning and decision making in response to early warnings and climate change trends			
	<p>3.5.1 Create a consultative forum with major private sector partners</p> <p>3.5.2. Deliver information including a set of key messages and training to private sector partners, including on coastal vulnerability, and adaptation</p>	3.5 Establishment of a public-private platform for risk management to engage private sector in climate proofing			

ANNEX IX. SUMMARY OF THE PROJECT'S SUCCESS IN PRODUCING PROGRAMMED OUTPUTS

Component	Expected Outcome	Outputs	Status at the end of the project
1. Climate change information, monitoring and early warning systems	Capacity of hydro-meteorological services and networks enhanced to predict climate events, identify the associated risks and issue early warnings	1.1 National network is strengthened to provide vital inputs for climate monitoring, prediction and generation of adequate data for climate impacts' assessment at appropriate geographical scales.	<p>Rehabilitation works and fencing of meteorological stations completed - Kerewan, Kaur, Janjangbureh, Basse, Fatoto, Jenoi, and Sibano completed (project final report).</p> <p>Appropriate positioning of the instruments within the enclosure to meet WMO and ICAO standards (Project final report);</p> <p>Relocation of the Basse and Airport Instrument, enclosure newly acquired land is completed (project final report).</p> <p>Office facilities have not yet been completed due to delay in acquiring and clearing the land. However construction work is near completion (project final report, site visited during evaluation mission) .</p> <p>All the Meteorological Stations are fully equipped (Final report, some stations visited during evaluation mission).</p> <p>VAISALA supplied and successful Installed one Automatic Weather Station (AWS) at the Central Weather Forecasting Office in the Banjul International Airport (Final report, visited during evaluation mission)</p> <p>Water Level Recorder was successfully installed at the Bansang Hydrological Station and flow measurement equipment been installed in Ballengho, Basse–PrufuBolong and Pakaliba Flow Gauging Stations. (Final report, visited during evaluation missions)</p> <p>Six Observation Boreholes have been drilled and data loggers to measure groundwater level have been supplied and installed (Final report, Tanene underground water observation borehole visited during evaluation mission).</p>
		1.2 Human capacity in place to use the rehabilitated and upgraded network	<p>Four Cadet Meteorologist recruited, three have been trained and absorbed in the Public Service Pay Roll in 2014 (Final project report)</p> <p>Two Meteorologists/Cadet Forecasters trained from LDCF funds;</p> <p>One Meteorologist/Cadet Weather Forecaster trained at the UK Met. Office Training School (LDCF).</p> <p>One Meteorologist on MSc training at the Federal University of Technology, Akure, Nigeria (NWSR).</p> <p>Seven Meteorological Technicians and six Computer and Data Analysis Technicians have been trained locally by IRI in Columbia, USA on Enhancing National Climate Services ENACTs (ACPC)</p> <p>One Hydrologist on MSC training in IWRM at the University of Dar-es-Salaam, Tanzania (NWSR);</p> <p>Seven Water Resources Technician on training to MSc. Level on Hydrogeology in South Africa (NWSR)</p> <p>Seven Meteorological Technicians trained at the Nigerian Meteorological Agency's Regional Meteorological Training Institute in</p>

Component	Expected Outcome	Outputs	Status at the end of the project
			<p>Oshodi, Lagos (NWSR)</p> <p>10 Hydrological Technicians from the Department of Water Resources are on training at the National Water Resources Institute, Kaduna, Nigeria (NWSR);</p> <p>Two Meteorological and Hydrological Instrument Technicians trained in India on the installation, operation and maintenance of AWS (ACPC).</p>
		1.3 System in place to couple climate and socio-economic assessments for more relevant predictions and better informed recommendations.	<p>Training of local communities conducted. 150 participants (125 of the local communities and 25 extension agents) in the NBR have been trained on rainfall measurement and phenological observations;</p> <p>About 120 members of the Radio Listening Groups (RLGs) in the NBR and the WCR have been trained on the operations of the Recorders and the transcription of the recorded broadcast of the weather forecast bulletin from the Community Radios;</p> <p>During these trainings the Posters were discussed and distributed to promote understanding of climate change causes, impacts and responses.</p> <ul style="list-style-type: none"> • Recommendations on software and tools and a Training Programmes are contained in the Socioeconomic Consultancy Report and the Report on the institutionalization of a Climate Change Adaptation Working Group. The acquisition of the Models and Tools and training will be conducted under the Third National Communications process from August 2014. • Agreement signed between the PMU and the Community Radios in NBR and WCR. The Forecast Office provides climate early warning products through the internet; the Community Radios receive and broadcast the products (these agreements expired in December 2014). • The partnership between the PMU, the Local Communities, RLGs, Non-Formal Education Unit and Media Houses has provided a translation of meteorological terms into four local languages (Fullah, Jola, Mandinka and Wollof).
2. Climate change information dissemination and communication to end users	Improvement in the delivery of climate information, including early warnings, to various users for effective adaptation decision making.	2.1 Appropriate and effective channels for the communication of relevant climate information	<ul style="list-style-type: none"> • Study report identifying appropriate communication strategy and channels from the PROVIDERS to the USERS of Climate Change Early Warning Information; • Communication Channels identified include: Community Radios, Radio Listening Groups, Multidisciplinary Facilitation Teams (MDFTs), GRTS – Television and Print Media • Meteorological Terms have been translated into local languages - Fullah, Jola, Mandinka and Wollof
		2.2 Demonstration of effective communication and response strategies to warnings are implemented.	<ul style="list-style-type: none"> • MOUs signed between Project Management and Management of NBR and WCR Community Radio Stations that enabled the reception and broadcasting of weather forecasts in local languages. • Staff of the Community Radios visited Weather Forecasts Office and had first-hand orientation on how weather forecasts are produced and disseminated. • In collaboration with GRTS, RLGs were established in NBR and WCR; RLGs trained to enable them understand climate and climate change products and how to provide feedback on impacts of the products; • The 2013 Seasonal Rainfall Outlook provided, discussed and disseminated to farmer groups and other stakeholders to increase farmer interest and likely uptake of climate messages.

Component	Expected Outcome	Outputs	Status at the end of the project
			<ul style="list-style-type: none"> 300 members of the general public sensitized and trained (in NBR, WCR, BCC and KMC) particularly the MDFTs consisting of Extension Agents from Government and Civil Society; 45 Media Agents trained on climate and climate science, risks, impacts and responses, types of alerts and forecast, and on reporting on climate change issues in their media outlets (newspapers and radios).
		2.3 Lessons learned are collected from pilot projects and used to improve the system (adaptive management)	<ul style="list-style-type: none"> A Survey conducted by the PMU which identified good practices of project for implementation and but also recommend remedies. A communication Strategy was completed in January 2013 and was useful in planning and conducting the training of Media Agents.
3. Institutional capacity for climate change policies and protocols	Enhanced preparedness of communities and government to respond to climate risks and vulnerabilities.	3.1 Capacity to initiate and undertake policy revision for climate sensitivity	<ul style="list-style-type: none"> A study on the institutionalization of the Climate Change Adaptation Working Group completed; Training of the Working Group will be conducted under the Third National Communication (TNC); Assessment of Vulnerability and production of climate hazard maps, sectoral risk and vulnerability maps will be conducted during the TNC; GIS Maps for Projected Temperature and Rainfall up to 2100 produced.
		3.2 Policy revisions are undertaken and implementation plans are developed	<ul style="list-style-type: none"> The Agriculture and Natural Resources (ANR) Policy, Forest Policy, and the Fisheries Strategic Action Plan were identified for integration of climate change; Sectoral Teams from the ARN, Forest and Fisheries sectors trained on integration of climate change into policy and development planning (Appendix II of the Mainstreaming Report); Climate change has been integrated in the above mentioned policies; The Action Plans of the sectors now need to be revised and budgeted based on the integrated climate change responses and strategies.
		3.3 Policy makers are aware of climate risks	<ul style="list-style-type: none"> Policy makers brought together and briefed on climate change and on the process to integrate climate change into development frameworks (Appendix I of Mainstreaming Report); Briefing session for Cabinet Ministers on climate change did not take place because the project has yet to be allocated a slot non cabinet agenda; 45 Media Agents were trained on climate change and its reporting (Appendix IV of the Mainstreaming Report); The Climate Change Page in the Ministry's WEBSITE is up and running.
		3.4 A functional policy response system is developed to encourage preventative planning and decision making in response to early warnings and climate change trends	<ul style="list-style-type: none"> Establishment of an inter-ministerial data coordination mechanism and METADATA SYSTEM is at an advanced stage (Appendix VI of Mainstreaming Report); The Mechanism is to be led by the MoECCWW and the METADATA will be housed and technically coordinated by the National Meteorological Services at the DWR; Nodes will be established at key Departments and Agencies that have been identified as Custodians (Agriculture, NEA, NDMA, Health, Forestry, Parks and Wildlife, GBOS, etc.) of climate and climate change related data and information.
		3.5 Establishment of a public-private platform for risk management to engage private sector in climate proofing	<ul style="list-style-type: none"> Establishment of a public-private platform for risk management to engage private sector in climate proofing has been initiated; About 65 Business and Private Sector entities were engaged through a Seminar on climate change and business risks and opportunities at the premises of the Gambia Chamber of Commerce and Industry (GCCCI), Appendix V of the Mainstreaming Report);

Component	Expected Outcome	Outputs	Status at the end of the project
			<ul style="list-style-type: none">• The GCCI will partner with the Ministry of Finance to serve as Designated National Authority (DNA) of the Green Climate Fund (GCF).• Further activities to strengthen the Public –Private Forum will be conducted under the planned Second Phase of the EWS project.

ANNEX X. THE GAMBIA LCDF/EWS PROJECT PICTURES

The Banjur Airport weather station was being relocated at the time of the evaluation mission - Left - old weather station; Right - new weather station site under construction



Left - Basse weather station in the North Bank Region was relocated, rehabilitated and re-equipped. Right - Kanjibat Automatic Weather Station

Hydro-meteorological stations were up through the project: Left - Balinghoration on Gambia river; Right - Tanene Underground water observation borehole



Community Radio stations, Swareh Kunda (right) were provided with a computer with installed internet facilities to disseminate climate information

ANNEX XI. CONSULTANTS' RÉSUMÉ

Revocatus Twinomuhangi, PhD - Team Leader

Revocatus Twinomuhangi holds a PhD in Environmental Management (Makerere University). He is a Uganda national working as Senior Lecturer in the Department of Geography, Geo-Informatics and Climatic Sciences at Makerere University. His main fields of expertise related to climate change involve climate change vulnerability, impact and adaptation, low carbon development, project development, implementation and evaluation. Evaluation related experience involves evaluation of the UNEP Climate Change Sub-programme and Uganda's Farm Income Enhancement and Forestry Conservation Project in Uganda.

He has been engaged as an independent consultant with many international organizations i.e. UNEP, UNDP, USAID, FAO, USAID, CDKN, WWF, EU, and Expertise France(former Adetef) in Uganda, East Africa and the African region. Currently he is currently engaged in overseeing two CDKN supported projects - the economic assessment of the impacts of climate change in Uganda and developing Intended Nationally Determined Contributions (INDCs) for Uganda. In addition he is engaged in National Adaptation Plans (NAPs) preparation for Uganda, developing a low carbon development and climate change resilient strategy for Kampala city. He was engaged in: developing the National Climate Change Policy for Uganda, integration of climate change in Uganda's Second National Development Plan (2015-2020), development of the Integrated Territorial Climate Change Plan for the Mbale region of Uganda, development of climate change adaptation strategy and action plan for WWF Uganda country Office. He is currently the Coordinator of the Makerere University Centre for Climate Change Research and Innovations and Director, Remode Consults Limited.

Gilbert Ong'isa Ouma, PhD - Supporting Consultant

Gilbert Ong'isa Ouma is Meteorologist, and is a Senior Lecturer in the Institute of Climate Change Adaptation at University of Nairobi, Kenya. He has carried out research and published on climate risk reduction and early warning as a strategy for climate change adaptation in the Greater Horn of Africa region. Has a broad experience in Participatory Action Research methodology and Climate Change Adaptation through involvement in several application-related projects working directly with vulnerable communities. Gilbert was involved in developing and piloting a framework to integrate the disaster risk and climate information for a comprehensive risk information system for United Nations International Strategy for Disaster Reduction (UNISDR), He has been engaged in: Building Resilience and Adapting to Climate Extremes and Disasters (BRACED), a Department for International Development (DFID) funded programme; IGAD Climate Prediction and Applications Centre (ICPAC) within the Planning for Resilience in East Africa through Policy, Adaptation, Research and Economic Development (PREPARED) project; Community Based Climate Services (CBCS) in support of climate risk reduction and local livelihoods in Eastern Africa; Improved Drought Early Warning and Forecasting to strengthen preparedness and adaptation to droughts in Africa; Knowledge Sharing for Climate Change Adaptation in Africa - AfricaAdapt; Trainer on climate change and vulnerability and adaptation assessment in support of Eritrean Second National Communication; Integrating indigenous knowledge into climate risk reduction – Case of the Nganyi Community of Western Kenya; Integrating Vulnerability and Adaptation to Climate Change into Sustainable Development Policy Planning and Implementation - Increasing Community Resilience to Drought in Makueni District, Kenya; Strengthening Community-Based Adaptation to Climate-Sensitive Malaria in Kakamega and Kericho Districts, Western Kenya Highlands; and, assessment of vulnerability and adaptation to climate variability and climate change impacts on malaria and health in the Lake Victoria region in East Africa.