

REPORT MID-TERM REVIEW



ADAPTING WATER RESOURCE MANAGEMENT IN THE COMOROS TO EXPECTED CLIMATE CHANGE



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Table of Contents

LIST OF FIGURES	9
LIST OF TABLES	9
LIST OF ACRONYMS AND ABBREVIATIONS.....	10
UNION OF COMOROS – MID-TERM REVIEW REPORT ADAPTING WATER RESOURCE MANAGEMENT IN THE COMOROS TO EXPECTED CLIMATE CHANGE.....	13
UNION OF COMOROS – MID-TERM REVIEW REPORT ADAPTING WATER RESOURCE MANAGEMENT IN THE COMOROS TO EXPECTED CLIMATE CHANGE.....	13
EXECUTIVE SUMMARY	14
1. INTRODUCTION	21
1.1. BRIEF PRESENTATION OF THE PROJECT	21
1.1.1. <i>Climate change in Comoros.....</i>	21
1.1.2. <i>The key actors involved in climate change.....</i>	22
1.2. OBJECTIVES AND CONTEXT OF THE MID-TERM REVIEW	22
1.2.1. <i>Context of the Mid-Term Review</i>	22
1.2.2. <i>Timetable of the mission.....</i>	23
1.2.3. <i>Objectives of the mission.....</i>	24
1.3. APPLIED METHODOLOGY FOR THE MTR.....	24
1.3.1. <i>Methodological approach.....</i>	24
1.3.2. <i>Site visits.....</i>	25
1.3.3. <i>Meetings at central level.....</i>	26
1.3.4. <i>The restitution workshop.....</i>	26
1.3.5. <i>The evaluation team.....</i>	26
2. BACKGROUND AND CONTEXT.....	27
2.1. PREPARATION OF THE INTERVENTION	27
2.1.1. <i>From the identification of NAPA priority projects to intervention planning.....</i>	27
2.1.2. <i>Identification.....</i>	27
2.1.3. <i>Formulation</i>	28
2.1.4. <i>Launch of the project.....</i>	28
2.2. POLITICAL AND INSTITUTIONAL CONTEXT	28
3. PROJECT EVALUATION	30
A. PROJECT FORMULATION.....	30
A.1. OBJECTIVES AND OUTCOMES.....	30
A.1.1. <i>Outcome 1. Improving institutional capacity at national and community level, to integrate climate change information into water resources management</i>	30
• OUTPUT 1.1. INFORMATION ON CLIMATE CHANGE RISKS TO WATER AVAILABILITY IN COMOROS IMPROVED : SUPPORTED BY UNEP.....	31
• OUTPUT 1.2. CAPACITY TO ASSESS AND MONITOR CHANGES IN WATER SUPPLY AND QUALITY (GIVEN CLIMATE CHANGE PROJECTIONS) DEVELOPED: SUPPORTED BY UNEP	31
• OUTPUT 1.3. PREPARATION AND PROVISION OF IMPROVED CLIMATE	

INFORMATION FOR WATER RESOURCE MANAGEMENT POLICIES AND SPENDING PLANS: SUPPORTED BY UNEP	31
• OUTPUT 1.4. INTEGRATION OF IMPROVED CLIMATE INFORMATION WITH WATER RESOURCE MANAGEMENT POLICIES AND SPENDING PLANS, AND OTHER RELEVANT POLICIES: SUPPORTED BY UNDP	31
• OUTPUT 1.5. CAPACITY DEVELOPMENT PLAN FOR POLICY REVIEW AND DESIGN AMONG DECISION-MAKERS DEVELOPED BASED ON BEST KNOWN SCIENTIFIC AND TECHNICAL EVIDENCE-BASE: SUPPORTED BY UNEP	31
<i>A.1.2. Outcome 2. Water supply and water quality for selected pilot communities to combat impacts of climate change improved</i>	31
• OUTPUT 2.2. COMMUNITY MEMBERS TRAINED TO MANAGE ADAPTIVE WATER INTERVENTIONS SUSTAINABLY: SUPPORTED BY UNDP	32
<i>A.1.3. Outcome 3. Awareness and knowledge of adaptation good practice for continued process of policy review and development increased.</i>	32
• OUTPUT 3.2. LEARNING DISSEMINATED THROUGH PLATFORM FOR NATIONAL LEARNING AND SUSTAINABILITY: SUPPORTED BY UNDP	33
A.2. INDICATORS AND RISKS	33
<i>A.2.1. Indicators in place to achieve the project goals</i>	33
• NUMBER OF POLICY DOCUMENTS REVISED TO INCLUDE REGULATIONS AND PROVISIONS THAT PROMOTE GENDER EQUITABLE ADAPTATION IN THE WATER SECTOR.	33
<i>A.2.2. A necessary prudence when interpreting indicators</i>	34
<i>A.2.3. Proposition to reformulate, add or suppress certain indicators</i>	35
OUTCOMES/INDICATORS	35
COMMENTS	35
REFORMULATION PROPOSAL	35
1.1 NUMBER OF POLICY DOCUMENTS REVISED TO INCLUDE REGULATIONS AND PROVISIONS THAT PROMOTE GENDER EQUITABLE ADAPTATION IN THE WATER SECTOR.	35
B. ASSUMPTIONS AND RISKS	36
B.1. ASSUMPTIONS	36
<i>B.1.1. Confrontation of the hypothesis at the design phase of the project and related risks</i>	36
<i>B.1.2. A continuous risk management</i>	37
C. PROJECT IMPLEMENTATION	38
- JOURNEY IN IVEMBENI WITH PARTNERS TO VALIDATE MONITORING PARAMETERS OF WATER AND CLIMATE	38
3.1. OUTCOME 1: IMPROVING INSTITUTIONAL CAPACITY AT NATIONAL AND COMMUNITY LEVEL TO INTEGRATE CLIMATE CHANGE INFORMATION INTO WATER RESOURCE MANAGEMENT.	54
i. <i>State of progress</i>	54
ii. <i>Indicators</i>	55
INDICATORS	55
TARGET VALUE AT THE END OF PROJECT	55
CURRENT STATE (BEGINNING OF JULY 2014)	55
iii. <i>Difficulties</i>	55
iv. <i>Recommendations</i>	56
B. OUTCOME 2: WATER SUPPLY AND WATER QUALITY FOR SELECTION PILOT COMMUNITIES TO COMBAT IMPACTS OF CLIMATE CHANGE IMPROVED	56
i. <i>Indicators</i>	57
INDICATORS	57

TARGET VALUE AT THE END OF PROJECT	57
CURRENT STATE (BEGINNING OF JULY 2014).....	57
OVERALL PERCEPTION OF THE POPULATION PER PILOT SITE ON: (I) THE DAILY QUANTITY OF WATER ACCESSIBLE FOR DOMESTIC USES; (II) THE FACILITY OF ACCESS TO THIS WATER; AND (III) THE QUALITY OF THE WATER USED	57
RAISE THE RATING TO 2 FOR ALL THREE CRITERIA ACROSS ALL PROJECT SITES.	57
LESS THAN 50% OF THE POPULATION OF MORONI HAS ACCESS TO WATER. IT IS EVEN WORSE IN OTHER TARGETED AREAS	57
AVERAGE YIELD FOR THE 2 MAIN VEGETABLE PRODUCTS IN THE PROJECT AREAS (TOMATO AND POTATO IN BANDASAMLINI AND TOMATO AND ONIONS IN LINGONI-POMONI)	57
ii. <i>Difficulties</i>	58
iii. <i>Recommendations</i>	58
C. OUTCOME 3. AWARENESS AND KNOWLEDGE OF ADAPTATION GOOD PRACTICE FOR CONTINUED PROCESS OF POLICY REVIEW AND DEVELOPMENT INCREASED.....	58
i. <i>State of progress</i>	58
ii. <i>Indicators</i>	59
INDICATORS.....	59
TARGET VALUE AT THE END OF PROJECT	59
CURRENT STATE (BEGINNING OF JULY 2014).....	59
iii. <i>Difficulties</i>	59
iv. <i>Recommendations</i>	60
C.1. FINANCE/CO-FINANCE	60
C.2. IA AND EA EXECUTION.....	60
C.3. MONITORING AND EVALUATION.....	60
C.4. STAKEHOLDER INVOLVEMENT.....	60
C.4.1. INSTITUTIONAL PARTNERS.....	60
C.4.2. BENEFICIARIES.....	60
<i>Relevance</i>	61
v. <i>Efficiency</i>	63
vi. <i>Effectiveness</i>	64
vii. <i>D.3. Sustainability</i>	65
viii. <i>Impact</i>	66
ix. <i>Cross-Cutting Themes</i>	66
D. ORGANISATION & MANAGEMENT.....	67
A. STRUCTURE & STAFF INTERVENTION	67
B. MANAGEMENT OF RESOURCES (FINANCIAL, PERSONNEL & EQUIPMENT)	69
E.	ERREUR ! SIGNET NON DEFINI.
A.	ERREUR ! SIGNET NON DEFINI.
B.	ERREUR ! SIGNET NON DEFINI.
F. CONCLUSIONS, RECOMMENDATIONS AND LESSONS	70
A. MAIN FINDINGS AND CONCLUSIONS	70
CRITERIA	ERREUR ! SIGNET NON DEFINI.
GRADE.....	ERREUR ! SIGNET NON DEFINI.
COMMENTS	ERREUR ! SIGNET NON DEFINI.
MONITORING & EVALUATION (M&E).....	ERREUR ! SIGNET NON DEFINI.
QUALITY OF THE ME PLAN	ERREUR ! SIGNET NON DEFINI.
2- UNSATISFACTORY	ERREUR ! SIGNET NON DEFINI.

INITIAL DESIGN OF ME PLAN..... ERREUR ! SIGNET NON DEFINI.

5- SATISFACTORY ERREUR ! SIGNET NON DEFINI.

THE PLAN SE DEFINED IN THE PROJECT DOCUMENT IS QUITE CLASSIC AND RELEVANT AS A WHOLE. THE FORMULATION OF MONITORING INDICATORS IS NOT ALWAYS CLEAR AND SOME IMPROVEMENTS IN THE FORMULATION ARE SUGGESTED.ERREUR ! SIGNET NON DEFINI.

IMPLEMENTATION OF ME PLAN ERREUR ! SIGNET NON DEFINI.

2-UNSATISFACTORY ERREUR ! SIGNET NON DEFINI.

THE IMPLEMENTATION OF THE M&E DID NOT SHOW ENOUGH DISCIPLINE AND REMAINS PERFECTIBLE ERREUR ! SIGNET NON DEFINI.

IMPLEMENTATION AND EXECUTION OF THE PROJECT ERREUR ! SIGNET NON DEFINI.

QUALITY OF IMPLEMENTATION BY THE IMPLEMENTING AGENCYERREUR ! SIGNET NON DEFINI.

4- MODERATELY SATISFACTORY..... ERREUR ! SIGNET NON DEFINI.

UNDP HAS FACED SEVERAL CHALLENGES SINCE THE LAUNCH OF THE PROJECT, WITH MEANS SOMETIMES A TENSE IMPLEMENTATION REGARDING CERTAIN ACTIVITIES.
..... ERREUR ! SIGNET NON DEFINI.

QUALITY OF IMPLEMENTATION BY THE INSTITUTIONAL PARTNERERREUR ! SIGNET NON DEFINI.

3- MODERATELY UNSATISFACTORY..... ERREUR ! SIGNET NON DEFINI.

POLITICAL INSTABILITY WITH ROTATION OF SEVERAL MINISTERS LEADING THE MPEEIC CAUSED VERY FREQUENT DELAYS, BECAUSE EACH NEW TEAM NEEDED TO RECLAIM THE PROJECT. ERREUR ! SIGNET NON DEFINI.

QUALITY OF THE IMPLEMENTATION AND EXECUTION OF THE PROJECTERREUR ! SIGNET NON DEFINI.

4- MODERATELY SATISFACTORY..... ERREUR ! SIGNET NON DEFINI.

OVERALL, GIVEN THE DIFFICULT POLITICAL CONTEXT, WE CAN ESTIMATE THE QUALITY OF THE IMPLEMENTATION OF THE PROJECT IS AVERAGE WITH SOME SUCCESS AND HOPES FOR THE FUTURE. INTERVENTIONS, INCLUDING ACCESS TO SAFE DRINKING WATER ARE ON TRACK, ALTHOUGH IT IS STILL TOO EARLY TO TALK ABOUT SUCCESS...ERREUR ! SIGNET NON DEFINI.

OBJECTIVES..... ERREUR ! SIGNET NON DEFINI.

QUALITY OF PROJECT OBJECTIVES..... ERREUR ! SIGNET NON DEFINI.

4-MODERATELY SATISFACTORY..... ERREUR ! SIGNET NON DEFINI.

THE TARGETS COVER THE TECHNICAL AND INSTITUTIONAL ASPECTS, BUT ALSO ASPECTS LINKED TO AWARENESS AND DISSEMINATION OF INFORMATION. IF THE RELEVANCE OF THE PROJECT IS VERY SIGNIFICANT, OTHER OBJECTIVES ARE NOT ACHIEVED.....ERREUR ! SIGNET NON DEFINI.

RELEVANCE OF OBJECTIVES..... ERREUR ! SIGNET NON DEFINI.

1-RELEVANT ERREUR ! SIGNET NON DEFINI.

PRIORITY OBJECTIVES DEFINED BY THE PROJECT WINS UNANIMOUS SUPPORT AND THE VULNERABILITY OF THE COUNTRY TO FACE CC REMAINS A PRIORITY.ERREUR ! SIGNET NON DEFINI.

EFFECTIVENESS..... ERREUR ! SIGNET NON DEFINI.

3-MODERATELY UNSATISFACTORY..... ERREUR ! SIGNET NON DEFINI.

PLANNED ACTIVITIES ARE NOT ALL BEING OPERATIONALIZED OR IMPLEMENTED AS THEY SHOULD. THE PERCENTAGE OF BUDGET CONSUMED IS PROBLEMATIC, AS A GAP OF CIRCA 400,000 EUR HAS TO BE FILLED. RECOMMENDATIONS ARE MADE TO EITHER DOWNSCALE SOME OF THE REMAINING ACTIVITIES, OR TO FIND A SOLUTION TO INJECT ADDITIONAL BUDGETING TO MATCH THE PROJECT ACTIVITIES.ERREUR ! SIGNET NON DEFINI.

EFFICIENCY ERREUR ! SIGNET NON DEFINI.

2-SATISFACTORY ERREUR ! SIGNET NON DEFINI.

SUSTAINABILITY ERREUR ! SIGNET NON DEFINI.

RISKS IMPEDING THE OVERALL SUSTAINABILITY OF THE PROJECTERREUR ! SIGNET NON DEFINI.

3-MODERATELY LIKELY ERREUR ! SIGNET NON DEFINI.

THE MAIN RISK IS THE LACK OF COORDINATION AND ORGANIZATION BETWEEN THE VARIOUS ACTORS IN THE FIGHT AGAINST THE RISKS ASSOCIATED WITH CC.....ERREUR ! SIGNET NON DEFINI.

RISKS IMPEDING THE SUSTAINABILITY OF FINANCIAL RESOURCESERREUR ! SIGNET NON DEFINI.

4-LIKELY ERREUR ! SIGNET NON DEFINI.

FINANCIAL RESOURCES WILL BE A LIMITING FACTOR AFTER THE PROJECT AND WILL HINDER THE DISSEMINATION OF GOOD PRACTICE IDENTIFIED IN THE PILOT SITES. HOWEVER, THE INTEREST OF OTHER DONORS IN AN EVENTUAL SECOND PHASE OF THE PROJECT IS A GOOD THING FOR THE SUSTAINABILITY THEREOF.ERREUR ! SIGNET NON DEFINI.

WITH REGARD TO THE CURRENT SITUATION, THE RATING MAY VARY IF THE SECOND PERIOD OF THE GEF-FUNDED PROJECT PERIOD IS FINALIZED AT NO-EXTRA COSTS, OR IF IT CAN BENEFIT FROM AN ADDITIONAL 400 000 USD FROM UNDP.ERREUR ! SIGNET NON DEFINI.

RISKS IMPEDING SUSTAINABILITY LINKED TO SOCIO-ECONOMIC ASPECTS.....ERREUR ! SIGNET NON DEFINI.

2-MODERATELY UNLIKELY ERREUR ! SIGNET NON DEFINI.

A PRIORI SOCIAL BARRIERS CAN BE EASILY EXCEEDED THROUGH AWARENESS ACTIONS. VISIBLE CONSEQUENCES OF THE IMPLEMENTED TECHNICAL SOLUTIONS IN FIVE PILOT SITES IN TERMS OF WATER MANAGEMENT WILL SERVE AS AN EXAMPLE FOR REPLICATION ACTIVITIES, WHICH WILL IMPROVE SOCIO-ECONOMIC SUSTAINABILITY OF THE PROJECT..... ERREUR ! SIGNET NON DEFINI.

RISKS IMPEDING THE SUSTAINABILITY OF GOVERNANCE AND INSTITUTIONAL FRAMEWORK ERREUR ! SIGNET NON DEFINI.

4-LIKELY ERREUR ! SIGNET NON DEFINI.

COORDINATION PROBLEMS BETWEEN PLAYERS ARE STILL FEARED AND THE SUPPORTING STRUCTURE, THE MAPEEIA, STILL PROVIDES TOO LITTLE SUPPORT. ERREUR ! SIGNET NON DEFINI.

RISKS IMPEDING ENVIRONMENTAL SUSTAINABILITY ERREUR ! SIGNET NON DEFINI.

4-MODERATELY LIKELY ERREUR ! SIGNET NON DEFINI.

BEYOND THE ISSUE OF CLIMATE CHANGE, DEFORESTATION PROBLEMS MAY EXACERBATE THE IMPACTS OF CLIMATE DISASTERS. ERREUR ! SIGNET NON DEFINI.

IMPACTS ERREUR ! SIGNET NON DEFINI.

BETTER CONSIDERATION OF ENVIRONMENTAL ASPECTS.....	ERREUR ! SIGNET NON DEFINI.
2- MODERATE.....	ERREUR ! SIGNET NON DEFINI.
PLANTATION WORK HELP TO REDUCE EROSION PROBLEMS, BUT THEY DO NOT GIVE THE EXPECTED RESULTS YET.....	ERREUR ! SIGNET NON DEFINI.
REDUCING PRESSURES ON THE ENVIRONMENT.....	ERREUR ! SIGNET NON DEFINI.
2- MODERATE.....	ERREUR ! SIGNET NON DEFINI.
THE ONGOING TECHNICAL WORK AIMS TO HAVE A POSITIVE IMPACT ON THE STATUS OF GROUNDWATER RESOURCES AND REDUCE THE PRESSURE ON THEM, ESPECIALLY IN RURAL AREAS. HOWEVER, IT HAS NOT YET BEEN ABLE TO ASCERTAIN AN EFFICIENT HYDROLOGICAL MONITORING, SO PRESSURES ON THE ENVIRONMENT STILL REPRESENT AN IMPORTANT RISK.....	ERREUR ! SIGNET NON DEFINI.
PROGRESS TOWARDS A BETTER CONSIDERATION OF THE ENVIRONMENT AND REDUCTION OF ENVIRONMENTAL PRESSURES.....	ERREUR ! SIGNET NON DEFINI.
3- SIGNIFICANT.....	ERREUR ! SIGNET NON DEFINI.
AWARENESS ACTIVITIES ON THE IMPORTANCE OF ENVIRONMENTAL CONSIDERATIONS ARE TO CONTINUE.....	ERREUR ! SIGNET NON DEFINI.
OUTCOME OF THE PROJECT AS A WHOLE (/ 6)	ERREUR ! SIGNET NON DEFINI.
3-MODERATELY UNSATISFACTORY.....	ERREUR ! SIGNET NON DEFINI.
THE PROJECT MAINLY LACK OF RIGOR AND STABILITY. EFFORTS ARE MADE TO REACH THE GOALS IN TIME; CROSS-CUTTING ISSUES ARE ADDRESSED BY THE PROJECT. WEAKNESSES LIE IN THE EFFECTIVENESS AND EFFICIENCY OF THE PROJECT AND ALSO IN THE MONITORING AND EVALUATION PLAN.....	ERREUR ! SIGNET NON DEFINI.
B. MAIN FINDINGS AND CONCLUSIONS.....	70
<i>i. Relevance.....</i>	<i>70</i>
<i>ii. Efficiency</i>	<i>71</i>
<i>iii. Effectiveness.....</i>	<i>71</i>
<i>iv. Sustainability.....</i>	<i>72</i>
<i>v. Impact.....</i>	<i>73</i>
C. RECOMMENDATIONS	74
<i>i. General recommendations.....</i>	<i>74</i>
<i>ii. Recommendations for the project coordination.....</i>	<i>75</i>
<i>iii. Recommendations for the implementation project partner.....</i>	<i>76</i>
<i>iv. Recommendations to the Steering Committee of the project.....</i>	<i>76</i>
<i>v. For the Project Management Team.....</i>	<i>76</i>
<i>vi. For UNDP and UNEP.....</i>	<i>77</i>
3.1.7. Concluding recommendation: two tier options.....	77
G. ANNEXES	79
A. TERMS OF REFERENCE	79
FAX: + 254-20-623158/4042.....	91
B. PLANNING OF THE MISSION.....	94
C. DOCUMENTS AND REPORTS CONSULTED	95
D. LOGICAL FRAMEWORK	96
THIS PROJECT WILL CONTRIBUTE TO ACHIEVING THE FOLLOWING COUNTRY PROGRAMME OUTCOME AS DEFINED IN CPAP OR CPD: CPAP (2008-2012) OUTCOME 5: CURRENT TRENDS IN ENVIRONMENTAL DEGRADATION AND DEPLETION OF NATURAL RESOURCES AND FACTORS OF RISKS AND VULNERABILITY TO CLIMATE ARE SIGNIFICANTLY REDUCED.....	96
E. LOGICAL FRAMEWORK AS MODIFIED IN THE 2013 PIR	100

List of Figures

Figure 1. Map of Comoros	21
Figure 2. Project organisation	67
Figure 3: Project Management.....	68

List of Tables

Table 1. Characteristics of the project "Adapting water resource management in the Comoros to expected climate change"	14
Table 2. Rating according to the evaluation criteria of the GEF	16
Table 3. Evaluation of the project zones	25
Table 4: Comments on the indicators and proposed reformulations	35
Table 5: State of indicators corresponding to the outcome 1, July 2014	55
Table 6: State of indicators corresponding to outcome 2, July 2014	57
Table 7: State of indicators corresponding to outcome 3, July 2014	59
Table 8: Performance Rating Project	70
Table 13: Project logical framework as presented in the Project Document.....	96

List of Acronyms and Abbreviations

ACCE	Adaptation de la gestion des ressources en eau aux changements climatiques
ACMAD	African Center of Meteorological Application for Development
AFD	French Development Agency
AfDB	African Development Bank
AIP	Annual Investment Program
ALM	Adaptation Learning Mechanism
ANACM	National Agency of Civil Aviation and Meteorology
AUEFD	Association of Waters Users from Fomboni to Djoïézi
AUEM	Association of Water Users of Mustamudu
AWP	Annual Work Plan
CCA	Climate Change Adaptation
CGE	Water Management Committees
CO	Country Office
CPAP	Country Programme Action Plan
CRCCA	Projet de Renforcement des Capacités d'Adaptation et de résilience du secteur Agricole aux Changements Climatiques aux Comores
DGEF	General Directorate of Environment and Forestry
DTU	Technical University of Denmark
EUD	EU Delegation
GAN	Global Adaptation Network
GCCA	Global Climate Change Alliance
GCM	Global Climate Model
GDEMW	General Directorate of Energy, Mines and Water
GDP	Gross Domestic Product
GEF	Global Environment Facility
GHG	Greenhouse Gas
HACT	Harmonized Approach to Cash Transfer
HIV/AIDS	Human Immunodeficiency Virus/ Acquired Immunodeficiency Syndrome
IDB	Islamic Development Bank

IPCC	Intergovernmental Panel on Climate Change
IW Learn	International Waters Learning Exchange and Resource Network
IWRM	Integrated Water Resources Management
LDCF	Least Developed Countries Fund
Ma-Mwe	Water and Electricity of Comoros (Ma-Mwe)
MAPEEIA	Ministry of Agriculture, Fisheries, Environment, Energy and Handicraft
MDG	Millennium Development Goals
M&E	Monitoring and Evaluation
MPREEIC	Ministry of Production, Environment, Energy, Industry and Crafts
MTR	Mid-Term Review
NAPA	National Action Programs for Adaptation
NC	National Coordinator
NDAS	National Directorate of Agricultural Studies
NDEWR	National Directorate of Energy and water Resources
NEX	National Execution
NFP	National Focal Point
NGO	Non Governmental Organizations
OVI	Objectively Verifiable Indicators
PAEPA	Potable Water Supply and Sanitation Project
PIF	Project Identification Form
PIR	Project Implementation Review
PMT	Project Management Team
PRGS	Poverty Reduction and Growth Strategy
RACP	Annual Report of the Resident Coordinator
RCS	Regional Support Center
RUTI	Head of the Islander Technical Unit
SCA2D	Accelerated Growth Strategy for Sustainable Development
SDF	Saudi Development Fund
SDW	Supply Drinking Water
SG	Secretary General
SIDS	Small Island Developing States
SNGRD	National System for Risk and Disaster Management
TOR	Terms of Reference
UCEA	Union Water Committees of Anjouan

UCEM	Union Water Committees of Moheli
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Program
UNEP	United Nations Environment Program
UNFCCC	United Nations Framework Convention on Climate Change
UNICEF	United Nations Children's Fund
UNV	United Nations Volunteers
USD	US Dollars
WMO	World Meteorological Organization

Union of Comoros – Mid-Term Review Report

Adapting water resource management in the Comoros to expected climate change

UNDP Project ID	00087432
UNEP Project ID	LDL 2328-2724-4B79
UNDP PIMS Number	4188
Project starting date	February 2011
Estimated end date	November 2014
Total allocated resources (USD)	8 299 528
UNDP contribution (USD)	1 478 550
GEF contribution (USD)	3 740 000
Government of Comoros contribution (USD)	40 000
In-kind (USD)	993 000
Other (USD)	1 201 528
Location	Union of Comoros
Executing Entity/Implementing Partner	General Directorate of Environment and Forestry
Implementing Entity/Responsible Partners	UNDP & UNEP

Evaluator: Alexandre Borde

Dates of the Mid-Term Review: June-August 2014

Executive summary

The UNDP-UNEP-GEF funded project entitled “Adapting water resource management in the Comoros to expected climate change” was approved by GEF in August 2010 for an initial period of 4 years. In line with guidance for the Least Developed Countries Fund (LDCF), the project targets several adaptation priorities and reduce the vulnerability of the population, especially by increasing water supply and improving water quality. These priorities have been identified during the National Adaptation Programme of Action (NAPA) process done in the Union of Comoros in November 2006.

The Mid-Term Review (MTR) of the project was carried out during the months of June to September 2014 to evaluate the extent of the activities implemented so far and to give some recommendations for the second phase of the project.

The table below presents data characterizing the project, including major budget lines.

Table 1. Characteristics of the project "Adapting water resource management in the Comoros to expected climate change"

Login of the project GEF	PIMS 004188		Budget (millions of USD)
Login of the project UNDP	PID 73302	LDCF/GEF funding	3 740 000
Country	Comoros	Executive Agency – UNDP cofinancing	1 478 550
Zone	Africa	Executive Agency – UNEP cofinancing	993 000
Area of intervention	Climate change	Government:	40 000
Objectives of area of intervention	LDCF	Ma-Mwe	568 147
Executive Partner	MPEEIC	ANACM	23 515
Other partners involved	Ma-Mwe, ANACM	Total co-funding	3 103 212
		Total cost of project	8 299 528

Overall findings

The Mid-Term Review mission took place in Comoros from June 15 to June 24, 2014, in order to assess in the field the project's progresses and make recommendations for the second period of the project. This assessment is based on the evaluation criteria of the GEF, and the following table summarizes the ratings given under these criteria.

The MTR concludes that the project is relevant given the importance of the climate related risks in Comoros. The project design is appropriate to address the issues of adaptation and resilience to climate change in relation to water resource management, and it mobilizes all the necessary institutional structures, technical solutions, communication tools and dissemination of good practices.

The first phase of the project was not as successful as desired due to delays in starting the project and to the reduction of the scope of work, in particular because of a tight budget and a financial planning that needed a review. Technical solutions in terms of water management were successfully implemented in several pilot sites in rural areas in Anjouan, Moheli and Grand Comoros islands and raising public awareness about the need for such work was in progress. However, the objectives related to institutional capacity building are still not fully achieved. In terms of project coordination, team members proved to be particularly motivated and invested in their tasks. This contributed to the project's effectiveness.. This is true at both the global scale and at the local level.

The evaluation mission found that the monitoring and evaluation system is satisfactory but could be further improved. The mid-term review is taking place at a late stage, and the project end date should be revised and extended, in order to provide enough time for the implementation of all the activities planned in the project framework and budget. The review suggests that the project strategy could and should be applied to a larger scale: : indeed, because of the first positive impacts of the project, there is an increasing demand from the population nearby the project intervention sites to scale-up the activities. Moreover, a few bilateral donors are interested in the project. Their financial support would allow the scaling up of some of the current project activities, or the implementation of new, complementary activities. These potential donors would enhance the financial sustainability of the activities in question during and after the project: therefore, the evaluation mission suggests considering their offers.

The project should develop synergies with other similar projects, in particular with the recently launched adaptation project in the agriculture sector. This cooperation is planned but has not been implemented yet.

Finally, it is necessary, in anticipation of the development of other NAPA projects, or the European Commission-funded Global Climate Change Alliance (GCCA) project, to draw profits from the first lessons learnt for this project.

Table 2. Rating according to the evaluation criteria of the GEF

Criterion	Reviewers' Summary Comments	Reviewer's Rating
Attainment of project objectives and results (overall rating)		4-MS
Outcomes		
Overall Quality of Project Outcomes	The targets cover the technical and institutional aspects, but also aspects linked to awareness and dissemination of information. If the relevance of the project is very significant, other objectives are not achieved.	3-MU
<i>Relevance</i>	Priority objectives defined by the project wins unanimous support and the vulnerability of the country to face CC remains a priority.	R
<i>Effectiveness</i>	Planned activities are not all being operationalized or implemented as they should. The percentage of budget consumed is problematic, as a gap of circa 400,000 EUR has to be filled. Recommendations are made to either downscale some of the remaining activities, or to find a solution to inject additional budgeting to match the project activities.	3-MU
<i>Efficiency</i>	The PMU is working well and the team is involved in the implementation in an efficient way. Questions remain about the functioning of the other project entities, such as the various committees.	2-U
Sustainability of Project outcomes (overall rating) Sub criteria (below)	The main risk is the lack of coordination and organization between the various actors in the fight against the risks associated with CC	ML
<i>Financial</i>	Financial resources will be a limiting factor after the project and will hinder the dissemination of good practice identified in the pilot sites. However, the interest of other donors in an eventual second phase of the project is a good thing for the sustainability thereof. With regard to the current situation, the rating may vary if the second period of the GEF-funded project period is finalized at no-extra costs, or if it can benefit from an additional 400 000 USD from UNDP.	ML

Criterion	Reviewers' Summary Comments	Reviewer's Rating
<i>Socio Political</i>	A priori social barriers can be easily exceeded through awareness actions. Visible consequences of the implemented technical solutions in five pilot sites in terms of water management will serve as an example for replication activities, which will improve socio-economic sustainability of the project	L
<i>Institutional framework and governance</i>	Coordination problems between players are still feared and the supporting structure, the MAPEEIA, still provides too little support.	L
<i>Ecological</i>	Beyond the issue of climate change, deforestation problems may exacerbate the impacts of climate disasters.	L
Achievement of outputs and activities	Achievement of outputs and activities is not as high as expected due to delays in the implementation. There is however a satisfying degree of confidence in results to come.	4-MS
Catalytic Role		
<i>Production of a public good(yes/no)</i>	Water is considered a public good in Comoros. Its use in a more sustainable way will benefit the population. After the end of this project, there should be less pressure on the resource in freshwater.	Yes
<i>Demonstration(yes/no)</i>	New agro-meteorological stations have allowed the setting of national weather reports for the first time in the country	Yes
<i>Replication(yes/no)</i>	There was replication in agricultural irrigation practices.	Yes
<i>Scaling up(yes/no)</i>	Funding agencies, including the African Development Bank, showed interest in financing the scaling-up of local project activities.	Yes
Monitoring and Evaluation (overall rating) Sub criteria (below)		4-MS
<i>M&E Design</i>	The M&E plan defined in the project document is quite classic and relevant as a whole. However, some indicators were modified because they were not formulated clearly enough or not feasible.	2-MU
<i>M&E Plan Implementation (use for adaptive management)</i>	The implementation of the M&E was effective: data was made available for indicators.	5-S

Criterion	Reviewers' Summary Comments	Reviewer's Rating
<i>Budgeting and Funding for M&E activities</i>		2-MU
IA & EA Execution		
<i>Overall Quality of Project Implementation/Execution</i>	Overall, given the difficult political context, we can estimate the quality of the implementation of the project is moderate with some success and hopes for the future. Interventions, including access to safe drinking water are on track, although it is still too early to talk about success.	4-MS
<i>Implementing Agency Execution</i>	UNDP has faced several challenges since the launch of the project, with means sometimes a tense implementation regarding certain activities.	4-MS
<i>Executing Agency Execution</i>	Political instability with rotation of several ministers leading the MPEEIC caused very frequent delays, because each new institutional team needed to reclaim the project.	4-MS
Country ownership /driveness	The country asked for additional project activities. The National Meteorology Agency (ANACM) and the Water Agency (Ma-Mwe) were especially involved in the project.	5-S
Stakeholders involvement	Local island communities are involved in the project. They have themselves proposed solutions to the problems faced by the project team.	5-S
Overall Rating	The project mainly lacks rigor and stability. Efforts are made to reach the goals in time; cross-cutting issues are addressed by the project. Weaknesses lie in the effectiveness and efficiency of the project and also in the monitoring and evaluation plan	3-MU

Code:

6-HS: Highly satisfactory

R: Relevant

5-S: Satisfactory

NR: Non relevant

4-MS: Moderately satisfactory

L: Likely

3-MU: Moderately unsatisfactory

ML: Moderately likely

2-U: Unsatisfactory

MU: Moderately unlikely

1-HU: Highly Unsatisfactory

U: Unlikely

Criteria	Grade	Comments
Monitoring & Evaluation (M&E)		
Quality of the ME plan	2- Unsatisfactory	
Initial design of ME plan	5- Satisfactory	The plan SE defined in the project document is quite classic and relevant as a whole. The formulation of monitoring indicators is not always clear and some improvements in the formulation are suggested.
Implementation of ME plan	2-Unsatisfactory	The implementation of the M&E did not show enough discipline and remains perfectible
Implementation and execution of the project		
Quality of implementation by the implementing agency	4- Moderately satisfactory	UNDP has faced several challenges since the launch of the project, with means sometimes a tense implementation regarding certain activities.
Quality of implementation by the institutional partner	3- Moderately Unsatisfactory	Political instability with rotation of several ministers leading the MPEEIC caused very frequent delays, because each new team needed to reclaim the project.
Quality of the implementation and execution of the project	4- Moderately satisfactory	Overall, given the difficult political context, we can estimate the quality of the implementation of the project is average with some success and hopes for the future. Interventions, including access to safe drinking water are on track, although it is still too early to talk about success.
Objectives		
Quality of project objectives	4-Moderately satisfactory	The targets cover the technical and institutional aspects, but also aspects linked to awareness and dissemination of information. If the relevance of the project is very significant, other objectives are not achieved.
Relevance of objectives	1-Relevant	Priority objectives defined by the project wins unanimous support and the vulnerability of the country to face CC remains a priority.
Effectiveness	3-Moderately unsatisfactory	Planned activities are not all being operationalized or implemented as they should. The percentage of budget consumed is problematic, as a gap of circa 400,000 EUR has to be filled. Recommendations are made to either downscale some of the remaining activities, or to find a solution to inject additional budgeting to match the project activities.
Efficiency	2-Satisfactory	The PMU is working well and the team is involved in the implementation in an efficient way. Questions remain about the functioning of the other project entities, such as the various committees.
Sustainability		
Risks impeding the overall sustainability of the project	3-Moderately likely	The main risk is the lack of coordination and organization between the various actors in the fight against the risks associated with CC
Risks impeding the sustainability of financial resources	4-Likely	Financial resources will be a limiting factor after the project and will hinder the dissemination of good practice identified in the pilot sites. However, the interest of other donors in an eventual second phase of the project is a good thing for the sustainability thereof. With regard to the current situation, the rating may vary if the second period of the GEF-funded project period is finalized at no-extra costs, or if it can benefit from an additional 400 000 USD from UNDP.
Risks impeding sustainability linked to socio-economic aspects	2-Moderately unlikely	A priori social barriers can be easily exceeded through awareness actions. Visible consequences of the implemented technical

		solutions in five pilot sites in terms of water management will serve as an example for replication activities, which will improve socio-economic sustainability of the project
Risks impeding the sustainability of governance and institutional framework	4-Likely	Coordination problems between players are still feared and the supporting structure, the MAPEEIA, still provides too little support.
Risks impeding environmental sustainability	4-Moderately likely	Beyond the issue of climate change, deforestation problems may exacerbate the impacts of climate disasters.
Impacts		
Better consideration of environmental aspects	2- Moderate	Plantation work help to reduce erosion problems, but they do not give the expected results yet.
Reducing pressures on the environment	2- Moderate	The ongoing technical work aims to have a positive impact on the status of groundwater resources and reduce the pressure on them, especially in rural areas. However, it has not yet been able to ascertain an efficient hydrological monitoring, so pressures on the environment still represent an important risk.
Progress towards a better consideration of the environment and reduction of environmental pressures	3- Significant	Awareness activities on the importance of environmental considerations are to continue.
Outcome of the project as a whole (/ 6)	3-Moderately unsatisfactory	The project mainly lack of rigor and stability. Efforts are made to reach the goals in time; cross-cutting issues are addressed by the project. Weaknesses lie in the effectiveness and efficiency of the project and also in the monitoring and evaluation plan

1. Introduction

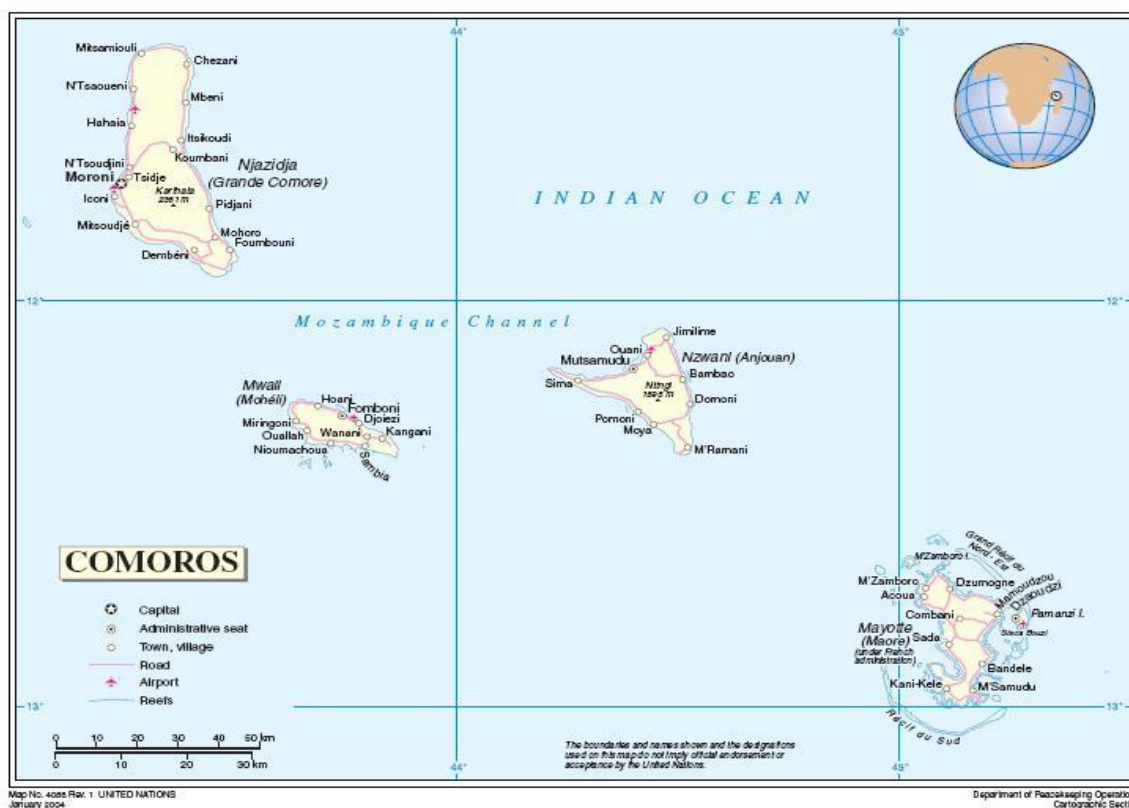
1.1. Brief presentation of the project

1.1.1. Climate change in Comoros

The Comoros archipelago is located at the northern entry of the Mozambique Channel. It comprises four islands, namely Grande Comore, Anjouan, Mohéli and Mayotte, totaling a land area of 2,236 km². The national territory of the Union of the Comoros comprises three of the islands, with the exception of Mayotte. The national Government oversees all three islands, and each autonomous island has its own governmental structure. The administrative system at national and autonomous island level is based on the so-called “canton” system which is similar to district or region¹. This LDCF project works on the three islands that constitute the territory of the Union of the Comoros.

The main climate change-induced problem facing Comorian communities addressed by the project is that climate change impacts negatively on water supply and quality. Comorian communities, autonomous islands’ Governments, and the national Government have weak technical and managerial capacities, and limited financial resources to overcome or cope with climate change. The rural population in particular lacks the capacity, resources and financial assistance to adapt to worsening climatic conditions (NAPA, 2006; PRGS, 2009).

Figure 1. Map of Comoros



The consequences in terms of loss of human lives, water resources, agricultural production and infrastructure damage are increasingly precarious. All key sectors of the economy, such

¹ General Census Results - Recensement Général de la Population et de l'Habitat de l'Union des Comores en 2003 (RGPH03)
UNDP, United Nations Development Programme and UNEP, United Nations Environment Programme
Mid-Term Review

as agriculture, infrastructure, fisheries, forestry and tourism, are affected by climate change. Thus, adaptation to climate change is a major issue in the Comoros, not only to ensure the sustainable development of the country but also food security for the most vulnerable populations.

1.1.2. The key actors involved in climate change

Given the challenge posed by climate change, the Union of Comoros signed the United Nations Framework Convention on Climate Change (UNFCCC) on the 11th of June 1992, and ratified it on the 31st of October 1994. Besides, the Kyoto Protocol has been ratified by Comoros on the 10th of April 2008. The country has made and submitted its first National Communication to the UNFCCC in April 2003.

In line with its international commitments, the country started to strengthen its institutional capacities in the field of climate change. The Directorate General for Environment and Forestry (DGEF) has integrated climate change adaptation in its main missions. The country also developed a National Adaptation Plan of Actions (NAPA) published in November 2006, to identify priorities and urgent adaptation needs regarding the degree of vulnerability of the population and social groups. The NAPA identifies 13 projects - or "options" – as priority adaptation actions. The project "Adapting water resource management in the Comoros to expected climate change" comes from the recommendations of the 2006 NAPA document (merging project sheets n°4 and n°5). This is the first project implemented under the NAPA, and as such, it is a key project in the climate change adaptation strategy of Comoros.

As part of the implementation of the Decision 28/CP.7 of the Conference of Parties at the UNFCCC during its 7th session in November 2001, regarding the development of National Action Programs for Adaptation (NAPA), the country has received funding from the Least Developed Countries Fund (LDCF) for the project. This funding helped to identify urgent actions to be implemented to strengthen the country's capacity for adaptation and reduce the vulnerability of local communities to the effects of extreme weather and climate risks.

1.2. Objectives and context of the Mid-Term Review

1.2.1. Context of the Mid-Term Review

The project helps Comorian communities to adapt to climate change by: i) increasing the supply of safe water resources by constructing and rehabilitating water storage facilities in accordance with international standards to equip the infrastructure to withstand the expected impacts of climate change; ii) training personnel and strengthening institutional capacity in order to promote sustainable management of this infrastructure and to use climate risk information for water sector planning; iii) promoting policy and budgetary adjustments so that successful pilots are up-scaled and catalyzed throughout the Comoros, including through the development of national standards for adaptation measures; and iv) improving institutional capacity to implement, monitor and report on climate change adaptation.

Capacity and systems to analyse, protect and harness valuable water resources are being developed at community, district (canton), autonomous island and national levels. Ultimately, the project increases knowledge and awareness on good adaptation practices in

the water sector. Adaptation learning generated from the pilot interventions is used to guide mainstreaming of adaptation in national fiscal, regulatory and development policy, in order to support adaptive practices on a wider scale.

The executing partner of the project is the Directorate General for Environment and Forestry (DGEF), in partnership with the United Nations Development Programme (UNDP) and the United Nations Environment Programme (UNEP) as implementing agencies. The purpose of the MTR mission is to determine whether the project objectives have been achieved at mid-term of the implementation of the project. It also enables to identify the factors that help or hinder the project, and determine lessons learned for the continuation.

The field mission was conducted by Alexandre Borde from June 16 to June 24 of 2014. During the mission, the strengths and weaknesses of the project were analyzed, the degree of overall progress and by activity was assessed using the GEF/UNDP/UNEP evaluation criteria, and the project impacts were assessed. Finally, recommendations to all the stakeholders were formulated through a restitution workshop and at the end of this document.

As a reminder, the documents produced during the MTR are:

- An inception brief to prepare the MTR mission, dated June 17, 2014;
- A presentation of the preliminary findings during a workshop held on June 23, 2014 in Moroni;
- This MTR report.

The next section presents the methodology used to conduct the evaluation.

1.2.2. Timetable of the mission

The agenda of the MTR mission was submitted during a preliminary meeting with UNDP, UNEP and the project manager, on the first day of the field mission, i.e. Monday, June 16, 2014.

It was decided to articulate the mission around i) interviews on the field in Bandassamlini, Hamalengo, and Vovoni, ii) meetings with national stakeholders of the project in Moroni, and iii) a restitution workshop on June 23 in Moroni. The agenda is presented below:

Monday 16 June 2014	
15h00-17h00	<ul style="list-style-type: none"> • Arrival for the mission • Briefing meeting with the National Coordinator • Meeting with UNDP Representative in Comoros, with the Environment programme Team Leader and with the Project Officer
18h00-20h00	• Informal meeting with the Islamic Development Bank (IDB) and the Saudi Development Fund
Tuesday 17 June 2014	
09h00-11h00	• Meeting with the General Secretary of the Ministry and the GEF National Focal Point
11h30-12h30	• Meeting with the project team unit
12h30-13h30	• Lunch
13h45-14h45	• Meeting with the Director of the ANACM
15h00-16h00	• Meeting with the Director General of Ma-Mwe
16h00-17h00	• Field visit of TP5 and ONU4 in Vouvouni
Wednesday 18 June 2014	

09h00-10h00 10h00-15h00	<ul style="list-style-type: none"> • Visit of equipments of the Meteorology Direction in Moroni • Field visit in Bandassamlini, Hamalengo and Diboini
Thursday 19 June 2014	
09h00-10h30 11h00-12h30	<ul style="list-style-type: none"> • Meeting with the Director General for Environment and Forestry • Meeting with the French Development Agency
14h00-15h00 17h00-18h00	<ul style="list-style-type: none"> • Meeting with EU Delegation • Meeting with the GCCA consultant
Friday 20 June 2014	
9h00 to 17h00	<ul style="list-style-type: none"> • Work session with the Project team (including the RUTI)
Saturday 21 June 2014	
9h00 to 14h00	<ul style="list-style-type: none"> • Work session with the Project team (including the RUTI)
Sunday 22 June 2014	
9h00 to 17h00	<ul style="list-style-type: none"> • Preparation of the workshop
Monday 23 June 2014	
10h00-15h30	<ul style="list-style-type: none"> • Workshop with all stakeholders
16h30-18h00	<ul style="list-style-type: none"> • Wrap-up meeting at UNDP
Tuesday 24 June 2014	
9h00 -10h30 11h00	<ul style="list-style-type: none"> • Meeting with the Project Team Unit • Departure

Visits on the other islands were not made possible due to the banning by UNDP to use local airline companies to travel there. Consequently, XXX

1.2.3. Objectives of the mission

The objective of this mid-term review (MTR) is to assess implementation progress and progress towards the project objective. The MTR will:

- Assess achievements and challenges at mid-point and in particular assess the implementation of planned project outputs and project performance against actual results. The risks to achievement of project outcomes and objectives will also be appraised (see Annex 5).
- Focus on identifying the corrective actions needed for the project to achieve maximum impact. Review findings will feed back into project management processes through specific recommendations and 'lessons learned' to date.
- Consider sustainability issues and 'exit strategy'

These objectives were followed by the evaluator throughout the mission.

1.3. Applied methodology for the MTR

1.3.1. Methodological approach

The evaluation consisted in comparing the expected results at the end of the first half of the project as formulated in the project document (ProDoc) with the actual results, taking into account issues that have been arisen, and shifts that may have occurred.

The consultant met with the project stakeholders, and went in the field in Bandassamlini, Hamalengo, Diboini and Vouvouni. He gained access to all project documents, with the entire collaboration of UNDP, UNEP and the PMT to enable him to answer some questions and to facilitate the MTR work. The PMU took all the appointments for the consultant with the stakeholders considered as the most relevant to meet, at local and national levels. Finally, a presentation of the results of the MTR mission was held on 23 June 2014 in Moroni.

Nearly 20 participants responded to the invitation and attended the workshop, from different technical departments of local and national institutions involved in the implementation of the project (Directorate General for the Environment and Forestry, Ma-Mwe representative, Anjouan and Mohéli representatives, etc). Key stakeholders from various multilateral and bilateral funding agencies involved in climate change also attended, among other AFD.

The methodological approach for the MTR was structured around key criteria in order to fully assess the performance of the design and implementation of project activities.

The MTR was conducted following the guideline questions provided by the review's terms of reference (see Annex), focusing on:

- A. Project formulation
- B. Assumptions and risks
- C. Project implementation
- D. Project Results
- and E. Conclusions, Recommendations and Lessons.

Moreover, the MTR was sensitive to participatory and consultative approaches. The process of involving all stakeholders was particularly analyzed.

The results of the MTR are presented as recommendations, including suggestions on the further implementation of the project and its sustainability.

1.3.2. Site visits

The consultant visited five places both urban and rural: Moroni (urban area, water tanks and pipes), Bandassamlini (rural area, resilient cultural practices, irrigation systems and small impluviums), Hamalengo (rural area, resilient cultural practices, irrigation systems and small impluviums), Diboini (rural area, agro-meteorological automated station) and Vouvouni (urban area, water wells and pipes). The purpose of these visits was to see the installations and meet the beneficiaries.

Table 3. Evaluation of the project zones

	MTR – Methodological approach
Grand Comoros, rural area	Site visit, documents et other administrative reports analyzed
Grand Comoros, urban area (Moroni, Vouvouni)	Site visit, documents et other administrative reports analyzed

During the site visits, a methodological order was adopted, with two levels of meetings:

- 1) *Meetings with national and local authorities:* the first level consisted in meeting national and local authorities involved in the project and based in Moroni and Vouvouni, that is to say ANACM (meteorological agency) and Ma-Mwe (Comorian Supplier, Distributer and Transporter of Electricity and Water). These meetings related to the field work (water pipes installation and functioning of the newly installed automated agro-meteorological stations). For each meeting, 2:00 to 3:00 hours were dedicated to the interviews.

- 2) *Visit of field facilities in rural areas:* The second level of visit allowed seeing the

achievements and developments of the project on site such as the irrigation systems. These visits in Bandassamlini, Hamalengo and Diboini enabled to meet several individuals farmers benefiting from the project, and representatives of the villagers. The visits lasted between one and two hours by location. The evaluator was able to interview the beneficiaries representing local communities without being hindered in his work.

1.3.3. Meetings at central level

The consultant met with national stakeholders of the project on several occasions and in different contexts. He held bilateral talks with many project partners and entities, particularly with the Directorate General for Environment and Forestry (DGEF), autonomous island's communities, UCEA, UCEM, and donors involved in climate change and/or water management like the EUD and AFD.

Finally, it is important to emphasize the availability of the contact persons within UNDP and UNEP to respond to all issues raised by the evaluation team. The premises were made available, and two conference calls were held at the beginning of the field mission, the first one with UNDP, with both the Country Office (CO) in Comoros and the Regional Support Center (RSC), and a second one with UNEP.

In addition, the consultant was able to regularly interact with the project coordinator and UNDP CO during his stay in Comoros, to have a better understanding of the results or the difficulties which have arisen during the first years of the project, and how they were or could be overcome.

1.3.4. The restitution workshop

On Monday, June 23, 2014, local and national stakeholders were invited to the restitution of the first findings of the MTR. This workshop took place at the MPEEIC in Moroni, from 11:00 to 15:30 in the presence of circa 20 participants from local and national organizations and from development agencies.

The Director General for Environment and Karim Ali Ahmed from the UNDP introduced the workshop. Participants were able to attend the presentation of the preliminary findings of the project. Participants were able to respond and ask questions to the evaluator or give clarification and viewpoints if necessary.

1.3.5. The evaluation team

The team of the MTR consisted of an International Consultant and Team Leader, Alexandre Borde.

The detailed timetable of the mission and the list of persons met are presented in annexes.

2. Background and context

2.1. Preparation of the intervention

2.1.1. From the identification of NAPA priority projects to intervention planning

At the end of a consultative process of several years, the National Adaptation Programme of Action to climate change (NAPA) was made public in November 2006 in Comoros². From the 13 interventions proposed in the NAPA as adaptation priorities, two focus on the sector of intervention about water resources, the first one on the increase of water supply, and the second one on the improvement of water quality. The project is responding to these two adaptation priorities on water resources (n°4 and n°5 in the NAPA). It has been designed around integrated water resource management (IWRM) and thus includes water basin management activities (i.e. soil stabilization through reforestation activities). In this respect, the project also contributes towards NAPA adaptation priorities “defense and restoration of degraded soils” (priority n°2) and “reconstruction of basin slopes” (n°3).

Following the publication of the NAPA, a project document served as the basis for the signature of a financing agreement between the Government of Comoros, the execution partner, namely the Directorate General for Environment and Forestry (DGEF), UNEP and UNDP for both funding and implementing the project entitled “Adapting water resource management in the Comoros to expected climate change”.

It is also important to remember that this intervention was and still is consistent with the expected effects of the 4th outcome of the UNDAF and the Country Programme Action Plan (CPAP) 2008-2012, to increase access to clean water and to reduce the vulnerability of poor people, and with the Strategic Programming Framework on Climate Change (2011-2016)³, a national document co-developed with the support of UNDP. The ACCE Project is also consistent with UNEP’s general objectives such as Climate Change Adaptation and Resource Efficiency through knowledge support, policy integration⁴ and by promoting Resource Efficiency (RE) and Sustainable Consumption and Production (SCP)⁵.

The intervention was prepared in accordance with the eligibility criteria of the Least Developed Countries Fund (LDCF) managed by the Global Environment Fund (GEF/C.28/18, May 12, 2006). In accordance with the guidelines of the LDCF, the project adopted an approach to support the management of climate risks endangering water resources in specific pilot sites selected on the basis of criteria including i) likelihood of generating adaptation benefits, ii) vulnerability of the beneficiary community, iii) implementation capacity of local institutions, and iv) on-going investment programmes.

2.1.2. Identification

The identification started focusing on actions that can reduce the vulnerability of populations highly vulnerable to the adverse impacts of climate change, especially with regards to accessing drinkable water.

The modernization of the weather forecasting system, and the water supply system, the

² <http://unfccc.int/resource/docs/napa/com01e.pdf>

³ <http://www.km.undp.org/content/dam/comoros/docs/km-CSP%202011-2016.pdf>

⁴ <http://www.unep.org/climatechange/adaptation/KnowledgeandPolicy/tabid/29577/Default.aspx>

⁵ <http://www.unep.org/resourceefficiency/Home/UNEPsResourceEfficiencyProgramme/tabid/55552/Default.aspx>

development of climate-resilient water management practices and the need to take into account the impacts of climate change at the community level and to invest in adaptive measures have been proposed.

2.1.3. Formulation

During the formulation phase, the need to strengthen the capacities of the most vulnerable communities was highlighted so that they adapt to extreme droughts and climate change impacts. The expected results of the project were formulated along three axes: i) institutions at a national and community level integrating climate change information into water resources management, ii) water supply and water quality improved for selected pilot communities to combat impacts of climate change, iii) awareness and knowledge of adaptation good practice increased for continued process of policy review and development.

2.1.4. Launch of the project

At the launch of the project, all stakeholders demonstrated a strong engagement in making recommendations in relation to the roles and responsibilities of each key partner in the project, based on the project logical framework, monitoring and evaluation, and major activities planned for the end of 2011 and for 2012. A Project Management Team (PMT) was also established.

The project held its inception meeting in February 2012 in Moroni, whereas the projected start was November 2010. From the outset, the elements of the project's logical framework were hailed as a model for future initiatives on Climate Change Adaptation (CCA) leading for instance to the launch in 2014 of a new project on adaptation in the agriculture sector.

2.2. Political and institutional context

Information about the political context and risks for Comoros is sparse. It is often considered as a potentially unstable country, but there are no specific concerns at the time of the mid-term review.

Between 1993 and 2001, the country created a political framework, which led to the preparation and adoption of an Agricultural Development Policy, an Environmental Action Plan and a national strategy and action plan for the conservation and sustainable management of biodiversity. These policies aimed to reduce the country's dependence on imports by doubling agricultural production within 20 years and ensuring a more rational and sustainable management of natural resources.

In the past years, the country continued to be committed towards sustainable development with the Itsandra Manifeste signed on December 20, 2011⁶ and the Accelerated Growth Strategy for Sustainable Development (SCA2D) for the period 2015-2019. In this context, the project promotes the success of these policies and plans by improving access to clean water, among others to increase agricultural productivity, and by piloting improved water basin management.

⁶ <http://www.km.undp.org/content/dam/comoros/docs/km-env-Manifeste-2011.pdf>

Additionally, the project assists in the realization of the goals set out in the 2009 Poverty Reduction and Growth Strategy (PRGS)⁷. This national document aims to increase economic growth by at least 5% annually and to decrease income poverty by 50% by 2015. Sustainable development, including protection of the environment is the major focus of the strategy with increasing water supply, improving soil productivity and integrated local management being three of the seven priority programmes.

Furthermore, the project contributes to:

- the follow-up of Outcome 4 of the UNDAF 2008-2012, namely: “By 2012, ecosystem integrity is preserved and ecosystem services they provide are valued for the benefit of the population, including communities dependent on natural resources for their survival”;
- the development policy, through the improvement of development in the Union of Comoros at the national and three islands levels, and the adoption and implementation of activities to reduce poverty in line with the development policy (e.g. improving agricultural productivity through improved water supply), particularly for women;
- the improvement of the Water Act;
- the strengthening of institutions at national and community levels to integrate climate change issues in national policies and strategies;
- the protection of the environment by increasing resources productivity, and reducing the rate at which resources are degraded and the vulnerability of certain ecosystems to climate change.

⁷ <http://www.imf.org/external/pubs/ft/scr/2010/cr10191.pdf>

3. Project Evaluation

A. Project formulation

The project logical framework is structured along the general objective, and declined into specific objectives. The evaluator analyzed each specific objective and planned interventions. The goal of the project is to help vulnerable communities adapt to climate change from impacts on water resources in the Comoros. Activities to achieve the objective include demonstration pilot sites, the promotion of ownership and the scaling-up of best practices and lessons learnt.

In this section, the revised logical framework⁸ is examined, focusing on the relevance of project activities to the objectives and outcomes stated in the logical framework. The status of various indicators and the degree of achievement of each objective will be evaluated in sections C and D.

A.1. Objectives and outcomes

A.1.1. Outcome 1. Improving institutional capacity at national and community level, to integrate climate change information into water resources management

Outcome 1 of the project plans to improve institutional capacity at the national and community levels to facilitate the use of climate risk information to support the planning processes. Originally, hydrological modeling should have been undertaken on all three islands to take stock of available water supplies, to determine the rate of replenishment and diminishment of water resources, and to determine the impacts of climate change on available water resources in order to enable future planning and management of water resources. The evaluation confirms that it was not realistic to implement this activity without a preliminary focus on data collection, storage and analysis.

Equipment for the collection and monitoring of hydrological and meteorological data is provided, taking the form of an information system for gathering, storing and processing the data. Climate change policies and planning benefit from agro-meteorological automated stations, for both short-term measures (rainfall and flow rate data are needed to validate the hydrological modeling exercises) and longer-term perspectives, in enabling down-scaling of Global Climate Models (GCM), because, for instance, climate records need to be developed over a number of years.

This outcome includes trainings at national level on collection, storage and analysis of meteorological data using relevant and appropriate hydrological models. Such data are used to assess and monitor changes in water availability given climate change projections. Additionally, it allows the safe yields of available resources to be computed and assessed. The conversion of the climatic data available on micro-files into usable electronic data is necessary.

It was first planned to install a tide gauge in Grande Comoros, with trainings to monitor the relationship between tidal actions and groundwater quality (i.e. monitoring of the salinity). However, the installation proved to be unnecessary, since there already is a tide gauge in

⁸ From the logical framework in the original project document, changes were made following the baseline study and the inception meeting. The revision was approved on February 3, 2012 by the Steering Committee.

Grande Comoros. The activity was therefore reformulated, and the focus was put on data collection and analysis from the existing tide gauge.

Policy related to the water sector is being updated, revised and improved to incorporate climate change considerations using available climate risk information (e.g. macro-economic planning).

A cross-governmental, coordinated policy process is being established in order to integrate climate change considerations into water management policy. This is essential in the Comorian context where there is a significant lack regarding mainstreaming climate change activities in the policy process.

The MTR leads to the conclusion that the country is able to modernize the forecasting system, and to propose a better response to climate change related to water management.

The section below presents the outputs for Outcome 1, with the split in terms of responsibility and support between UNEP and UNDP.

- Output 1.1. Improved information on climate change risks to water availability in Comoros: Supported by UNEP
- Output 1.2. Increased capacity in assessing and managing changes in water availability and quality: Supported by UNEP
- Output 1.3. Preparation and provision of improved climate information for water resource management policies and spending plans: Supported by UNEP
- Output 1.4. Integration of improved climate information with water resource management policies and spending plans, and other relevant policies: Supported by UNDP
- Output 1.5. Capacity development plan for policy review and design among decision-makers developed based on best known scientific and technical evidence: Supported by UNEP
- Output 1.6. Capacity development plan for policy review and design among decision-makers implemented: Supported by UNDP

A.1.2. Outcome 2. Water supply and water quality for selected pilot communities to combat impacts of climate change improved

The second outcome of the project intervenes in five pilot sites. These interventions were formulated to improve water supply and quality given the expected climate change impacts on existing water resources. Specifically, all rehabilitation and construction efforts undertaken by the project follow international standards regarding design and quality measures (to cope with changing climatic conditions) in order to ensure the sustainability of works. The strengthening of the capacities is undertaken to enable a replication of the project technologies and practices in other sites. The successful introduction of new adaptive techniques were conceived to encourage changes in the relevant legislative and policy frameworks to promote replication of successful interventions, including the development of national standards for adaptation measures. This appears as a rather ambitious indirect impact which still needs to be confirmed. It requires at minimum that the

results of the interventions are documented and disseminated to all key stakeholders (e.g. pilot site communities, decision-makers, sectoral planners and the general public).

Interventions in the five pilot sites include:

- Rehabilitation of existing water supply infrastructure;
- Construction of drinking water storage facilities (cisterns, reservoirs);
- Rehabilitation of simple irrigation systems to ensure adequate water provision to crops;
- Reforestation.

Local capacity is strengthened through extensive training and involvement in the implementation of interventions both at the level of national institutions and at the community level. This is common in such types of project, to facilitate effective management, generate community ownership and ensure that project interventions are sustainable beyond the project lifespan.

The outputs for Outcome 2 supported by UNEP and UNDP are presented hereafter:

- Output 2.1. Construction and rehabilitation of water conservation and adduction infrastructures for household and agricultural uses: Supported by UNDP
- Output 2.2. Technologies to improve water access and quality that mitigate climate change risks are piloted: Supported by UNDP
- Output 2.3. Degraded agricultural and forested lands in pilot sites are the object of sustainable land use plans and vegetative cover increases: Supported by UNEP

A.1.3. Outcome 3. Awareness and knowledge of adaptation good practice for continued process of policy review and development increased.

Outcome 3 collates the results and experiences of Outcome 1 and 2 to pave the way for future adaptation activities in the water sector in the Comoros, for instance in the case of a second phase of the project.

It make sense to collect information on costs and benefits of adaptation measures, best practices in design and implementation, lessons learned on how to remove barriers to adaptation, and on conditions for success. Community members are made aware of the project's lessons through community workshops. Furthermore, lessons learned from this project are linked to the Adaptation Learning Mechanism (ALM)⁹, the Global Adaptation Network (GAN)¹⁰ and the International Waters Learning Exchange and Resource Network (IW Learn¹¹). The project is hence a potential valuable case study for improved water resource management in a Small Island Developing State (SIDS) under changing climatic conditions and could therefore positively influence other similar projects. Adaptation learning is disseminated through the policy mechanisms established in Outcome 1.

Out of the three outputs of Outcome 3, two are supported by UNEP and one by UNDP:

⁹ <http://www.adaptationlearning.net/>

¹⁰ <http://ganadapt.org/>

¹¹ www.iwlearn.net

- Output 3.1. Knowledge management and communications products on lessons learned for decision makers, communities and development partners: Supported by UNEP
- Output 3.2. Learning disseminated through a platform for national learning and sustainability, and integrated in the global water networks (ALM, GAN and Integrated Water Learn): Supported by UNDP
- Output 3.3 Disseminate Comorian experience in knowledge networks and through regular updating of the project's website: Supported by UNEP

Overall, the project improves access to safe drinking water in the most vulnerable regions of the Comoros, with a potential for up-scaling the project in a second phase for instance, under changing climatic conditions. The resulting improved access to drinking water is a key element for the improvement of health status of the Comorian community, therefore attaining better health outcomes and positively affecting some Millennium Development Goals (MDGs)¹². In addition, project interventions contribute directly to the target n°7C of MDG 7, on “halving by 2015 the proportion of the population without sustainable access to safe drinking water and basic sanitation”. The evaluation confirms the relevance of most of the activities, from the project formulation and the logical framework revision processes.

A.2. Indicators

A.2.1. Indicators in place to achieve the project goals

Within the logical framework, Objectively Verifiable Indicators (OVI) are proposed. Their relevance is hereafter analyzed. The logical framework proposes a cross-cutting indicator in order to assess the attainment of the project's objective:

- The degree of vulnerability of men and women living in the pilot sites to climate change risks on availability and quality of water (domestic and irrigation).

Regarding Outcome 1 entitled “Institutions at a national (i.e. Ma-Mwe and ANACM) and community (i.e. UCEA and UCEM) level strengthened to integrate climate change information into water resource management”, the proposed indicators are the following:

- Number of policy documents at the Union decisional level, the island decisional level and the community/local level revised or elaborated to include regulations and provisions that promote gender equitable adaptation in the water sector.
- The number of policy-makers and planners at the Union and island levels using adjusted processes and methods (e.g. collecting water data and climate data, modeling climate trends and monitoring water quality and supply) to develop gender-equitable water management policies that integrate climate change projections.

For “Water supply and water quality for selection pilot communities to combat impacts of climate change improved”, i.e. Outcome 2, there are four proposed indicators:

¹² For instance MDG n°4 on “Reducing child mortality”, n° 6 “Combating HIV/AIDS, malaria and other diseases”, n°7 on “Ensuring environmental sustainability”.

- Overall perception of the population per pilot site on: i) the daily quantity of water accessible for domestic uses ii) the facility of access to this water and iii) the quality of the water used (as per WHO standards) on a rating of 1-4¹³.
- Annual number of cases of typhoid and acute diarrhoea reduced in pilot sites¹⁴
- Number of surviving trees in reforested areas¹⁵.

The predefined indicators in the logical framework for Outcome 3 “Awareness and knowledge of adaptation good practice for continued process of policy review and development increased” are as follow.

- Percentage of men and women (public and decision-makers) aware of climate change vulnerability and adaptation responses (survey-based results).
- Number of newspaper articles, booklets and pamphlets highlighting lessons learned during the project and number of technical documents on lessons learned submitted to knowledge networks

A.2.2. A necessary prudence when interpreting indicators

Globally speaking, the proposed indicators are relevant. They clearly show all aspects to consider in order to effectively measure the progress made. However, some formulations in the indicator title should be rephrased or seem too ambitious, for instance related to the health sector.

It is important not to systematically assimilate the beneficiaries in local or urban areas to the entire population of each locality. With the number of men and women who have access to practices and lessons learnt on vulnerability and adaptation responses, because of the project, it can also be interesting to calculate the rate of new measures in practice, in relation to the size of each community or each locality. This gives a better idea of the impact of the project.

¹³ It was initially proposed in the project document to measure the percentage of population with access to delivery of drinking water, based on surveys (and water meters where applicable) regarding the number of litres of water supplied to households within pilot sites on a daily basis. The indicator has been modified to a more measurable one.

¹⁴ Similarly, this indicator is defined as the percentage reduction in cases in nearby hospitals compared with average levels at the beginning of the project. The percentage reduction should be calculated based on surveys in communities who are unable to get to hospitals and based on hospital records where applicable.

¹⁵ To be measured every 12 months after rehabilitation by running line transects through the restored area.

A.2.3. Proposition to reformulate, add or suppress certain indicators

This part deals with the reformulation of the title of some indicators and their content, and suggests changes for some of them.

Table 4: Comments on the indicators and proposed reformulations

Outcomes/Indicators	Initial formulation	Comments	Reformulation proposal
Reduce the risk of climate change on lives and livelihoods from impacts on water resources in Comoros through demonstration pilot sites	1. The percentage change in vulnerability of men and women living in the pilot sites to climate change risks on availability of clean water.	The factor of quality of water could be added. Rather than defining a percentage change, it would be better to define a degree of vulnerability which is easier to measure	The degree of vulnerability of men and women living in pilot sites to climate change risks on availability and quality of water (domestic and irrigation water).
Outcome 1 - Institutions at a national (i.e. Ma-Mwe and ANACM) and community (i.e. UCEA and UCEM) level strengthened to integrate climate change information into water resource management.	1.1 Number of policy documents revised to include regulations and provisions that promote gender equitable adaptation in the water sector. 1.2. The number of policy-makers and planners using adjusted processes and methods to develop gender-equitable water management policies that integrate climate change projections.	Ma-Mwe, ANACM, UCEM and UCEA should be trained on CC Indicators must be more specific on what methods and processes that should be used in terms of collecting water and climate data, modelling climate trends and monitoring water quality and supply	1.1 Quantity of information (integrated system of gathering and systematic treatment of hydro meteorological and agro meteorological data) on climate risks related to water availability 1.2 Number of policy documents, revised or elaborated to include regulations and provisions that promote gender-equitable adaptation in the water sector. 1.3 Number of policy-makers and planners using adjusted processes and methods in terms of collecting water and climate data, modelling climate trends and monitoring water quality and supply, to develop gender-equitable water management policies that integrate climate change projections.
Outcome 2 - Water supply and water quality for selection pilot communities to combat impacts of climate change improved.	2.1 Percentage increase in the population at each pilot site with improved delivery of drinking water 2.2 Percentage increase in agricultural production at all pilot sites 2.3. Number of cases of hepatitis and typhoid fever reduced in all five pilot sites 2.4 Percentage of land surface covered by forest tree canopy	2.1 The first indicator is very vague: It is not clear how the improved delivery of drinking water is be measured, it lacks specificity and should be more neutral. It should measure (i) the daily quantity of water accessible for domestic uses; (ii) the facility of access to this water; and (iii) the quality of the water used 2.2. It is not specific enough (what agricultural production and on what period?) It could focus on two or three main vegetables 2.3. This indicator is not relevant, because many other parameters count. Even if the project has an impact on water diseases, other reasons out of the scope of the project can influence the measured result. 2.4. This indicator could be more specific to an area	2.1 Overall perception of the population per pilot site on: (i) the daily quantity of water accessible for domestic uses; (ii) the facility of access to this water; and (iii) the quality of the water used 2.2 Average yield for the 2 main vegetable products in the project areas (tomato and Potato in Bandasamlini and tomato and onions in Lingoni-Pomoni) 2.3 Number of surviving planted trees in the reforested areas.

Outcome 3 - Awareness and knowledge of adaptation good practice for continued process of policy review and development increased.	<p>3.1 Number of men and women (public and decision-makers) aware of climate change vulnerability and adaptation responses (survey-based results).</p> <p>3.2 Number of knowledge products generated and disseminated</p>	<p>3.1 It is difficult to measure. The definition of a percentage of men and women aware of climate change vulnerability and adaptation responses could be more effectively assessed and at a lower cost, through interviews and focus-groups.</p> <p>3.2. This indicator is not very specific. Knowledge products should be defined.</p>	<p>3.1 Overall estimation (in percentage) of men and women (public and decision-makers) aware of climate change vulnerability and adaptation responses.</p> <p>3.2 Number of newspaper articles, booklets and pamphlets highlighting the lessons learned during the project and number of technical documents on lessons learned submitted to knowledge networks.</p>
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Given the difficulty in establishing an M&E plan, one should generally seek to simplify the indicators so that they are more easily measurable.

B. Assumptions and risks

B.1. Assumptions

B.1.1. Confrontation of the hypothesis at the design phase of the project and related risks

At the time of the project design, several assumptions were made. It was assumed that:

- Stakeholders such as autonomous island's communities, UCEA, UCEM, NGOs and CGEs would remain committed to implementing baseline activities complemented by the additional interventions the project aims to implement.
- Pilot sites are best placed to demonstrate the benefits of measures to adapt to climate change.
- The major implementing agents at the community level (extension workers and community workers) remain committed to the project during the entire duration.
- Climate change concerns are not overshadowed by other emergency matters or urgent projects.

These assumptions were formulated taking into account the fact that there might be some problems at these levels¹⁶. The MTR was the opportunity to study the situation, for example the risks identified at the start, and where the project stands at mid-term. Most risks are organizational (that is to say, linked to institutional and individual capacities). In summary, the following nine key risks have been reviewed:

- 1) Involvement and co-operation of stakeholders to provide the project team with data;
- 2) Relationship among stakeholders as regards roles in the project;
- 3) Political will to support the project;
- 4) Co-ordination among implementing and executing agencies;
- 5) Cost-effectiveness of adaptation measures implemented in the water sector (i.e. rehabilitation/construction of infrastructure);
- 6) Capacity within relevant ministries/insufficient qualified human capacity;

¹⁶ Annex 1 of the project document lists the potential risks.

- 7) Adoption by communities of reforestation activities.
- 8) Degree of commitment from communities.
- 9) Size of the water infrastructure constructed by the project in relation to sustainable consumption and recharge.

B.1.2. A continuous risk management

Risk mitigation measures are mentioned in the appendix on risks in the project document. With regard to risk management in the implementation of the project, the MTR mission realized the difficulty of implementing measures to mitigate the identified risks. It is necessary that the PMT continues to do a regular monitoring of these risks and report on their level in reports produced periodically, especially given the fact that important construction work just started (in May 2014).

The organizational risks are most sensitive and likely to occur. The non-acceptance risk of the proposed technical solutions by local populations was somehow underestimated, for instance for the adoption of the irrigation systems, and more efforts are needed to raise awareness among farmers.

The second period of the project is likely to face the same risks as those anticipated. Their essentially political and organizational nature leads to recommend stronger involvement from the PMT on these issues, with support on a case by case by UNDP and UNEP. The delays faced by the project are common for such type of projects, and are limited in importance if not in time. To the opposite, the budget shortage risks were not properly anticipated and a solution must be found to overcome the current situation. The next sections of the document will address this serious issue.

C. Project Implementation

This section presents the level of implementation of the project for each objective from the project document, and for each indicator chosen to monitor the project. Difficulties encountered are detailed for each objective, with recommendations to overcome them.

Global status report of the project								
Outcome	Indicator	Output	Activities	Partner	Implementing rate			Observations
					Activity	output	Outcome	
Outcome1. Improving institutional capacity at national and community level to integrate climate change information into water resource management.	1.A Quantity of information on climate risks related to water availability	1.1 Implementation of an integrated system of gathering and systematic treatment of hydro meteorological and agro meteorological data.	1.1.1a Definition and adoption of monitoring parameters of water resources and climate.	UNDP, ANACM/ WMO, DGEF	100%	100%	55%	- Journey in Ivembeni with partners to validate monitoring parameters of water and climate
			1.1.1b Identification, in collaboration with the ANACM, of equipment requirements and positioning sites of stations.	UNDP, ANACM, DGEF	100%			- Working sessions with partners to validate the ToR, records Bidding, bid evaluation and selection of suppliers. -Identification and negotiation of land used for the installation of equipment with landowners and village leaders. - Acquisition and installation of measuring equipment at national level including 02 stations in Grande Comore, Anjouan and 02 to 01 Moheli. - Exchanges made with regional and international meteorological institutions allowed to retain ACMAD (Niamey-Niger) for data conversion -The lack of operational

			1.1.2 Purchase and installation of measuring equipments for hydro-meteorological and agro-meteorological parameters.	UNEP, UNDP, ANACM, DGEF, Ministries of Finance, Regulatory Authorities Public Procurement, the village chief and Landowners	100%		equipment did not allow ACMAD to respond to the project request on data conversion. -Following this failure, the project and ANACM eventually identify at the national level, a resource person able to do manual data conversion. -Development and validation of ToRs and recruitment of national consultant for the conversion of existing meteorological data. The data existing in the microfilm at ANACM were converted into usable digital format.
			1.1.3 Conversion of existing data on micro-files in usable format.	UNEP, UNDP, ANACM, ACMAD-Niger, Meteo Madagascar, WMO, DGEF	100%		
			1.1.4 Analyze available climate data to validate the models	UNDP, ANACM, DGEF	?		Some activities deferred and/or cancelled because of the sessions organized by the project and its partners, including the exchange of emails with the UNDP (Mark Tadross) regional office, due to the lack of reliable data to achieve the objective
			1.1.5 Develop data collection, conservation and analysis systems in each island	UNEP, UNDP, ANACM, DGEF, Ministries of Finance, Regulatory Authorities Public Procurement	100%		1. Working sessions with stakeholders to validate the ToR, records Bidding, bid evaluation and selection of suppliers 2. Purchase and acquisition of server and computers done under activities 1.1.2

	1.B Number of policy documents, revised or elaborated to include regulations and provisions that promote gender-equitable adaptation in the water sector.	1.2. Elaboration and implementation of a development plan for monitoring capacities and management of changes in water availability and quality.	1.2.1 Analysis of stakeholders and evaluation of needs for the elaboration of a development plan for monitoring capacities and management of changes in water availability and quality.(ANACM, UCEA, UCEM)	State, national and insular institutions in charge of water management, communities, UNDP, ANACM, UCEA, UCEM, AUEM, AUFD, CGE, DGEF,	100%	70%	<ul style="list-style-type: none"> 1. Awareness meetings and stakeholder identification 2. Meetings and contacts with stakeholders to identify their roles in water management. The stakeholder analysis concerned partner cities, but also all the actors involved in the management of water resources in the Comoros 3. Meetings with stakeholders to identify their needs for capacity building; 4. Regional workshops (Mwali Ndzouani and Njazidja) to enrich and validate the draft report needs assessment for capacity development. 5. Integration of comments and finalization of the evaluation report 6. Dissemination of the final report to all the technical and financial partners.
			1.2.2 Training of ANACM staff on climate data collection and analysis and on climate model downscaling	ANACM, UNDP, DGEF	70%		<ul style="list-style-type: none"> 1.The terms of reference were developed and validated by the partners. 2. The recruitment process of the expert to provide training is underway (launch of the call for proposals was launched on the website of UNDP and the national media) 3.The trainer consultant is recruited
			1.2.3 Training of MAMWE staff on integration of climate data and on water related climate risk management	Ma-Mwé, UNDP, DGEF	70%		<ul style="list-style-type: none"> 1. The terms of reference were developed and validated by the partners. 2. The recruitment process of the expert to provide training is underway (launch of the call for proposals was launched on the website of UNDP and the national media) 3.The trainer consultant is recruited
		1.3. Preparation and provision of improved climate information for water resource management policies and spending plans	1.3.1 Undertake hydrological modelling on the three islands (availability, recharge and exploitation)	UNDP, UNEP, ANACM, DGEF	70%	70%	<ul style="list-style-type: none"> 1. Session work with partners to identify technical measurement parameters and choice of materials, 2. Order launched, 3. Material being delivered 4. Approved material 5. Installation scheduled for second quarter of 2014

	1.C Number of policy-makers and planners using adjusted processes and methods in terms of collecting water and climate data, modelling climate trends and monitoring water quality and supply, to develop gender-equitable water management policies that integrate climate change projections.	1.4. Integration of improved climate information with water resource management policies and spending plans, and other relevant policies (UNDP)	1.4.1 Analysis of sectoral policies that facilitate or hinder community resilience		40%	25%	<p>1. Consultation on the analysis of sectoral policies has been postponed by decision of the Steering Committee pending the validation of the strategy and national program of drinking water and sanitation by the PAEPA project funded by the ADB.</p> <p>2. The project participated to the national workshop to present the strategy and has submitted written comments to improve the document.</p> <p>3. The process to recruit a specialist international consultant and a national adaptation legal consultant is underway to include measures to promote equitable and responsive adaptation to gender in the water sector.</p>
			1.4.2 Develop policy notes showing impacts, costs, benefits of resilience in the three islands				<p>The development of policy briefs was extended in 2014 until the adoption of the national strategy and program of drinking water and sanitation.</p> <p>Pending validation of the strategy, the TOR for the recruitment of a national economic consultant are developed and validated.</p>
			1.4.3 Revise the water Code and regulations	DGEF, UNDP, PAEPA, GDEMW, AFD	70%		<p>1. Working sessions were held with project partners to decide in advance the actions that each partner should do to avoid duplication and then the improvements to appropriate new code developed by the PAEPA including aspects of climate change.</p> <p>2. The project has made its contributions by participating in workshops and submitting written comments to improve the new Water Code and its implementing regulations.</p> <p>3. The project developed and validated in national workshop regulations texts (constitution and bylaws Committees Water Management) to revitalize the village management committees of the water.</p> <p>4. A national consultant was</p>

								recruited in order to verify compliance and enforceability of these texts. 4. The process of extension of regulations texts is underway to sensitize stakeholders involved in water management on the new provisions.
			1.4.4 Develop recommendation on the changes to national budget or water prices and tariffs, including on cost recovery.	DGEF, UNDP, Ma-Mwé, GDEMW				Working sessions with stakeholders to discuss the feasibility of the study. Following the discussions, the participants decided to postpone the consultation hearing the findings of the investigations by the PAEPA studies on water code including the financing and tariff principles of public service water and sanitation part.
			1.4.5 Review and revise development legislation and policy, the environmental action plan and the poverty reduction strategy					Activity scheduled for first quarter of 2015
			1.4.5b Training on the recovery of costs related to hydrological infrastructure					Activity scheduled for fourth quarter of 2014.
		1.5. A capacity development plan for policy review and design among decision-makers, developed based on best known scientific and	1.5.1 Develop a capacity development plan for policy revision and planning related to adaptation (following 1.2.2)			0%		Activity scheduled for third quarter of 2014.

		technical evidence (UNEP)	1.5.2 Train planners and decision-makers on revisions and proposed changes to existing legislation and regulations					Activity scheduled for fourth quarter of 2014.
		1.6. Implementation of the capacity development plan for policy review and design among decision makers (UNDP)	1.6.1 Establish an intergovernmental and inter-ministerial process for revising policies related to water			0%		Activity scheduled for fourth quarter of 2014.
Outcome 2: Water supply and water quality for selection pilot communities to combat impacts of climate change improved.	2A Overall perception of the population per pilot site on: (i) the daily quantity of water accessible for domestic uses; (ii) the facility of access to this water; and (iii) the quality of the water used (based on standards defined by GHO and MDO)	2.1 Facility building and rehabilitation for water storage and piping for agricultural and domestic purposes.	2.1.1 Feasibility study for the rehabilitation of Moroni's main water line and system.	Ma-Mwé, beneficiaries communes, UNDP, DGEME, DGEF, UNEP Commissioner in charge of water,	100%	70%	65%	<ul style="list-style-type: none"> 1. Briefings and awareness with the beneficiaries. 2. Working session with the partners for the preparation of the mission 3. Budgets Revised upward from the original budgets to reflect actual costs. 4. Study conducted and included in the ODA. 5. Awareness meetings and negotiations with the municipality of Vouvouni on the location for the establishment of the basis of life. 6. Negotiation with the commune of Vouvouni on the implementing modalities of development work and securing the base of life. 7. Implementation of planning work and securing the base of life Vouvouni. 8. These studies have a global descriptive vision of works and investment needed to finally settle the issue of sustainable drinking water supply of the town of Moroni

			2.1.2 Environmental and social impacts assessment for construction and rehabilitation works on the three islands and Feasibility study for the reservoirs and harvesting structures in Anjouan.	Beneficiaries at the commune level, UNDP, GDEMW, DGEF, UNEP, UCEA, EDA, CGE Commissioner in charge of water	100%		<ol style="list-style-type: none"> 1. Briefings and awareness meetings with the beneficiaries. 2. Working session with the partners for the preparation of the mission 3. Negotiation with the communities of Lingoni Pomoni on the establishment of a common Supply Drinking Water (SDW) network 4. Budget revised upward from the original budgets to reflect actual costs. 5. Negotiation with communities, landowners on spaces reserved for the construction of water storage tanks, filters, crossing water pipes and the base of life. 6. Development and validation of the ToR, issuing calls for proposals, bid analysis and selection of office and signing contract. 7. Monitoring and support of the mission field 8. These studies have a global descriptive vision of works and investment needed to finally settle the issue of sustainable water supply for agricultural and domestic purposes in the watershed area Nioumakélé and Lingoni / Pomoni
			2.1.4 Feasibility study on the implementation of a water piping network for drinking and agricultural purposes in Moheli.	Communes beneficiaries, UNDP, GDEMW, DGEF, UNEP, UCEM, CGE, Commissioner in charge of water	100%		<ol style="list-style-type: none"> 1. Briefings and awareness meetings with the beneficiaries. 2. Working session with the partners for the preparation of the mission 3. Negotiation with the communities of Mbatse and Hoani on the establishment of a common SDW network 4. Negotiation with communities, landowners spaces reserved for the construction of water storage tanks, filters, crossing water pipes and the base of life (warehouse Hoani). 5. Development and validation of the ToR, issuing calls for proposals, bid analysis and selection of office and signing

								<p>contract.</p> <p>4. Monitoring and support of the mission field</p> <p>5. Budget revised upward from the original budgets to reflect actual costs</p> <p>6. These studies have a global descriptive vision of works and investment needed to finally settle the issue of sustainable water supply for agricultural and domestic purposes in the watershed area Mbatse/Hoani</p>
			<p>2.1.5 Feasibility and ESIA for the rehabilitation and construction of water conservation structures for agriculture in Bandassamlini Sangani and Hamalengo (Grande Comore).</p>	<p>UNDP, GDEMW, DGEF, UNEP, communities, Communes, Commissioner in charge of Water</p>	100%			<p>1. Briefings and awareness meetings with the beneficiaries.</p> <p>2. Working session with the partners for the preparation of the mission</p> <p>3. Development and validation of the ToR, issuing calls for proposals, bid analysis and selection of office and signing contract.</p> <p>4. Monitoring and support of the mission field</p> <p>5. Negotiation with communities, landowners on spaces reserved for the construction of the catchment area, crossing water pipes and the base of life.</p> <p>6. Budget revised upward from the original budgets to reflect actual costs</p> <p>7. These studies have a global descriptive vision of works and investment needed to finally settle the issue of sustainable water supply for agricultural and domestic purposes in the watershed areas of Bandasamlini, Sangani, Hamalengo and Diboini</p>
			<p>2.1.6 Conduct rehabilitation works for the Moroni water network.</p>	<p>UNDP, DGEF, Ma-Mwé, GDEMW</p>	70%			<p>1. Working sessions with partners to decide the provision by the ACCE project MAMWE of pipes and other hydraulic equipment from Chinese donations to the SDW-funded project;</p> <p>2. Working sessions with partners on the implementation of SDW work (work performed governed by</p>

								<p>MAMWE) strategy.</p> <p>3. Preparation, Adoption and signing of a Memorandum of Understanding between the DGEF and MAMWE and approved by the Minister supervising the general conditions work of the SDW Moroni and its surroundings.</p> <p>3. DAO split in three lots is finalized :</p> <p>1. Purchase of equipment issued. Launching orders</p> <p>2. Rental gear released Bid evaluation and contract award made</p> <p>3. Civil engineering published Bid evaluation and contract award made.</p> <p>4. Welding pipe butt underway at the site</p> <p>5. Purchase contracts of pozzolan and delivery concluded</p>
			2.1.6b Conduct rehabilitation works for Bandassamlini and surroundings.	DGEF, UNDP, RACP, community of Diboini,	50%			<p>1. Negotiation with communities Diboini for the provision of the crater and the opening of an access trail and the location of the base of life and the passages of water pipes.</p> <p>2. Works of cleaning of the access track to the crater;</p> <p>3. Negotiation with the community Diboini for the allocation of a site already identified for the supply of land (fill) to develop the crater.</p> <p>4. Preparation, publication of bidding and evaluation of bids in progress</p>
			2.1.6c Acquisition and formation of drip irrigation kits in Bandassamlini and Hamalengo and network connected to DECVAS tank	DGEF, UNDP, beneficiaries	80%			<p>1. Working sessions with partners to decide to buy irrigation equipment for the operation of existing water infrastructure.</p> <p>2. Control, acquisition and installation of 330 irrigation kits drip 200M2. Training of thirty farmers trainers in Grande Comore.</p>

								Installation of a drop by drop kit 3. Start of construction of a dozen micro basins on the sites of the catchment area of Bandassamlini and the tank DECVAS in Hamalengo.
			2.1.7 Conduct rehabilitation and piping works in Anjouan.	DGEF, UNDP, RACP, CGE of Nioumakélé-bas, UCEA,	70%			1. Working sessions with stakeholders to reflect on the type of action to take after finding the non-availability of water resources of the river Sadapoini. 2. Meetings with the CGE villages of Nioumakele to decide the type of intervention needed to improve the water supply of the said areas; 3. Working sessions with stakeholders to validate the choice of beneficiary communities on the rehabilitation of the supply line from the main water tank of the five villages Nioumakélé low-supply network. 4. Allocated market and work in progress
			2.1.8 Conduct water mobilization and conservation works in Moheli.	DGEF, UNDP, RACP	70%			cf 2.1.4 Preparation, publication of bidding and evaluation of bids in progress Contract awarded and work in inception phase
			2.1.10 Develop indicators and targets to measure adaptation in the water sector					This should be consolidated in the second phase of the project.
		2.2 Technologies to improve water access and quality that mitigate climate change risks are piloted	2.2.1 Establish and train a water management committee under supervision of MAMWE in Moroni	DGEF, UNDP, Ma-Mwé, Communes beneficiaries	50%	0%		1 Working session with MAMWE and local beneficiaries on fountains management; 2 Meeting with MAMWE to prepare training of fountains managers standpipes.;

								<p>3 Meeting with MAMWE to validate the ToR on the training of managers fountain terminals.;</p> <p>4. Launching call for applications at national level, receiving 10 nominations and evaluation is underway.</p>
			2.2.1b Assess previous experience on water treatment and propose adapted and replicable technologies for water quality control and treatment.	DGEF, UNDP, GDEMW, Ma-Mwé, UCEA, UCEM,	50%			1 Working sessions with operators to identify water purification technology of water used;
			2.2.2 Train MAMWE technical staff in charge of operations and maintenance (chlorination, pump maintenance, leak detection)					Activity postponed to the second quarter of 2015
			2.2.3 Capacity building of local stakeholders in water management for a sustainable management of hydraulic facilities either restored or built.	DGEF, UNDP, GDEMW, MaMwé, AFD, PAEPA, ONG 2mains, UCEA, UCEM, DREME, CGE, UNICEF	100%			<p>1 session work with partners to launch the modality of revision activities of the CGE regulations for their revitalization.;</p> <p>2 Meeting with the UCEA, UCEM CGE and to revise existing regulations (statutes and regulations);</p> <p>3 A national workshop validated the revised regulations and are disseminated to committees of water management;</p>
			2.2.4. Introduce technologies for water potabilization and treatments at local level, including ecological sanitation systems (Mbatse, Hoani and Lingoni-Pomoni)	DGEF, UNDP, Belgian cooperation, beneficiaries Communities	80%			<p>1. Working sessions with partners to decide on the treatment and water purification technology from ecological wastewater treatment systems;</p> <p>2 Technical studies for the construction of filters were carried out by the project team;</p> <p>3. Installation sites of ecological filters are identified and negotiated with communities Mbatse / Hoani Mwali and Lingoni / Pomoni to Ndzoauni.</p>

			2.2.4b Measures of water quantity and quality in pilot sites	DGEF, UNDP, UDC, Ma-Mwé	40%			1. Working sessions with partners to decide on a strategy for measuring water quality; 2. Analysis of water quality in rivers Hoani Moheli, Daji and Lingoni Anjouan is performed and results are available 3. Measures on TP5 and ONU4 Grande Comore are planned in the second quarter 2014.
2. C Number of surviving planted trees in the reforested areas.		2.3. Degraded agricultural and forested lands in pilot sites are the object of sustainable land use plans and vegetative cover increases	2.3.1a Finalize the state of reference on agricultural planning and perform participatory species selection for reforestation works	DGEF, UNDP, UNEP, farmers from intervention sites of the project	100%	75%		1 Working sessions with partners to stop the development strategy of the reference state planning and participatory crop species selection for reforestation.; 2 Development and validation of ToRs of the consultation on the baseline and participatory selection of species for reforestation.; 3. Development and availability of a report on the state of the references and on participatory selection of resilient species to climate change have been developed at each island. 4. Validation with farmers intervention sites of project status reports and the references on participatory breeding species resilient to climate change
			2.3.2 Elaborate a land use plan in each site.			100%		

			2.3.3 Train and support communities during reforestation using an agro-sylvo-pastoral approach that promotes resilience.	DGEF, UNDP, UNEP,	60%		<p>1. Formation of beneficiary communities intervention sites of the project on reforestation techniques depending on the approach agro-forestry-pastoral.</p> <p>2. Eight groups of land use have been created in the intervention sites project to support the implementation of sustainable land management plan.</p> <p>3. A Memorandum of Understanding was developed and negotiated with the island authorities and the CRC to sustain all field activities.</p>
			2.3.4 Participatory reforestation within communities in the framework of the national campaign "1 Comorian, 1 tree".	DGEF, UNDP, UNEP, Union Government and the Autonomous Islands National Army Development, National Police, beneficiaries Community, Justice, Media	60%		<p>1 Information and awareness Meetings of the beneficiary communities on the role of trees in climate regulation and organization of days reforestation ;</p> <p>2. Intervention in local radio and national television about the effects of climate change and adaptation measures.</p> <p>3. Community training sessions on techniques for reforestation site preparation (technical picket ground by spot cleaning).</p> <p>4. Process conducted on the three islands in collaboration with the Comorian State</p> <p>5. With the participation of the Head of State, Vice Presidents, three Governors Island, members of the government of the Union and islands, The National Army of Development, the National Police and the beneficiary communities, 12,000 seedlings were planted in Grande Comore, Moheli 3000 and 4000 to Anjouan;</p> <p>6. Meetings awareness of beneficiary communities for the establishment of management structures for the maintenance of reforested</p>

								areas, surveillance and the fight against bush fires; 7. National Workshop on the sustainability of reforestation organized. Following this meeting the Attorney General signed a requisition authorizing the Commander of the gendarmerie and the Director General of Police to establish offenses related to environmental degradation, including fires in natural and planted forests, deforestation illegal, especially plant species fully protected and any other acts which reached the marine and terrestrial environment.
	2D. Average yield for the 2 main vegetable products in the project areas (tomato and Potato in Bandassamlini and tomato and onions in Lingoni-Pomoni)		2.3.5 Training and support to producers towards the sustainable and resilient land use for agriculture (Bandassamlini and Nioumakele).	DGEF, UNDP, UNEP, DRE, Trainers peasants	60%			One Hundred twenty five farmers were trained in the intervention sites of the project on sustainable management techniques and resilient agricultural land.
Outcome 3: Awareness and knowledge of adaptation good practice for continued process of policy review and development increased.	3A. Overall estimation (in percentage) of men and women (public and decision-makers) aware of climate change vulnerability and adaptation responses.	3.1.Knowledge management and communications products on lessons learned, for decision makers, communities and development partners	3.1.1 Compile project results and identify potential barriers to their replication.	DGEF, UNDP, Communities,		60%	60%	Reports on lessons learned for all project activities
			3.1.2 Launch and disseminate knowledge products and communications products	DGEF, UNDP, Communities,	40%			1. Production and dissemination of leaflets on various sites reforestation project objectives and reforestation; 2. Synoptic views of sustainable development Njazidja Ndzuwani and Mwali were developed in collaboration with the team of UNDP; 3. Strategy and communication plan has been developed and validated; 4. The project logo was designed, validated and disseminated; 5. Two hundred and fifty pamphlets prepared and published at the launch of the

							<p>project in 2012 and nearly 100 flyers made and published during the days of reforestation Bandasamlini in Grande Comore and Mbatsé Hoani, Moheli in 2013</p> <p>6. Over 500 tee shirts distributed at project events containing slogans event previously defined as a score of banners.;</p> <p>7. An information and awareness report of 05 minutes 36 seconds on the theme 'Adapting to climate change in order to better conserve water in the Union of Comoros 'is achieved.</p> <p>8. A wall calendar project, 2013 edition</p> <p>9. A training film in Comorian language, the technical installation and operation of an irrigation drip kit 200M2.</p>
	3B. Number of newspaper articles, booklets and pamphlets highlighting the lessons learned during the project and number of technical documents on lessons learned submitted to knowledge networks.	3.2. Learning disseminated through a platform for national learning and sustainability, and integrated in the global water networks (ALM, GAN and Integrated Water Learn)	3.2.1 Create a parliamentary working group and organize seminars on risks posed by climate change.	???			
			3.2.2 Organize national workshop and 3 islands workshops for the dissemination of project lessons and results.				
			3.2.2a Inception workshop.		100%	20%	
			3.2.3 Organize community workshops on the project.				
			3.2.4 Publish workshop reports and distribute documents.				
			3.2.5 Publish a monthly newsletter, newspaper articles, pamphlets and other documents on the project.	DGEF, UNDP, UNEP	60%		1. Development and implementation of a communication strategy tailored

							2. A newsletter "Inforapide" special reforestation in Bendasamlini, produced and published electronically by 2013 and about fifteen articles published in national media, the MAVUNA newsletter vice presidency, Facebook page and UNDP Comoros the website of the UNDP (www.km.undp.org) 3. A special edition on climate change, including the achievements of the project is available in the magazine Al-Watwan
			3.2.6 Intervene through local media (radio, TV).	DGEF, UNDP, UNEP,	60%		Radio and television broadcasts on the launch of the project, the development of project activities at each steering committee, reforestation activities and sustainability, including the management of bushfires has been made in each of the islands.
		3.3 Disseminate Comorian experience in knowledge networks and through regular updating of the project's website	3.3.1 Create, validate and launch project website.	DGEF, UNDP, UNEP	???	15 98%	A national consultant Webmaster was recruited to design a project website, which also includes the aspect of Knowledge Management The website is being finalized
			3.3.2 Compile information and technical documents and submit them to various networks	UNDP, UNEP,	60%		1. Comprehensive information and technical project documents are available to be issued once the site operational web. 2. Responsible for the newly recruited communication will be responsible for supplying the site regularly in collaboration with the project team.
			3.3.3 Develop a document summarizing project lessons for publication in an academic journal and presentation at an international conference				Activity scheduled for 2015.

3.1. Outcome 1: Improving institutional capacity at national and community level to integrate climate change information into water resource management.

i. State of progress

Output 1. Information on climate change risks to water availability in Comoros improved

The purchase and installation of measuring equipments for hydro-meteorological and agro-meteorological parameters was done in early 2014. There was a difficulty to find a center able to convert existing data on micro-files in usable format, so the PMU made the decision to do the conversion manually with national consultants. These products related to this output are available since February 2014.

The analysis of climate data to validate the models and the development of data collection, conservation and analysis systems in each island was postponed until hydrological and climate data is available in sufficient amounts, i.e. time series. The ANACM is working on a plan to deliver the output by the end of 2014. However, It is uncertain how this will be done to this day.

Output 2. Capacity to assess and monitor changes in water supply and quality (given climate change projections) developed.

The analysis of stakeholders and evaluation of needs for the elaboration of a development plan for monitoring capacities and management of changes in water availability and quality is developed: three work shops were held in July 2013 for this output.

However, some remaining training activities with ANACM, Ma-Mwe, UCEA and UCEM are postponed and should start during the third quarter of 2014.

Output 3. Preparation and provision of improved climate information for water resource management policies and spending plans.

As explained above, instruments were purchased in order to improve climate data collection.

Output 4. Integration of improved climate information with water resource management policies and spending plans, and other relevant policies

Few activities have been held to date for this output: some expenditures have been made, as well as consultations and linkages with PAEPA.

Output 5. Capacity development plan for policy review and design among decision-makers developed based on best known scientific and technical evidence-base

The development of a capacity development plan for policy revision and planning related to adaptation was postponed after the late completion of the capacity assessment report. This activity will be conducted in house by the Chief Technical Advisor, in order to finalize the capacity development plan in light of recent AfDB and AFD work on similar activities.

As for the training of planners and decision-makers on revisions and proposed changes of

the existing legislation and regulations, a portion of this activity is being accomplished through the work of the UNVs and project team, who have developed regulations and rules for water user groups, and are now submitting them to consultations among local communities and decision-makers. When the new water code will be available (it is under development with the support of the AfDB) a formal training program and awareness raising activities will be deployed.

Output 6. Intergovernmental and interministerial process for revision of water policies

This output still needs to be achieved.

ii. Indicators

The most representative indicators of improved institutional capacities are those related to Output 1, including the number of policy documents with new or revised regulations and provisions. The corresponding actions have so far been developed with delays.

It appears that this first phase went well and that the actions envisaged in the context of Output 1 are now engaged.

Table 5: State of indicators corresponding to the outcome 1, July 2014

Indicators	Target value at the end of project	Current state (beginning of July 2014)
1.1 Quantity of information on climate risks related to water availability	Implementation of an integrated system of gathering and systematic treatment of hydro meteorological and agro meteorological data.	All activities are done
1.2 Number of policy documents, revised or elaborated to include regulations and provisions that promote gender-equitable adaptation in the water sector.	The Water Act is revised and includes regulations and provisions that promote gender-equitable adaptation One water programme with priority actions by 2030 is elaborated by the end of the project.	Analysis of stakeholders and evaluation of needs for the elaboration of a development plan is done, but trainings are still remaining
1.3 Number of policy-makers and planners using adjusted processes and methods in terms of collecting water and climate data, modelling climate trends and monitoring water quality and supply, to develop gender-equitable water management policies that integrate climate change projections.	Water Acts at the local level in the pilot sites in Moheli and Anjouan are revised to include regulations and provisions that promote gender equitable adaptation 7 policy makers and planners at Union level, 5 in MaMwe; 10 in ANACM; 3 in the Directorate of Environment in Moheli; 5 in the Directorate of Environment in Anjouan; 2 in UCEM and 7 in UCEA,	Consultation on the analysis of sectoral policies has been postponed by decision of the Steering Committee pending the validation of the strategy and national program of drinking water and sanitation by the PAEPA project funded by the ADB. A lot of activities are scheduled for this year

iii. Difficulties

Improving institutional capacity to respond to climate change, a time-consuming process

Awareness of the importance of institutional capacity in adaptation to climate change is always and repeatedly necessary before committing actions that actually increase institutional capacity. Awareness is a delicate and time-consuming preliminary step that

should not be underestimated. Therefore, the results are still not completely achieved, but efforts are encouraging.

The difficult choice of the scale

The results of Outcome 1 allow taking into account local geographical and socio-economic characteristics in the implementation of the different actions, and enable appropriate agro-meteorological predictions. These are better suited at a local scale and are therefore more effective.

Nevertheless, the coordination of these actions is likely to be unsure after the end of the project, in terms of sustainability, at local scale and even at national scale. Developing a national policy framework in order to deal with climate change (e.g. a National Climate Change Strategy) should be the main lever to increase the institutional capacity of the country, which is not the case at this stage. This process at the national level would ensure a long-term sustainability strategy for the project by enabling pilot sites to further their activities and by replicating them in the country.

iv. Recommendations

Continue information campaigns and develop the most effective actions at the local level

As described in the Project Document, activities such as putting in place rapid alert systems and localized weather reports (with the training of two journalists by ANACM), strategies for recovery of the affected areas and mapping of vulnerable areas remain essential. This concerns both awareness raising and eventual climate disaster prevention.

Integrating local actions at national level

It is necessary to strive at central level the local results and capitalize on these gains. This requires a flow of information from local communities to the governmental level, primarily the DGEF, but also a stream of instructions and recommendations of the DGEF to communities. In other words, capitalization and share of activities undertaken at the local level is needed.

Maximum use of the tools such as NAPS

Institutional capacities involve a legislative framework for adaptation to climate change. In the longer term, it is necessary to develop more efficient and more focused regulatory tools on adaptation to climate change. So far, at the national level, the main document on adaptation is the NAPA, but it would make sense to strengthen the national institutions, for instance by starting a National Adaption Plan (NAP)¹⁷ process.

b. Outcome 2: Water supply and water quality for selection pilot communities to combat impacts of climate change improved

Output 1. Facility building and rehabilitation for water storage and piping for agricultural and

¹⁷ http://unfccc.int/adaptation/workstreams/national_adaptation_plans/items/6057.php

domestic purposes.

All the preparatory work has been done. The work started in May 2014 and field visits during the MTR enabled to see work under progress.

Output 2. Technologies to improve water access and quality that mitigate climate change risks are piloted (UNDP)

Work is underway to develop internal rules and procedures for water user groups and some awareness raising meetings have taken place in project sites. Other activities will be conducted once the work under progress for the output 1 (under Outcome 2) is completed.

Output 3. Degraded agricultural and forested lands in pilot sites are the object of sustainable land use plans and vegetative cover increases

Most activities for this output are finalized, except the training programs. It must be added that the project was able to co-finance two activities under this outcome with the support of the Flemish cooperation, for a total budget of circa 150,000 USD: it enabled introducing local water treatment technologies, such as localized ecologically-based water purification systems, and supporting the training and support of local agricultural producers in the sustainable and resilient use of agricultural land..

i. Indicators

These indicators reflect the improvement of water quality and quantity for the population.

Table 6: State of indicators corresponding to outcome 2, July 2014

Indicators	Target value at the end of project	Current state (beginning of July 2014)
Overall perception of the population per pilot site on: (i) the daily quantity of water accessible for domestic uses; (ii) the facility of access to this water; and (iii) the quality of the water used	Raise the rating to 2 for all three criteria across all project sites.	Less than 50% of the population of Moroni has access to water. It is even worse in other targeted areas
Average yield for the 2 main vegetable products in the project areas (tomato and Potato in Bandasamlini and tomato and onions in Lingoni-Pomoni)		Bandasamlini: tomato average yield is 440kg per 1000 plants, and potato average yield is 326kg per 100kg of seeds. The average consolidated yields are 1205kg of tomatoes per 1000 plants and 333kg of onions for Lingoni-Pomoni
Number of surviving planted trees in the reforested areas.	2 sites of 95 ha each to be reforested (Bandasamlini & Lingoni-Pomoni). At 1,000 trees/ha = 180,000 trees. Target is an 80% survival rate which gives 144,000 living trees by the end of the project.	The project planted 12 000 plants in Grande Comore, 3000 in Moheli and 4 000 in Anjouan. A meeting took place to raise awareness on the need to put in place structures for management of reforested areas and for control and monitoring of bushfires. At 1'000 trees/ha this means 19 ha have been planted so far.

ii. Difficulties

Initial under estimation of some costs

The major difficulty for this outcome is related to the first output. The rehabilitation and/or new construction of water storages and piping for agricultural and for domestic purposes in urban areas is costly. There are high financial risks related to such investment, and the project had to deal with initial under estimation of the costs related to this output.

iii. Recommendations

Finalize the work on rehabilitation and new construction of water pipes

Even though the rehabilitation led to more expenditures than originally thought, it is important to finish these activities and provide the services to the beneficiaries, because expectation is high. Two options are proposed to overcome this issue: either adjust the project activities, by downgrading some remaining unimplemented project activities (no-cost option), or increase the current project budget by circa 400,000 USD to finalize the rehabilitation while implement in parallel the other remaining project activities.

Strengthen awareness of the economic consequences of climate change

Climate change has economic impacts that the Comorian Government must not neglect. The destruction caused by floods, heavy rains, droughts and coastal erosion due to sea level raise, cause reconstruction costs to be taken into account in the allocation of the state budget. Such awareness would lead to an allocation of more financial resources for projects of adaptation to climate change, or transversely into sectoral policies.

Adaptation must finally be seen as a lever to fight poverty. To this end, training and seminars can be organized to strengthen economic expertise on this subject.

Initiate the development of a national strategy for adaptation and mitigation to climate change

A climate change strategy should be clearly defined and provide more visibility to donors. It will result in greater efficiency in the use of financial resources and a framework that encourages donors to allocate more funds for the adaptation and mitigation projects. While the project activities do not plan to develop such a strategy, it would make sense, via the project, to sensitize the national authorities in order to initiate some preliminary thoughts on the rationale of such a strategy to contribute to the scaling-up of the project results.

Synergies between the different funded projects can be searched in order to increase the efficiency of investment.

c. Outcome 3. Awareness and knowledge of adaptation good practice for continued process of policy review and development increased.

i. State of progress

Output 1. Knowledge management and communications products on lessons learned, for decision makers, communities and development partners

This output is about identifying potential barriers to their replication, launching and disseminating knowledge products and communications products.

Output 2. Learning disseminated through a platform for national learning and sustainability, and integrated in the global water networks (ALM, GAN and Integrated Water Learn)

This product is delivered through workshops for all interested stakeholders and the publication of a monthly newsletter, newspaper articles, pamphlets and other documents on the project.

Output 3. Disseminate Comorian experience in knowledge networks and through regular updating of the project's website

It describes the creation of a website where information and technical documents is compiled and submitted to various networks.

ii. Indicators

These indicators indicate the way the project is going to impact population through several dissemination channels.

Table 7: State of indicators corresponding to outcome 3, July 2014

Indicators	Target value at the end of project	Current state (beginning of July 2014)
Overall estimation (in percentage) of men and women (public and decision- makers) aware of climate change vulnerability and adaptation responses.	By the end of the project, at least 30% of the population within pilot sites and 50% of decision-makers have better knowledge on climate change impacts and adaptation options by having taken part in seminars and workshops.	Currently 10 % of decision makers and less than 5% of population in pilot sites are aware of climate change vulnerability and adaptation responses. Community workshops are still undergoing.
Number of newspaper articles, booklets and pamphlets highlighting the lessons learned during the project and number of technical documents on lessons learned submitted to knowledge networks.	By the end of the project, project lessons are distributed in hard copy (e.g. pamphlets, briefing notes, newsletters, booklets etc), electronically (e.g. via the project website), via radio broadcast and via one national and three island-level workshops.	Production and distribution of pamphlets on the project at the site of reforestation campaigns. Reviews of sustainable development for the three islands were developed. A project communication strategy was developed and validated. The project logo was developed and approved. More than 500 T-shirts were distributed. A CD containing a media report on the theme of adaptation was produced. A calendar for the project was developed for 2013. Plans were underway to recruit a communications advisor.

iii. Difficulties

Difficult to sensitize population

Too few people in Comoros are aware of water resource vulnerability to climate change and

adaptation responses. It can be difficult to make sure these vulnerable populations consider adopting adaptive practices as a priority.

Fragmented and inconsistent information

Information can take many different forms, from weather forecasts to be disseminated to the population, to sophisticated models for research purposes. Taking into account all the information uses (awareness raising, decision making, research, etc.) is important, but requires to rationalize data management. The difficulty is not about spreading information, but reflection and work on the project metadata, compatibility of data collected, or information storage should be launched to not compromise the rest.

iv. Recommendations

Enhancing the visibility of the project

Efforts must continue in order to enhance the visibility and the impact of the project. The workshops that are currently undergoing should contribute to this. A communication officer is supporting these activities and this should be continued.

Organize the data flow

Measuring indicators should be done homogeneously across the country or the concerned areas. Data may already be grouped to form a database that will be used during the dissemination of information in the second part of the project.

C.1. Finance/co-finance

C.2. IA and EA execution

C.3. Monitoring and evaluation

C.4. Stakeholder involvement

C.4.1. Institutional partners

Institutional partners are:

- DGEF/MAPEEIA
- NDEWR
- NDAS
- Ma-Mwe
- UCEA
- UCEM
- ANACM

C.4.2. Beneficiaries

With the rehabilitation of the well TP1, an additional flow of water will help to supply the population connected to the Ma-Mwe network who do not have drinkable water because of

the low pressure.

Additionally, the installation of the new pipes in parallel with the rehabilitation of the TP1 will increase the efficiency of the whole system by reducing the physical losses from the old piping system, estimated to be between 50 to 70%¹⁸. In this case, the leakages are greatest in the old transmission line (cast iron pipe laid in 1976) because it is located at the beginning of the system where the flow and the pressure are highest. The replacement of the main pipe thus significantly reduces the leakage¹⁹. Therefore, water pumped from the rehabilitated borehole TP1 to the rehabilitated water pipeline is useful.

The full rehabilitation of the TP1 borehole including 200 m branch pipeline HDPE DN350 brings an additional value to the rehabilitation of the main pipeline, and the replacement of the pumps of the TP5 borehole. The whole system helps increase the access to water of the Moroni population and surrounding villages. The following benefits are associated with the rehabilitation:

- Three new villages (Hantsambou, Bandamadji and Pvanamboini) of 10,000 people (1,667 households) will have access to water,
- Additionally, 70% of the population (of 17,200 people) who rely on stand-pipes but who are without access to water because of low pressure, will have access to water. This will be equivalent to 12,000 people or 2,000 households.
- Better water quality will be supplied to the population of Moroni because of the techniques used to rehabilitate TP1. This improves the health conditions of the Moroni population and surrounding populations by resulting in a reduction in water-borne diseases (assumption approximately 65,000 people - 10,000 households).
- Furthermore, based on the assumption that an additional 12,000 people will have access to water due to improvements in the flow and pressure in the network, it is likely that the water supplied by cistern-trucks will decrease. This will have an added economic value on the household expenses because instead of paying higher rate to buy water from cistern-trucks, they will pay the regular rate of Ma-Mwe.

50% of customers living at higher villages who do not have sufficient water due to low pressure will have improved water supply conditions (for instance in Moroni, approximately 3,250 households, equivalent to approximately 20,000 people).

D. Projects Results

Relevance

Relevance examines the adequacy of the project's objectives and the specifics of the situation on which it proposes to act (the elements of the context of action). From this point of view, the MTR mission was the opportunity to watch all of these aspects.

Relevance to the concerns of the targeted communities

Interviews with project beneficiaries revealed that climate risks are still major concerns. The population present in the areas where the project is active are suffering from the impacts of climate change, especially in the field of water resource management. It is imperative to

¹⁸ Leakages happen mostly at the joints and for a 7 km pipeline, there are 1,167 joints.

¹⁹ The expected ratio of physical losses after the replacement is 5%.

provide them with the means to adapt and gain resilience to face these phenomena increasingly recurring. The evaluation concludes that the project is relevant to the local concerns.

Consistency between the project and the national policies and strategies

The project document, also called ProDoc, was consistent with some policy documents and national strategies at the time of its preparation. It was especially consistent with the Growth and Poverty Reduction Strategy covering the period 2010 to 2014, which recognizes the importance of preserving the environment and adapting to climate change in its sixth strategic focus²⁰. This consistency has been checked and found to be satisfactory during the mid-term review, knowing that globally, the national policies and strategies that address the issue of climate change remain rare. Concerning national policies to come, the project is in alignment with the future Accelerated Growth and Sustainable Development Strategy (in French: *Stratégie de Croissance Accélérée de Développement Durable*), which establishes climate change adaptation as a major challenge.

Besides, there must be a capacity building of policies and strategies and a better visibility in the policy documents that are not specifically about climate change.

Consistency with the strategies of financial partners (UNDP, GEF and UNEP)

Project consistency with the policies and strategy of the Global Environment Facility (GEF) is obvious because the targeted concerns are the very reason why this global funding mechanism was created. In particular, the project is aligned with the strategy developed by the GEF concerning the Focal Area of Climate Change Adaptation, the Strategy on Adaptation to Climate Change for the Least Developed Countries Fund (LDCF) and the Special Climate Change Fund (SCCF)²¹.

For the second financial partner, UNDP, the framework document signed with the Government of Comoros provides for the establishment of national adaptation strategies to climate change. The project is consistent with UNDP's Strategic Plan, which puts special emphasis on climate change issues and adaptation actions.

Project consistency with the strategy of the UNEP, was also evaluated. UNEP is not as present as UNDP in the Comoros, but is very involved in these issues in Comoros. The project is in line with the objectives of UNEP: it is consistent with the objectives of its Global Adaptation Network (GAN), which mobilizes existing knowledge and good practices at the global, regional and national levels, and supports countries to integrate climate change adaptation in national planning processes. It is also consistent with UNEP's Resource Efficiency Programme since it promotes sustainable consumption and management of resources such as water.

It is interesting to notice that the project is in alignment with the CC DARE Initiative, jointly implemented by UNEP and UNDP, and providing technical and financial support to African countries in particular.

²⁰ <http://www.km.undp.org/content/dam/comoros/docs/SCRIP.pdf>

²¹ <http://www.thegef.org/gef/sites/thegef.org/files/publication/GEF-ADAPTION%20STRATEGIES.pdf>

In conclusion, the project is consistent with the policies and strategy of the financial partners.

Relevance of the monitoring and evaluation indicators to report on the effectiveness of measures implemented

Indicators for M&E used in the project document are not always relevant or realistic. It is good to test them by a practical exercise.

Relevance to the national context

Given the evolution of the national context, the context of the MTR highlighted the relevance of the project through several factual examples. Climate changes have a negative impact on water supply and quality in the Comoros: water availability is and will continue to be reduced, and contaminants will be more and more diluted if no adaptation interventions are implemented. Indeed, water security and quality have been identified by the Comoros Poverty Reduction and Growth Strategy reports as among the most critical problems. The NAPA 2006 also reveals national concern towards water resources and lists the water sector as being the second most vulnerable sector to climate change.

Most interviewees confirmed that the impact of climate change was increasingly felt. The Comoros remains one of the most exposed and most vulnerable countries.

v. Efficiency

Efficiency focuses on the optimization of resources mobilized by the project, and therefore in general, on the relation cost / effectiveness of the achievements (infrastructure or services). Efficiency is to compare the results obtained with the means employed (average financial, human and material).

Uneasy efficiency because of some activities

A lot of scheduled activities are operational and currently implemented. However, a lack of reliable and complete information at the design stage of the project led to a severe underestimation of costs. Additional expenses were therefore necessary to reach the expected results of the projects. Moreover, for outcome 2, output 1, the ambition to go for some heavier work led to additional expenses by for instance accomplishing feasibility studies that were not scheduled at the time of the project design. This impacts negatively the efficiency of the project, and solutions must be found to implement all the activities by the end of the project with a limited remaining budget. Two options are recommended to fix this issue in the section presenting the recommendations from the evaluation.

Efficient project support

Project supports in the rural areas cover certain steps essential to obtain the results to convince the beneficiaries on their effectiveness (localities of Bandassamlini and Hamalengo: drip systems and application nurseries), and proves to be efficient.

In addition, beneficiaries are making efforts such as the provision of spaces to build water

reservoirs, at no extra cost.

Monitoring and Evaluation (M&E) of the project

The evaluation reports are provided (all these documents were made available to the evaluator, by giving an access to the files and documents of the project on dropbox under "ACCE-Comores").

It includes the "Annual Project Reviews" and the "Project Implementation Reports" with a description of progress toward goals, an estimate of each of the indicators, the results achieved during the year in question, lessons learned and best practices taught, reports detailing expenditures.

Indicators identified in the ProDoc, revised at the inception, and implemented during the first phase of the project are relevant for reporting project progress, but some still need reviewing and reformulation in order to effectively measure work progress. What is lacking is the operational aspect of M&E, mainly due to the fact that one post on M&E has been removed from the Project Management Unit, which effects the efficiency of the M&E system regarding this project.

vi. Effectiveness

Evaluation of the effectiveness after the AWP reading

Planned activities are not all being operationalized or implemented as they should, mainly due to cash-flow distortions. The Annual Work Plan (AWP) integrates properly the needs of beneficiary communities but the administrative distortions in the cash out to implement the AWP activities complicates the implementation process and indirectly impacts negatively on its effectiveness.

Technically speaking, the character of "demonstration" from project supports, developed by providing a specific accompaniment, covers all essential steps to achieve results in order to convince beneficiaries about the efficiency of the project.

Delays in starting some activities

As previously indicated, for various reasons, all activities started with a delay, some more than others. The analysis of the effectiveness covers the issue of mobilization of time resources (human, material and financial). The MTR observed a clear effort from the project beneficiaries and the PMU to overcome challenges in the field and at central level.

Relevance and effectiveness of the implemented management structures

The partnership strategy developed by the project is to devolve implementation to public structures in charge of water management (Ma-Mwe, UCEA and UCEM) for the activities under their jurisdiction. Framework agreements (MOUs) are signed with each technical

partner for this purpose, eg with ANCAM and Ma-Mwe.

If this policy is relevant, the monitoring of these partnerships lack rigor because the structures in relation with the project are more likely to play their roles in achieving the expected results. Thus, the project does not focus enough on considering the effective implementation of its partnership strategy.

Partnership strategies developed in the project framework are considered as means to ensure ownership by the national structures of knowledge and expertise regarding the risks of climate change. While these risks are not new, their skills for effective and sustainable management remains a national challenge. That is why responsabilization of national structures and their direct involvement in the definition of reinforcement strategies of adaptation capacities to climate change risks, is an appropriate approach and should be favoured through a more effective and more operational partnership strategy

In addition, public structures often show arduousness or even administrative deficiencies that slow the progress of the project, for instance in the disbursement process. The delay for performing certain tasks assigned to partner organizations is not only caused by organizational learning. If the project knows delay during its implementation, it has found some alternative solutions to overcome its administrative bottlenecks: strategies have been elaborated to overcome procurement delays in particular, with differentiated solutions given the overall project institutional and administrative structure.

Continuous management

The Project Steering Committee currently meets twice year. It is necessary that it brings a more regular support, especially at the end of the project. Quarterly meetings – or at least more regular meetings - would be beneficial in this regard to improve project closure and sustainability, especially if decisions are required

It is strongly recommended to already prepare sustainability and geographical extension activities strategies. This can be done now by identifying the affected areas where similar projects could be implemented. As an up-scaling strategy for the end of the project, it is possible to open the meetings related to the project, to stakeholders who will be affected by the geographical extension of the project. They are well acquainted with the challenges posed by such activities, and geographic extension of the project will be even faster.

vii. D.3. Sustainability

Sustainability focuses on long-term effects of the project and the durability of results and impacts. The durability analysis is to assess the ability of actions to continue independently.

Project institutional anchorage

Anchor of the project in state structures is necessary to ensure the sustainability of the adopted measures and the pursuit of strategies implemented in the project framework even after its end.. It is clear that this anchorage is lacking for the moment, although policy-related interventions are expected to be delivered in the second half of the project. The

implementation of the project should be carried out by state bodies in charge of the sectors concerned by the risks associated with climate change, but the main structure, the MPEEIC remains fragile and with limited resources. The reinforcement of capacities of these structures by the Government for the sustainability of adaptation measures accompanying the populations is needed.

Partnerships between national authorities are encouraging and promote long-term maintaining of the project effects. The commitments of the various ministries and national agencies (ANACM, UCEM, UCEA, DGEF, ACMAD, Ma-Mwe) give hope that these issues will be permanently embedded in various public policies.. It is crucial to build capacity and develop financial mechanisms within the country in order to enable this commitment to trigger concrete actions regarding water resource management.

viii. Impact

Expected impacts especially near local beneficiaries

The testimonies of beneficiaries on the effects of the assistance provided by the project include access to irrigation systems (in rural areas) and drinking water (in urban areas).

For instance, in one of the three places visited during the MTR mission, beneficiaries have provided testimonies on the benefits they will get from works under construction and accompaniments (equipment and advice) provided by the project, that will allow them to increase their resilience in times of drought. Hence, it is clear that the project by interviewing beneficiaries that the project impacts are positive, although these impacts could not be quantified during the MTR.

Direct or indirect impacts difficult to quantify

The monitoring and evaluation system does not yet provide an indicator to quantify achievements, hence the importance of strengthening the monitoring and evaluation system using an array of M&E. It is necessary to adapt the guidelines to be adopted later in the project's progress.

ix. Cross-Cutting Themes

Gender Equality

Qualitative information on gender in the project indicates that women are beneficiaries as well as men in the target areas. But this is very vague and no objective evidence is sufficient to support this impression. Again, it is more about estimating the monitoring indicators, which include the percentage of women involved in the activities of ACCE.

Environment and climate change adaptation

With regard to cross-cutting themes, the subject of the project itself - adaptation to climate change - addresses one of them: the environment and climate change.

Indeed, reforestations, improved management of water resources, awareness of climate change issues contribute to reduce the degradation of natural resources and environment.

Social economy

Other cross-cutting issues are indirectly addressed by the project, including the strengthening of the social economy: villagers benefit for instance from equipments provided by the project, and this should allow them to be better off. Also, the poor access to drinking water in Moroni usually affects the poorest households, and rehabilitating the networking will benefit to the social economy in the capital city.

The MTR mission found that the cross-cutting themes are treated appropriately by the project.

D. Organisation & Management

a. Structure & staff intervention

The originally approved structure of the project is currently running, but the creation of additional committees appears to be superfluous. On paper, it seems appropriate and functional, and respects the institutional arrangements envisaged at the project formulation, but the committees do not meet on a regular basis as expected. Given the advanced stage of the project, it does not seem relevant to modify the structure to tailored it at the reality, but rather simply keep it has it is, and rely on the operational entities.

Figure 2. Project organisation

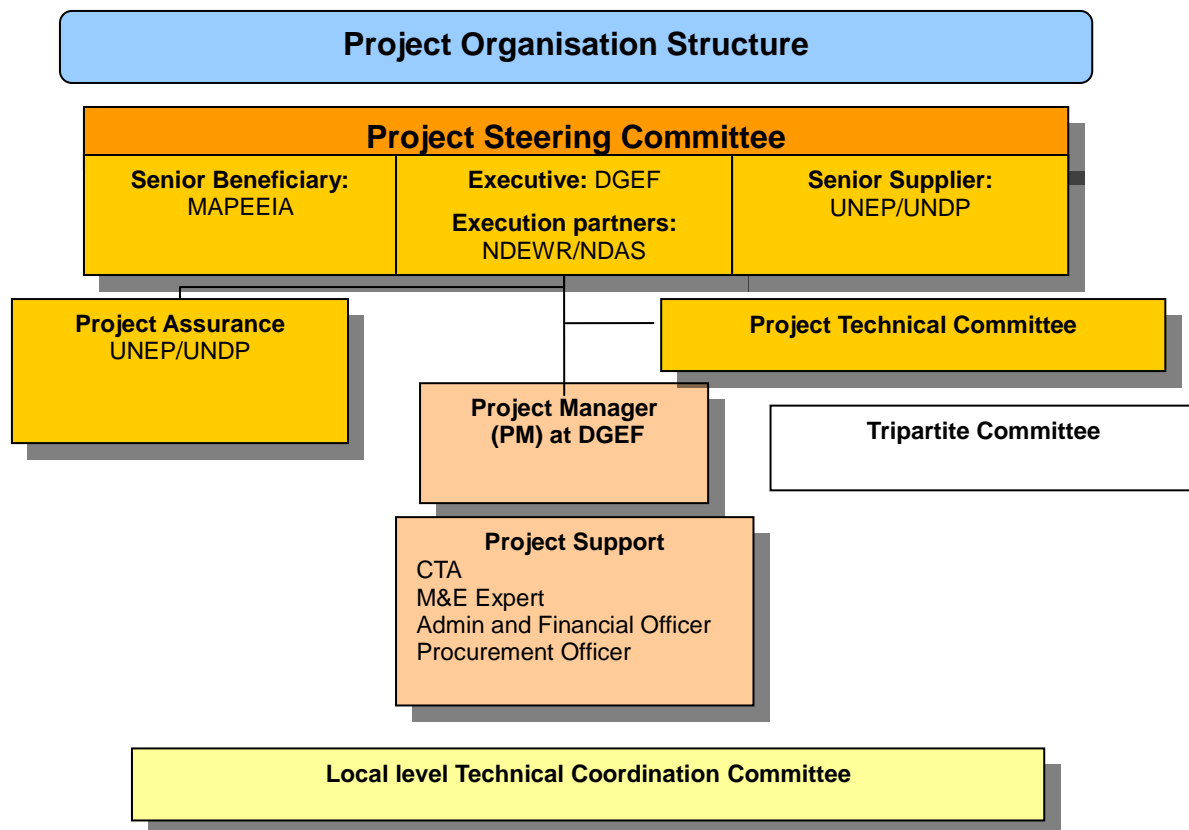
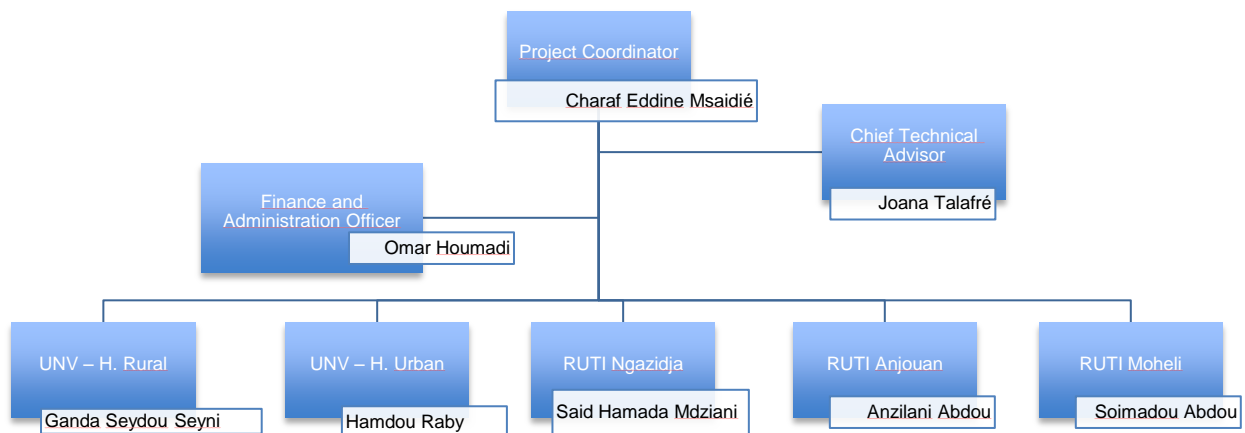


Figure 3: Project Management



b. Management of resources (financial, personnel & equipment)

The project is jointly supported by UNEP and UNDP according to National Execution Modalities (NEX).

The implementing partner is the Directorate General for Environment and Forests (DGEF) of the MAPEEIA, who works in close collaboration with NDEWR, National Directorate of Agricultural Studies (NDAS), and island level institutions responsible for the local level interventions of the project. The implementing partner is accountable to both UNDP and UNEP. The UNDP Country Office (CO) provides technical and administrative support and monitors the implementation of the project according to the UNDP and UNEP regulations and procedures.

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E. Conclusions, recommendations and lessons

a. Main findings and conclusions

The following table concisely summarizes the findings of the mid-term review on the basis of GEF criteria:

Table 8: Performance Rating Project

b. Main findings and conclusions

This section presents the main findings of the mission of mid-term on the basis of criteria defined in the methodology.

i. Relevance

An issue more topical than ever

The relevance examines the adequacy of the project objectives and the specifics of the situation on which it proposes to act: in this case, it is clear that the situation regarding water resource supply and quality is not improving in Comoros, which is why the project is very relevant

The mission was able to see that the issues related to climate change regarding water resource management are urgent, because adaptation needs and communities expectations are increasing.

An ever-increasing demand for support from vulnerable populations

On the ground, the beneficiary populations confirmed that the project met their expectations and needs to be less vulnerable to impacts of climate change on water resources, to which they are exposed.

The MTR mission recommends, despite the fragility of national institutions and even though many challenges remain, that the local communities continue to be supported, by opening the field work and the network established in the field to new adaptation projects such as the GCCA and the CRCCA projects..

Consistency between the project and the national policies and strategies

There is an acceptable consistency between the project and national policies. However, the integration of adaptation of water resources to climate change in public policies must be strengthened. The second half of the project will deliver policy-related interventions, which will hopefully enable the achievement of this objective. Similarly, the thematic strategies not specifically focused on climate and water resources must always take into account CCA and make it more visible in policy documents, otherwise they will be useless regarding this issue. Therefore, it is advisable to continue raising awareness and capacity building for relevant ministries to improve the consideration of CCA in decision making.

Consistency between the project and the policies and strategies of financial partners

The project's objectives are consistent with the strategies of the various financial actors, bilateral and multilateral.

The GEF, the UNDP, the UNEP are engaged in the fight against climate change.

It is recommended that the UNDP and UNEP continue to play its central role of technical assistance to the Ministry of Environment on issues related to the ACC and water resource management.

Indicators identified in the ProDoc and implemented during the first phase of the project are relevant for reporting project progress, but some need reviewing and reformulation in order to effectively measure work progress. What is lacking is the operational aspect of M&E.

ii. Efficiency

Strong efficiency at the local level

Project management at the local level is efficient because the local management teams are reduced and the results obtained, particularly in pilot areas are satisfactory. More field visits would enable the management team to make decisions based on more observations.

Strong efficiency at national level

The coordination team is efficient, which minimizes fixed costs for the implementation of the project. This is due to the motivation of the staff at the local level, with young experts under different status (including experts under the United Nations Volunteers Program²²). The proximity of the coordination team to the ministry also enables to prevent some problems from minor practical decisions to a global perspective.

iii. Effectiveness

Contrasting effectiveness

Yet, it seems more complicated to make progress regarding the planned policy activities at national level. At the end of July 2014, the rate of implementation of the project is estimated at 65%. However, the mid-term review mission found that the implementation of planned activities sometimes encounters difficulties leading to more or less effective work progress depending on the considered activity. On the ground, the activity progresses, with facilities being finalized.

The need for a 6 months extension

Delays in the implementation of the activities and the execution of several activities remain a challenge. These delays lead now to consider an extension of the period of implementation

²² <http://www.unv.org/>

of the project beyond the initial period to allow the closure of activities initiated cycles. This extension should not be more than 6 months, given the tight remaining budget, regardless of the decision made between the two tier options.

The lack of a quantitative measure of the effectiveness of the project

There is an obvious lack of statistical data which prevents reliable economic analyzes of all beneficiaries at this stage.

? A contrasted management structure

While the PMU is effective and operational to move ahead with the project activities, some of the other bodies involved in the project may be less active. It is not appear that the three existing project committees (Steering Committee, Technical Committee and Tripartite Coordination Committee) meet as regularly as planned. The supervision of the project has yet to be proven and the Steering Committee must increase its authority to ensure better cohesion of the project.

iv. Sustainability

Uncertain sustainability and further capacity building

Sustainability is uncertain because the capacity of project stakeholders in the field of CCA is still not sufficient. The uncertainty on human resources after GEF-funded project closure, and the lack of continuity in the acquisition of skills in the field of CCA does not make it easy. Therefore, sustainability lies in potential additional funding, the continuation of the project with a second phase particular person, rather than the existence of institutions that can meet the needs of CCA.

Inability to decide on sustainability

Even if the arrangements made by the project to ensure the anchoring of project achievements at local and central level are correct, it is necessary to also ensure that people remain in place in time, i.e. for a period exceeding 6 months. On the ground, in the pilot areas, it can be estimated that the undertaken actions, leading to the development of adaptive measures to climate change, will generate a benefit which will last beyond the end of the intervention as long as they are considered in a broader perspective over the long term

Sustainability of the project is also linked to its institutional anchor, which is still fragile. Indeed, the implementation of the project should be provided by state bodies in charge of the sectors concerned by the risks of climate change, which is not the case today at the central level. The capacity building of these structures remains limited, especially in the perspective of sustainability.

Dependency on donors in the continuity of funding

Sustainability is also related to the continuity of funding, yet commitment of the authorities of the Comoros in the co-financing of the project is not assured. With limited financial resources

in its national budget, the country is still fragile, financially speaking.

The bilateral and multilateral donors appear to be the only providers of possible funding short to medium term. However, the involvement of new donors, to strengthen the capacity of MAPEEIA, should be noted. Contacts have been taken with the Islamic Development Bank and the Saudi Fund for Development²³. The MTR mission met for instance with the Technical Director of the SFD to discuss a potential financing to expand the activities implemented by the project so far.

Maintenance of the facilities rehabilitated by the project still at stake

Facility maintenance is essential to maintain positive impact of project at long-term. Beyond the rehabilitation of the water adduction network in Moroni, the operations and maintenance of the network must be guaranteed. The issue of budgets for maintenance was raised since the beginning of the project, but there is a general feeling that there is no real uptake at the central level to address this. The reorganization of Ma-Mwe, with one company involved in water supply, and one other in electricity supply, should mitigate the financial risks of Ma-Mwe.

v. Impact

Institutional capacity increase but barriers remain

Currently, institutional capacities to adapt to climate change are in general too low in order to respond in an appropriate way to pressures on water resources linked to climate change. It seems that the first phase of awareness of the importance of climate change on economic development was necessary. A lack of willingness or systemic issues remain as a barrier, and delay the project's impact on increasing institutional capacities to respond to climate change. It might be explained by a general belief that climate change is a long-term issue, and hence a second rank priority for the Government.

Difficult impacts to measure

The monitoring and evaluation system being weak in terms of quantitative data, it is difficult to measure the impacts of the project (e.g., objectively responding to question such as “is the rural population benefiting from the project better off? If so, by how much?”, or “is the country better prepared to tackle climate change and water shortage in 20 years because of the project?”). This statement is true for most of the projects, and not specific to this one.

The only way to assess the impacts is by interviewing beneficiaries, which was done by the evaluator during the field visits. A general impression is that the beneficiaries in the rural areas are satisfied by the project, and consider that it impacts positively their lives.

²³ <http://www.sfd.gov.sa/>

c. Recommendations

i. General recommendations

Continue efforts in terms of field activities

Local communities need more than ever concrete actions to deal with the emergency situation. Pilot sites considered in the project have a dual role: they ensure improved food security and water supply within the sites themselves, but they also serve as showcases for the rest of the country. The development of their beneficial effects is therefore necessary to encourage the development of these actions at the national level.

In addition, it is also recommended to organize field visits with parliamentarians, particularly those involved in the sites concerned by the project.

Linking with the CRCCA project

The rest of the project, mainly its exit strategy, should already be in preparation. For this, a strategy for capitalization of results is expected. The durability of the actions implemented and upscaling strategies defined on the 5 pilot sites in local areas should be a priority. It is important that the project can be implemented effectively for the remaining period, especially considering the budgetary issues: it is strongly recommended to already prepare sustainability in the rural areas and geographical extension activities strategies, by linking the ACCE project with the new CRCCA project. It is possible to open the meetings related to the project, to stakeholders who will be affected by the geographical extension of the project, and organize regular meetings with the PMU of the CRCCA project.

Adjust the project period

The project took a little delay in the implementation of activities. The end date of the project must be redefined according to the progress of activities. It is recommended to extend the project period by 6 months.

ii. Recommendations for the project coordination

Ensure the visibility of the project in the long-term

The PMU is recently reinforced with a communication expert. Since it is the first project realized under the NAPA of 2006, it is important to communicate on the results of the project. Beyond the general actions already undertaken (including a creative initiative such as giving to the project a jingle), it is important to capitalize the results in the long-term, for new adaptation projects, showing that these new projects build up from the ACCE project.

Capitalize on the results obtained

The first results of the measures undertaken in the project are clearly visible. Therefore, it is necessary to highlight them. Thus, a national symposium of capitalization could be organized in Moroni to discuss the results obtained. More generally, efforts in terms of communication should be made to raise awareness of the challenges posed by such a project by exchanging with stakeholders and detail the lessons learnt. First steps and additional activities towards a second phase should be identified.

Strengthen the monitoring and evaluation system

The monitoring and evaluation system should be adjusted by making sure that indicators are not only redefined but also assessed and made operational. It does not yet provide an indicator to quantify achievements, hence the importance of strengthening the monitoring and evaluation system using an array of M & E. It is necessary to adapt the guidelines to be adopted later in the project's progress.

iii. Recommendations for the implementation project partner

Explore other possible funding and prepare a phase 2 proposal

Many donors are showing interest for water management to capitalize and continue project activities. Contacts established and funding possibilities must be explored for a potential phase 2 of the project.

Given the preliminary contacts with the IDB and the SDF, it is recommended to prepare some phase 2 project idea document. During the MTR, this exercise has been initiated, with a one day work with some members of the PMU to identify actions for a phase 2 project, discussed on June 23, 2014, during the MTR first findings presentation meeting.

Strengthen information exchange

The Steering Committee should occupy a central place within the various partnerships. Discussions between the different partners should be encouraged to strengthen the cohesion of all project stakeholders. Without cohesion, there is no common will to ensure the proper operation of the project. Besides, information exchange with the ministry in charge of the project must be strengthened.

iv. Recommendations to the Steering Committee of the project

Strengthen the role of the steering committee of the project

The Steering Committee of the project currently meets every year. It is necessary that it brings a more regular support to the project management team. Quarterly meetings – or at least more regular meetings when necessary for decision making - would be beneficial in this regard by establishing a calendar. A co-president from a cross-government institution outside the MAPEEIA may be appointed.

Prepare a strategy for sustaining the project and geographic extension of the measures undertaken

The need for adaptation is growing beyond the pilot areas and the risks of climate change are increasingly threatening. Therefore, it is necessary to establish a long-term strategy of sustainable actions beyond the end date of the project. Adaptation needs should be identified beyond pilot areas.

v. For the Project Management Team

Continued intervention

The observation was made that adaptation and expectations of villagers needs are great, and amplifying. Unsurprisingly, it is recommended to continue the efforts of implementation of field activities, and link with the CRCCA project in the field when possible.

Regarding the recommended 6 months extension period, it is essential to make sure of the

PMU staff, including the UNV, can have their contract extended and adjusted to this period.

The emergency of strengthening the monitoring and evaluation system

Noting that the monitoring and evaluation system based on the results do not yet provide indicators to quantify achievements, it is advisable to strengthen the monitoring and evaluation system by setting up a computerized system based on the results (systematic documentation of outcomes and impacts), but also enhance local actors on this topic.

The need to better anticipate cash flow from co-financing

Resources budgeted in the project document are released piecemeal. It is therefore important to work with local and national funding partners to a better visibility of the allocation of these resources and the sustainability of funding.

vi. For UNDP and UNEP

Strengthening the structure and implementation of the project

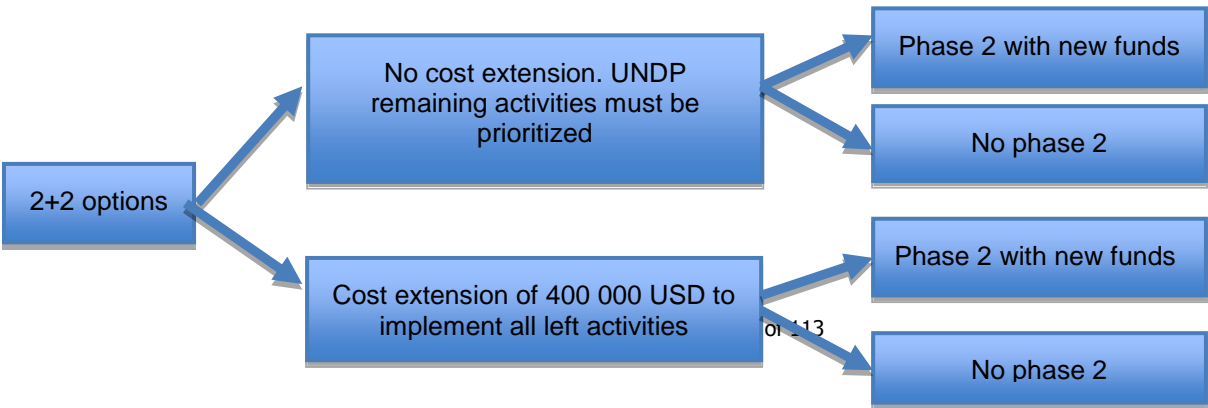
The structure and implementation of the NAPA are adequate, and the role of the UNDP and UNEP are significant as guarantor of adequacy. It is advisable to capitalize on the experience of the first phase of the project and increase the momentum during the second phase project. UNDP and UNEP should also formalize links with other projects that can take over secondary activities (project CRCCA, project GCCA, etc.).

Take advantage of synergies with other projects

The project must fit coherently among other projects and synergies should continue to emanate from different projects. It is necessary to anticipate especially the development of other NAPA projects to take benefits from them. UNDP and UNEP should also identify and formulate additional activities for a project extension, taking into account activities that have already been done by other projects such as the PAEPA and larger national water initiatives.

3.1.7. Concluding recommendation: two tier options

In conclusion, there is a two tier options, as presented in the graph. The first option is at no cost, i.e. a no cost extension where remaining UNDP activities must be prioritized in order to be effectively achieved. Then, a phase two of the project can be decided or not according, to the willingness of potential donors (for instance the Saudi Development Fund).



The second option is a cost extension of 400 000 USD in order to implement all the remaining activities. Then, a phase two of the project can be decided or not according the willingness of potential donors as for the first option.

In case of option 1, the recommended adjustments are listed below:

- Network expansion (water supply for households) of the activities in Mbatsé and Hoani to cover all areas not sufficiently taken into account (upper area of Ntakoudja and Mbasté and neighborhood of Gnambo to Hoani), budget permitting.
- Supply of vegetable crops and seeds for 100 plots in irrigation in Mbasté and Hoani (micro-items)
- Solutions for watering animals in Mbasté and Hoani : Creating watering points far from the rivers to prevent the cattle to go in the catchment area
- Support for local authorities to support the project and punish?! populations that do not respect project investments
- In some watersheds, pursue reforestation to ensure the capture of rainwater
- Pursue protection and restoration of soil with agro-pastoral development
- -Adjustment of the approach of reforestation of riverbanks and source heads with fruit trees such as mango
- Continue to support the adoption of new water code by the National Assembly and definition of an action plan to be implemented
- Review the articulation with other sectors / themes on the issue of climate change

In addition, considering the possibility to go for a second phase of the project, the MTR mission listed the following proposed activities:

- Support for the creation of 3 or 4 model farms where techniques for adaptation to climate change are applied in relation to the issue of water resources (this is already planned in the new CRCCA project, but could be extended to other sites)
- Explore techniques of rainfed agriculture and improvement of irrigation techniques
- Installation of greenhouses and nurseries (this is already planned in the new CRCCA project but could be extended to other sites)
- Extension of the renewal of the water supply network of Moroni and construction of new reservoirs
- Construction of reservoirs at the bottom of craters
- New impluviums and drop by drop irrigation in rural areas
- Rehabilitation of secondary pipes and additional tanks at high-level in Sahani or Mbar or Mkazi
- investigate new sources to provide access to drinking water for Nioumakéléba in Anjouan
- Extension of the organization of community water management committees
- Pursuit of sustainable land management with fruit trees

F. Annexes

a. Terms of reference

The terms of reference are recalled below:

TERMS OF REFERENCE

Mid-term Review of the UNEP/LDCF project:

“Adapting Water Resource Management in Comoros to cope with the effects of Climate Change”

1. PROJECT BACKGROUND AND OVERVIEW

1.1. Project background

The Comoros archipelago is made up of four islands: Grande Comore, Anjouan, Mohéli and Mayotte. At present, the sovereignty of the Union of the Comoros (hereafter referred to as ‘the Comoros’) is maintained in practice by all but Mayotte. Classified among the Least Developed Countries (LDCs), the Comoros is one of the poorest countries in the world, with an estimated GDP of US\$ 450 per capita (2006). Additionally, the population density is among the highest in Africa (approximately 283 people per km²). The growth rate of the population (2.1%) surpasses the economic growth rate (2% in 2007), making it difficult for the government to provide basic social services such as drinking water and health care. Furthermore, the Comoros has high levels of poverty (55%), a chronic economic deficit and is considered a highly indebted poor country. At present, only one of the Millennium Development Goals (MDGs) is presently on-track (namely, MDG 4 “reduce child mortality”).

Climate change is likely to adversely affect the Comoros by resulting in: i) changes in rainfall levels and patterns; ii) increased temperatures; iii) sea level rise (and subsequent salinization of critical coastal aquifers as a result of salt water intrusion); and iv) an increased frequency of climatic hazards (such as tropical cyclones, droughts, episodes of heavy rainfall and flooding). Exacerbating these climate change impacts are the inherent environmental vulnerabilities of the Small Island Developing States (SIDS) (including small land area, susceptibility to natural disasters, geographical isolation, limited natural resources and sensitive ecosystems) of which the Comoros is part. This, superimposed on existing anthropogenic practices (such as the quickening pace of deforestation rates for agricultural production), threatens water security, food security, economic growth and the livelihoods of communities within the Union of the Comoros.

Climate change and variability (e.g. variations in rainfall, increase in temperature, sea level rise and increased frequency in climatic hazards) have a negative impact on water supply and quality in the Comoros by reducing availability of water and dilution of contaminants (e.g. pollutants, salts and sediment). This will continue to be the case unless timely adaptation interventions are implemented. Indeed, water security and quality have been identified by the Comoros Poverty Reduction and Growth Strategy reports as among the most critical problems facing the Comoros. Additionally, a vulnerability survey undertaken during the NAPA (2006) process listed the water sector as being the second most vulnerable sector to climate change. The problem is exacerbated by inadequate water resources management including inter alia: i) limited and inadequate water supply; ii) inadequate infrastructure and insufficient water treatment and; iii) quality monitoring has resulted in poor access to potable water. Moreover, people who do have access to drinking water frequently suffer from waterborne diseases due to its poor quality.

Comorian communities, autonomous islands' governments, and the national government presently lack the technical capacity, management capacity, physical resources and financial resources to overcome or cope with water resources management in the context of worsening climatic conditions.

The **goal** of the project is *to adapt water resource management to climate change in the Comoros* whilst the project **objective** is *to reduce the risk of climate change on lives and livelihoods from impacts on water resources* in the Comoros. In so doing, this project will implement the adaptation priority "increase in water supply" and contribute to the adaptation priority "improvement of water quality", identified during the National Adaptation Programme of Action (NAPA) process. The project works on the three islands that constitute the territory of the Comoros with a focus on improving water resources management to increase water supply and quality under changing climatic conditions. To achieve this, the following outcomes will be delivered:

1. Institutions at a national (i.e. Ma-Mwe and ANACM) and community (i.e. UCEA and UCEM) level strengthened to integrate climate change information into water resources management.
2. Water supply and water quality improved for selected pilot communities to combat impacts of climate change.
3. Awareness and knowledge of adaptation good practice increased for continued process of policy review and development.

Project outcomes are jointly supported by the UNDP and UNEP, with each Agency focusing on a distinct set of outputs.

1.2 Project Activities

Project activities in the table below reflect the original list of activities as designed after the inception meeting. Some minor changes and reformulations have since taken place in light of the findings of various baseline and feasibility studies.

	Activities
1.1 Improved Information on climate change risks to water availability in Comoros . (UNEP)	1.1.1a definition and adoption of the water and climate monitoring parameters 1.1.1b. Identification, in collaboration with ANACM of the equipment needs and sites for monitoring stations 1.1.2 Acquisition and installation of hydrometeorological and agrometeorological stations 1.1.3 conversion of existing available data on microfile to a usable format 1.1.4 analyse available climate data to validate the models (link to 1.2.1) 1.1.5 Develop data collection, conservation and analysis systems in each island 1.1.6 install a tide gauge in Grande Comores to determine the relationship between salinity and tides and to measure SLR

1.2. Increased capacity in assessing and managing changes in water availability and quality (UNEP)	1.2.1 stakeholder analysis and assessment of needs towards the development of a capacity building plan to strengthen monitoring and assessment capacity for availability and water quality.
	1.2.2 Training of ANACM staff on climate data collection and analysis and on climate model downscaling
	1.2.3 Training of MAMWE staff on integration of climate data and on water related climate risk management
	1.2.4. Training of UCEA and UCEM staff on the operation and management of hydraulic infrastructures
1.3. Preparation and provision of improved climate information for water resource management policies and spending plans (UNEP)	1.3.1 Undertake hydrological modelling on the three islands (availability, recharge and exploitation rates, climate)
1.4. Integration of improved climate information with water resource management policies and spending plans, and other relevant policies (UNDP)	1.4.1 Analysis of sectoral policies that facilitate or hinder community resilience
	1.4.2. Develop policy notes showing impacts, costs, benefits of resilience in the three islands
	1.4.3 Revise the water Code and regulations
	1.4.4 Develop recommendation on the changes to national budget or water prices and tariffs, including on cost recovery
	1.4.5. Review and revise development legislation and policy, the environmental action plan and the poverty reduction strategy
	1.4.5b. Training on the recovery of costs related to hydrological infrastructure
1.5. A capacity development plan for policy review and design among decision-makers, developed based on best known scientific and technical evidence (UNEP)	1.5.1 Develop a capacity development plan for policy revision and planning related to adaptation (following 1.2.2)
	1.5.2 Train planners and decision-makers on revisions and proposed changes to existing legislation and regulations
1.6. Implementation of the capacity development plan for policy review and design among decision makers (UNDP)	1.6.1. Establish an intergovernmental and interministerial process for revising policies related to water

2.1 Construction and rehabilitation of water conservation and adduction infrastructures for household and agricultural uses (UNDP)	2.1.1 Feasibility study for the rehabilitation of Moroni's main water line and system
	2.1.2 Environmental and Social Impact Assessment for construction and rehabilitation works on three islands
	2.1.3 Feasibility study for the reservoirs and harvesting structures in Anjouan
	2.1.4. Feasibility study on the implementation of a water piping network for drinking and agricultural purposes in Moheli
	2.1.5 Feasibility and ESIA for the rehabilitation and construction of water conservation structures for agriculture in Bandassamlini Sangani and Hamalengo (Grance Comore)
	2.1.6 Conduct rehabilitation works for the Moroni water network
	2.1.6b Conduct rehabilitation works for Bandassamlini and surroundings
	2.1.7 Conduct rehabilitation and piping works in Anjouan
	2.1.8 Conduct water mobilization and conservation works in Moheli
	2.1.9. Develop a replication plan
2.2 Technologies to improve water access and quality that mitigate climate change risks are piloted (UNDP)	2.1.10 Develop indicators and targets to measure adaptation in the water sector
	2.2.1 Establish and train a water management committee in Ngazidja under supervision of MAMWE
	2.2.1b Assess previous experience on water treatment and propose adapted and replicable technologies for water quality control and treatment
	2.2.2 Train MAMWE technical staff in charge of operations and maintenance (chlorination, pump maintenance, leak detection)
2.3. Degraded agricultural and forested lands in pilot sites are the object of sustainable land use plans and vegetative cover increases (UNEP)	2.2.3 Train communities regarding conservation infrastructure maintenance
	2.3.1a finalize the state of reference on agricultural planning and perform participatory species selection for reforestation works (formerly part of 2.1.5)
	2.3.2 elaborate a land use plan in each site
	2.3.3. Train and support communities during reforestation using an agro-sylvo-pastoral approach that promotes resilience
	2.3.4 Participatory reforestation within communities in the framework of the national campaign "'1 comoraan, 1 tree"
3.1. Knowledge management and communications products on lessons learned, for decision makers, communities and development partners	3.1.1 compile project results and identify potential barriers to their replication
	3.1.2 Launch and disseminate knowledge products and communications products

(UNEP)	
3.2. Learning disseminated through a platform for national learning and sustainability, and integrated in the global water networks (ALM, GAN and Integrated Water Learn) (UNDP)	3.2.1 Create a parliamentary working group and organize seminars on risks posed by climate change
	3.2.2 organize national workshop and 3 islands workshops for the dissemination of project lessons and results
	3.2.2a Inception workshop
	3.2.3 Organize community workshops on the project
	3.2.4 Publish workshop reports and distribute documents
	3.2.5 Publish a monthly newsletter, newspaper articles, pamphlets and other documents on the project
	3.2.6 intervene through local media (radio, TV)
3.3. Disseminate Comorian experience in knowledge networks and through regular updating of the project's website (UNEP)	3.3.1 Create, validate and launch project website
	3.3.2 compile information and technical documents and submit them to various networks
	3.2.4 develop a document summarizing project lessons for publication in an academic journal and presentation at an international conference

1.2. Budget

The project is funded through a grant contribution from the LDCF, and co-financing contributions as indicated below. In addition, additional co-financing of 150,000 Euros was mobilized from the Flemish Government in 2012-2013 for the conduct of activities related to sustainable land management, improved agricultural production, and water purification technologies.

Sources du budget financé:	
• Gouvernement	40.000 USD
• FEM LDCF	3.740.000 USD
• PNUD Comores	200.000 USD
Cofinancements:	
• UNDP-BCPR	918.550 USD
• BAD	4.548.508 USD
• AFD	1.020.000 USD
• Ma-Mwe	568 147 USD

1.4. Executing Arrangements

The project is executed in line with National Execution modalities under UNDP (NIM) and UNEP (NEX). Each Agency channels funds associated with its outputs and according to the set annual workplan in the relevant procedure: through the UNDP Country Office and

through the National Executing Partner (Ministry of Agriculture, Fisheries, Industry, Environment and Crafts). The Project coordination unit is housed within the Ministry, and is headed by a National Project Coordinator and. The project is overseen nationally by the National Project Director (Director of Environment and Forests).

2. TERMS OF REFERENCE FOR THE REVIEW

2.1. Objective and Scope of the Review

The objective of this mid-term review (MTR) is to assess implementation progress and progress towards the project objective. The MTR will:

- d) Assess achievements and challenges at mid-point and in particular assess the implementation of planned project planned outputs and project performance against actual results. The risks to achievement of project outcomes and objectives will also be appraised (see Annex 5).
- e) Focus on identifying the corrective actions needed for the project to achieve maximum impact. Review findings will feed back into project management processes through specific recommendations and 'lessons learned' to date.
- f) Consider sustainability issues and 'exit strategy'

The review should focus on the following main questions:

A. Project formulation:

- Were the project's objectives and components clear, practicable and feasible within its time frame?
- Were the capacities of the executing institution(s) and its counterparts properly considered when the project was designed?
- Were lessons from other relevant projects properly incorporated in the project design?
- Were the partnership arrangements properly identified and roles and responsibilities negotiated prior to project approval?
- Were counterpart resources (funding, staff, and facilities), enabling legislation, and adequate project management arrangements in place at project entry?
- Were the project assumptions and risks well articulated in the PIF and project document?

B. Assumptions and risks:

- An assessment of the stated assumptions and risks, whether they are logical and robust, and have helped to determine activities and planned outputs.
- Externalities (i.e. effects of climate change, global economic crisis, etc.) which are relevant to the findings.

C. Project implementation:

- The relevance and usefulness of the logical framework used during implementation as a management and M&E tool
- Effective partnerships arrangements established for implementation of the project with relevant stakeholders involved in the country/region
- Lessons from other relevant projects (e.g., same focal area) incorporated into project implementation Feedback from M&E activities used for adaptive management.

C.1. Finance/co-finance

The evaluation report should clarify the financial particulars of the project, including extent of co-financing across the portfolio. Project cost and funding data should be

presented, including annual expenditures. Variances between planned and actual expenditures should be assessed and explained. Observations from financial audits as available should be considered.

The evaluation should include a table that shows planned and actual co-financing commitments, as set out in Annex 2. Evaluators during their fact finding efforts should request assistance from the Project Team to fill in the table, and the Evaluator should then follow up through interviews to substantiate. The evaluator should briefly describe the resources the project has leveraged since inception and indicate how these resources are contributing to the project's ultimate objective.

The evaluator should determine the reasons for differences in the level of expected and actual co-financing, and the extent to which project components supported by external funders was well integrated into the overall project. The evaluation should consider the effect on project outcomes and/or sustainability from the extent of materialization of co-financing.

C.2. IAs and EA execution:

The evaluator should assess and rate **(R)** the quality of Implementing Agency execution (refer to Annex 1 for the ratings table). The assessment should be established through consideration of the following issues:

Whether there was an appropriate focus on results by the implementing and executing agencies

The adequacy of IA & EA supervision

The quality of risk management

Responsiveness of the managing parties to significant implementation problems (if any)

Quality and timeliness of technical support to the project team

Candor and realism in supervision reporting

Suitability of chosen executing agency for project execution

Any salient issues regarding project duration, for instance to note project delays, and how they may have affected project outcomes and sustainability

C.3. Monitoring and evaluation:

The evaluator should assess and rate **(R)** the quality of monitoring and evaluation (refer to Annex 1 for the ratings table). The evaluation team should be expected to deliver an M&E assessment that provides:

1. An analysis of the M&E plan at project start up, considering whether baseline conditions, methodology and roles and responsibilities are well articulated. Is the M&E plan well conceived? Is it articulated sufficient to monitor results and track progress toward achieving objectives?
2. The quality of M&E plan implementation: Was the M&E plan sufficiently budgeted and funded during project preparation and implementation?
3. The effectiveness of monitoring indicators from the project document for measuring progress and performance;
4. Compliance with the progress and financial reporting requirements/ schedule, including quality and timeliness of reports;
5. The value and effectiveness of the monitoring and evaluation reports and evidence that these were discussed with stakeholders and project staff;
6. The extent to which follow-up actions, and/or adaptive management, were taken in response to monitoring reports (PIRs) ;
7. Check to see whether PIR self-evaluation ratings were consistent with the MTE and TE findings. If not, were these discrepancies identified by the project steering committee and addressed?

8. Terminal Evaluations for full size projects should also include consideration of the M&E analysis carried out for the mid-term evaluation and whether changes were made to project implementation as a result of the MTE recommendations.

C.4. Stakeholder involvement:

The evaluation should include findings on the role and involvement of key project stakeholders. Two aspects can be considered:

1. A review of the quality and thoroughness of the stakeholder plan presented in the PIF and project document which should be reviewed for its logic and completeness.
2. The level of stakeholder participation during project implementation.

Questions regarding stakeholder participation include:

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? Were the relevant vulnerable groups and powerful supporters and opponents of the processes properly involved?

C.5. Adaptive management:

The evaluation team should take note whether there were changes in the project framework during implementation, why these changes were made and what was the approval process. In addition to determining the reasons for change. The evaluator should also determine how the changes were instigated and how these changes then affected project results. A few key questions to consider:

Did the project undergo significant changes as a result of recommendations from the mid-term evaluation? Or as a result of other review procedures? Explain the process and implications.

If the changes were extensive, did they materially change the expected project outcomes?

Were the project changes articulated in writing and then considered and approved by the project steering committee?

D. Project results:

Results as measured by broader aspects such as: country ownership, mainstreaming, sustainability, catalytic role and impact.

D.1. Country ownership:

Was the project concept in line with development priorities and plans of the country (or countries)?

Were the relevant country representatives from government and civil society involved in project implementation, including as part of the project steering committee?

Was an intergovernmental committee given responsibility to liaise with the project team, recognizing that more than one ministry should be involved?

Has the government(s), enacted legislation, and/or developed policies and regulations in line with the project's objectives?

D.2. Mainstreaming:

The section on mainstreaming should assess:

1. Whether it is possible to identify and define positive or negative effects of the project on local populations (e.g. income generation/job creation, improved natural resource management arrangements with local groups, improvement in policy frameworks for resource allocation and distribution, regeneration of natural resources for long term sustainability).
2. Whether there is evidence that the project outcomes have contributed to better preparations to cope with natural disasters.
3. Whether gender issues had been taken into account in project design and implementation, (i.e. project team composition, gender-related aspects of pollution impacts, stakeholder outreach to women's groups, etc). If so, indicate how.

D.3. Sustainability:

The evaluator should assess and rate **(R)** the overall risks to sustainability (refer to Annex 1 for the ratings table). Sustainability is considered to be the likelihood of continued adaptation benefits after the LDCF project ends. Consequently the assessment of sustainability considers the risks that are likely to affect the continuation of project outcomes. The GEF Guidelines establish four areas for considering risks to sustainability: Financial risks; socio-economic risk; institutional framework and governance risks; and environmental risks. Each should be separately evaluated and then rated on the likelihood and extent that risks will impede sustainability.

Relevant factors to improve the sustainability of project outcomes include:

Development and implementation of a sustainability strategy.

Establishment of the financial and economic instruments and mechanisms to ensure the ongoing flow of benefits once the LDCF assistance ends (from the public and private sectors, income generating activities, and market transformations to promote the project's objectives).

Development of suitable organizational arrangements by public and/or private sector.

Development of policy and regulatory frameworks that further the project objectives.

Incorporation of environmental and ecological factors affecting future flow of benefits.

Development of appropriate institutional capacity (systems, structures, staff, expertise, etc.).

Identification and involvement of champions (i.e. individuals in government and civil society who can promote sustainability of project outcomes).

Achieving social sustainability, for example, by mainstreaming project activities into the economy or community production activities.

Achieving stakeholders' consensus regarding courses of action on project activities.

D.4. Catalytic effect

The evaluator should complete the ratings table **(R)** on whether or not the project has had a catalytic effect (refer to Annex 1 for the ratings table). The reviewer should consider the extent to which the project has demonstrated: a) production of a public good, b) demonstration, c) replication, and d) scaling up. Replication can have two aspects, replication proper (lessons and experiences are replicated in different geographic area) or scaling up (lessons and experiences are replicated within the same geographic area but funded by other sources). Examples of replication approaches include:

Knowledge transfer (i.e., dissemination of lessons through project result documents, training workshops, information exchange, a national and regional forum, etc).

Expansion of demonstration projects.

Capacity building and training of individuals, and institutions to expand the project's achievements in the country or other regions.
Use of project-trained individuals, institutions or companies to replicate the project's outcomes in other regions.

D.5. Impact

The reviewer should discuss the extent to which projects are achieving impacts or are progressing toward the achievement of impacts among the project beneficiaries. Impacts in the context of adaptation projects refer to the extent to which vulnerability to climate change has decreased, as measured by the indicators included in the Results Framework, and other quantitative and qualitative information. Process indicators, such as regulatory and policy changes, can also be used to measure impact.

E. Conclusions, Recommendations and Lessons

Conclusions should be comprehensive and balanced, and highlight the strengths, weaknesses and outcomes of the project. They should be well substantiated by the evidence and logically connected to the evaluation findings. They should respond to key evaluation questions and provide insights into the identification of and/or solutions to important problems or issues pertinent to project beneficiaries, UNDP, UNEP and GEF.

The evaluation report should provide practical, feasible recommendations directed to the intended users of the evaluation about what actions to take and decisions to make. The recommendations should be specifically supported by the evidence and linked to the findings and conclusions around key questions addressed by the evaluation.

The evaluation report should include, if available, lessons that can be taken from the evaluation, including best (and worst) practices that can provide knowledge gained from the particular circumstance (programmatic and evaluation methods used, partnerships, financial leveraging, etc.) that are applicable to other GEF, UNDP and UNEP interventions.

2.2. Deliverables

1. An inception report should be prepared by the evaluation team prior to the main evaluation mission. It should detail the evaluators' understanding of the project being evaluated and why, showing how each evaluation question (detailed in Section 2.1 of this ToR) will be answered by way of: proposed methods, proposed sources of data and data collection procedures. The inception report should include a proposed schedule of tasks, activities and deliverables, designating a team member with the lead responsibility for each task or product. The inception report should annex the signed code of conduct agreement form – attached at Annex 6.

2. A draft mid-term evaluation report, which includes the evaluation scope and method, findings, conclusions and recommendations. The report should cover the following five major criteria: relevance, efficiency, effectiveness, results and sustainability, applied to a) project formulation b) project implementation and c) project results.

3. A final mid-term evaluation report.

Section 2.4 below contains directions on the outline of the report. The draft report is considered complete, in contractual terms, only when it has achieved acceptable standards.

2.3. Methodology

A detailed methodology for meeting the objectives of the MTR should be proposed by the consultant in the MTR inception report as outlined in section 2 above. As a minimum the following is expected:

- An 'evaluation mission' should be scheduled, providing an intensive 10 days for the evaluation team to hold interviews and visit project sites. The evaluation mission should be planned far enough in advance to enable interviews to be properly set up, especially to request meetings with senior Ministry officials. A detailed plan for the mission should be included in the MTR inception report, which should be revised based on UNEP TM, project team and OFP inputs.
- Field visits are expected to the project site or a select sampling if there are multiple sites. The decision on which sites to visit should be done jointly with the UNEP TM, and project team and outlined in the inception report as outlined in section 2 above.
- The MTR will properly examine and assess the perspectives of the various stakeholders. Interviews should include a wide array of interested persons including civil society, NGOs and the private sector, local ministry officials as relevant, and national ministry officials (in addition to the OFP).
- Data analysis should be conducted in a systematic manner to ensure that all the findings, conclusions and recommendations are substantiated by evidence. Appropriate tools should be used to ensure proper analysis (e.g. including a data analysis matrix that records, for each evaluation question/criteria, information and data collected from different sources and with different methodology).
- By the end of the evaluation mission and prior to submitting a first draft evaluation report, a wrap up discussion should be organized with the country office and project team to present initial findings and request additional information as needed.

This mid-term review will be conducted as an in-depth project review using a participatory approach whereby the UNEP and UNDP staff associated with the project, key representatives of MAPEIIA and other ministries, other relevant stakeholders are kept informed and regularly consulted throughout the review. The review consultants will liaise with UNEP/UNDP on any logistic and/or methodological issues to properly conduct the review in as effective way as possible, given the circumstances and resources offered. The draft report will be delivered to UNEP/UNDP in English, along with a summary of key points and recommendations in French, and then circulated to project management staff. Any comments or responses to the draft report will be sent to UNEP/UNDP for collation and the consultant will be advised of any necessary revisions.

Following the review of the draft evaluation report, the evaluation team should indicate how comments have been addressed in the revised evaluation report.

2.4. Review report format and review procedures

The report should be brief, to the point and easy to understand. It must explain; the purpose of the review, exactly what was evaluated and the methods used. The report must highlight any methodological limitations, identify key concerns and present evidence-based findings, consequent conclusions, recommendations and lessons. The report should provide information on when the review took place, the places visited, who was involved and be presented in a way that makes the information accessible and comprehensible. The report

should include an executive summary that encapsulates the essence of the information contained in the report to facilitate dissemination and distillation of lessons.

Evidence, findings, conclusions and recommendations should be presented in a complete and balanced manner. The review report shall be written in English, be of no more than 50 pages (excluding annexes), use numbered paragraphs and include:

- i) An **executive summary** (no more than 3 pages) providing a brief overview of the main conclusions and recommendations of the review;
- ii) An **executive summary in French** summarizing key findings and recommendations;
- iii) **Introduction and background** giving a brief overview of the evaluated project, for example, the objective and status of activities;
- iv) **Scope, objective and methods** presenting the review, the review criteria used and questions to be addressed;
- v) **Project Performance and Impact** providing factual evidence relevant to the questions asked by the reviewers and interpretations of such evidence. This is the main substantive section of the report and should provide a commentary on all review aspects (section 2 above).
- vi) **Conclusions and rating** of project implementation success giving the reviewers' concluding assessments and ratings of the project against given review criteria and standards of performance. The conclusions should provide answers to questions about whether the project is considered good or bad, and whether the results are considered positive or negative;
- vii) **Lessons learned** presenting general conclusions from the standpoint of the design and implementation of the project, based on good practices and successes or problems and mistakes. Lessons should have the potential for wider application and use. All lessons should 'stand alone and should':
 - Specify the context from which they are derived
 - State or imply some prescriptive action;
 - Specify the contexts in which they may be applied (if possible who when and where)
- viii) **Recommendations.** High quality recommendations should be *actionable* proposals that are:
 - 1. Implementable within the timeframe and resources available
 - 2. Commensurate with the available capacities of project team and partners
 - 3. Specific in terms of who would do what and when
 - 4. Contain results-based language (i.e. a measurable performance target)
 - 5. Include a trade off analysis, when its implementation may require utilizing significant resources that would have otherwise been used for other project purposes.
- ix) **Annexes** include Terms of Reference, list of interviewees, documents reviewed, brief summary of the expertise of the review team, a summary of co-finance information etc. Dissident views or management responses to the review findings may later be appended in an annex.

2.5. Review of the Draft Review Report

The draft mid-term review report is submitted to UNEP, UNDP and to the NDEF. The Agencies and Ministry will then provide initial feedback and comments on the mid-term evaluation report with a primary emphasis on any errors of fact and may highlight the significance of such errors in any conclusions. The comments may also address the feasibility of the recommendations suggested.

2.6. Submission of Final Mid-term Review Report

The final report shall be submitted in electronic form in MS Word format in English and should be sent to the following persons:

For UNEP:

Maryam Niamir-Fuller, Director
UNEP/Division of GEF Coordination
P.O. Box 30552-00100
Nairobi, Kenya
Tel: + 254-20-7624686
Fax: + 254-20-623158/4042
Email: maryam.niamir-fuller@unep.org

Ms. Ermira Fida
Head,
GEF Climate Change Adaptation Unit
Division for Environmental Policy and Implementation (DEPI)
United Nations Environment Programme (UNEP)
P.O.Box 30552, Nairobi, Kenya
Tel: (254-20) 762 3113
Fax: (254-20) 762 3162/762 4041/762 4042
email: ermira.fida@unep.org

For UNDP:

XXXX
UNDP/GEF
Address and contact

Ms. Jessica Troni
XXXXX
UNDP GEF Regional Office, Pretoria
XXXX

The final Review report will further be disseminated to: The GEF Operational Focal Point, Relevant Government representatives, the project's Executing Agency (MoE) and Technical Staff (PMO and PMUs).

2.7. Resources and schedule of the review

International Reviewer

This mid-term review will be undertaken by one international reviewer and one national reviewer contracted by the UNEP on behalf of the two Agencies. The contracts for the reviewers will begin on XXXX and end on XXX (30 days - 10 days of travel to Comoros and approximately 20 days of desk study). The reviewers shall submit a first draft report on XXX to UNEP/UNDP. Comments to the final draft report will be sent to the consultants by XXXX. A second draft report should be submitted by XXXX. Feedback will be provided by XXXX. After which, the consultant will submit the final report no later than XXXX.

The reviewers should not have been associated with the design and implementation of the project. The reviewers should have the following minimum qualifications:

Education

Masters degree in agricultural economics, agricultural sciences, economics, natural resources management, development studies or other relevant social or natural sciences field.

Experience

A minimum of at least 5 years relevant work experience in:

- Conducting independent evaluation of rural/agricultural development and/or coastal zone management projects, especially donor-funded projects.
- Project management cycle (designing, implementation, monitoring and evaluation)

Competency profile

- Demonstrated solid knowledge of climate change adaptation or development.
- Demonstrated experience in project development, implementation or management.
- Good understanding of climate change, environment and food security issues.
- Working with the Government, NGOs, donors or the UN system in the South East Asia/Cambodia is an added advantage.
- Conversant with monitoring and evaluation of projects, including developing results-oriented targets and indicators and collecting quantitative and qualitative data.
- Fluency in oral and written English and French.

2.8. Schedule Of Payment

The reviewer will be paid a total lump sum (travel inclusive – to undertake one travel to Comoros) and the payment schedules will be as follows:

- Upon signing the contract (travel costs) - (15%)
- Second payment will be paid upon satisfactory completion of the first draft - (25%)
- Third payment will be paid upon satisfactory completion of second draft - (30%)
- Final payment upon satisfactory completion of work - (30%)

The fee is payable under the individual Special Service Agreement (SSA) of the reviewer and IS **inclusive** of all expenses such as travel, accommodation and incidental expenses.

In case, the reviewer does not provide the products in accordance with the TORs, the timeframe agreed, or his products are substandard, the payment to the reviewer could be withheld, until such a time the products are modified to meet UNEP's, standard. In case the reviewer fails to submit a satisfactory final product to UNEP the product prepared by the reviewer may not constitute the final report.

b. Planning of the mission

Monday, 16 June 2014	
15h00-17h00	<ul style="list-style-type: none"> • Arrival for the mission (welcome at airport with the National Coordinator of project ACCE) • Meeting with the ARR of UNDP, the associate of UNDP environment programme and National Coordinator of project ACCE
18h00-20h00	<ul style="list-style-type: none"> • Informal meeting with the Islamic development Bank and the Saudi Development Fund
Tuesday 17 June 2014	
09h00-11h00	<ul style="list-style-type: none"> • Meeting with SG-NFP GEF, the responsible planning monitoring and evaluation of the Ministry of Environment
11h30-12h30	Meeting with project team
12h30-13h30	<ul style="list-style-type: none"> • Lunch
13h45-14h45	<ul style="list-style-type: none"> • Meeting with ANACM director
15h00-16h00	<ul style="list-style-type: none"> • Meeting with Ma-Mwe director (Vouvouni)
16h00-17h00	<ul style="list-style-type: none"> • Field visit TP5, ONU4 in Vouvouni
Wednesday 18 June 2014	
Toute la journée	<ul style="list-style-type: none"> • Field visit (Visit of equipments of the Meteorology Direction, Bandassamlini, Hamalengo and automatic meteo station of Diboini)
Thursday 19 June 2014:	
09h00-10h00	<ul style="list-style-type: none"> • Meeting with Directeur General Environment
10h30-11h30	<ul style="list-style-type: none"> • Meeting with the Commissioner for Environment and DRE
11h30-12h30	<ul style="list-style-type: none"> • Meeting with AFD
14h00-15h00	<ul style="list-style-type: none"> • Meeting with DUE
Friday 20 June 2014	
Whole day	<ul style="list-style-type: none"> • Work reunion with Project team
Saturday 21 June 2014:	
Whole day	<ul style="list-style-type: none"> • Work reunion with Project team
Sunday 22 June 2014	
Whole day	<ul style="list-style-type: none"> • Drafting of the Memorandum of the mission
Monday 23 June	
9h00-10h00	<ul style="list-style-type: none"> • Wrap-up meeting with UNDP (ARR, ARR, Programme and CN / ACCE)
11h00-15h30	<ul style="list-style-type: none"> • Workshop with all stakeholders
Tuesday 24 June 2014	
9h00 -10h30	<ul style="list-style-type: none"> • Meeting with the project team
11h00	<ul style="list-style-type: none"> • Departure of the mission

c. Documents and reports consulted

This list presents a nonn-exhaustive list of the documents received and/or accessed on dropbox under the file “ACCE-Comores”

- ACCE-AWP 2012
- DETAILED DRAFT ANJOUAN
- Detailed Draft Grande Comore
- DETAILED DRAFT Mohéli
- DETAILED DRAFT Moroni
- DAO Bandassamlini, LOT 01
- DAO Hamalengo
- DAO Sangani, LOT 02
- Half Yearly Progress Report 2013
- LDCF Comoros Baseline Final Synthesis Report
- NAPA Comoros 2006
- Planning Plan NGAZIDJA
- Planning Plan Pomoni-Lingoni
- Project Document Fonds Flammand
- Programme Conjoint Adaptation EAU Comores 2010-2014
- AWP 2013 ACCE
- AWP ACCE 2014
- AWP 2012-2013
- Activity Report 2013
- Workshop report 2013
- Steering Committee Report 2013
- Project Document UNDP-LDCF Comoros
- UNDP-4188-Climate Change - LDCF-2013 PIR Report
- UNDP-PIR-Comoros 2012
- UNEP-PIR-Comoros- June 2013 - final

d. Logical framework

Table 9: Project logical framework as presented in the Project Document

This project will contribute to achieving the following Country Programme Outcome as defined in CPAP or CPD: CPAP (2008-2012) Outcome 5: Current trends in environmental degradation and depletion of natural resources and factors of risks and vulnerability to climate are significantly reduced.					
Country Programme Outcome Indicators: The overall and sectoral policies integrate environmental concerns and sustainable development; % of degraded areas that are the subject of restoration programs; Number of investment decisions in line with the blueprint of water.					
Primary applicable Key Environment and Sustainable Development Key Result Area (same as that on the cover page, circle one): 1. Mainstreaming environment and energy OR 2. Catalyzing environmental finance OR 3. <u>Promote climate change adaptation</u> OR 4. Expanding access to environmental and energy services for the poor.					
Applicable SOF (e.g. GEF) Strategic Objective and Program:					
Applicable SOF (e.g. GEF) Expected Outcomes:					
Applicable SOF (e.g. GEF) Outcome Indicators:					
	Indicator	Baseline	Targets	Source of verification	Risks and Assumptions
Project Objective: "To reduce the risk of climate change on lives and livelihoods from impacts on water resources in the Comoros."	1. The percentage change in vulnerability of men and women living in the pilot sites to climate change risks on availability of clean water.	1. The baseline will be determined in the pilot sites in the inception phase through a VRA.	1a. 50% increase in the VRA score at the end of the project. 1b. 20% increase in the VRA score mid-way through the project.	1. Gender-sensitive field Surveys/VRA.	Adaptation measures implemented in the water sector (i.e. rehabilitation/construction of infrastructure) are not found to be cost effective. (i.e. cost-recovery cannot be ensured). Stakeholders such as autonomous island's communities, UCEA, UCEM, NGOs and CGEs remain committed to implementing baseline activities complemented by the additionality interventions the project aims to implement. Pilot sites are best placed to demonstrate the benefits of measures to adapt to climate change. Logistical challenges slow down delivery e.g. getting supplies to islands and procuring contractors in a

					timely fashion.
<p>Outcome 1 Institutions at a national (i.e. Ma-Mwe and ANACM) and community (i.e. UCEA and UCEM) level strengthened to integrate climate change information into water resource management.</p>	<p>1. Number of policy documents revised to include regulations and provisions that promote gender equitable adaptation in the water sector.</p> <p>2. The number of policy-makers and planners using adjusted processes and methods to develop gender-equitable water management policies that integrate climate change projections.</p>	<p>1. Water Act and other relevant policies do not include regulations for application/enforcement.</p> <p>2. Policy makers and planners do not currently integrate knowledge of climate change into policies related to water, agriculture or poverty reduction.</p> <p>Deficiencies include: a) no collection of water data, no modelling or analysis of safe yield or of available water resources is carried out. b) water quality and supply monitoring capacities are weak.</p>	<p>1. At least one policy document is revised by the end of the project.</p> <p>2. By the end of the project, at least 10 policy makers and planners are using adjusted processes and methods to develop water management policies that integrate climate change projections.</p>	<p>1. Revised policy documents and interviews with Vice-President, Secretary General and agencies concerned.</p> <p>2. Gender-sensitive surveys and interviews with Ma-Mwe, UCEA, UCEM and AFD.</p>	<p>Availability of technical expertise and equipment for downscaling international climate data to ANACM level.</p> <p>Government remains stable and commits itself to incorporate climate change adaptation into its policy documents as a matter of priority.</p>
<p>Outcome 2 Water supply and water quality for selection pilot communities to combat impacts of climate change improved.</p>	<p>1. Percentage increase in the population at each pilot site with improved delivery of drinking water.</p>	<p>1. At present, domestic water supply is insufficient for the capital of Moroni and the present network is failing. There is no network in place at Djandro Plateau. A network exists in Lingoni-Pomoni and Nioumakélé but they are insufficient and require rehabilitation. Baseline water supply is less than 50 litres/per capita/per day and water quality does not comply with drinking water</p>	<p>1a. By the end of the project, at least 50% of the populations within each pilot site are able to access at least 50 litres per day of safe drinking water.</p> <p>1b. Mid-way through the project, pilot interventions regarding the construction and rehabilitation of water supply infrastructure are at least 90% completed.</p>	<p>1. Surveys and end of project evaluation reports. VRAs. Water distribution meters and results of quality monitoring.</p>	<p>Communities do not respond positively to improved water management practices.</p> <p>Adaptation measures implemented in the water sector (i.e. rehabilitation/construction of infrastructure) are not found to be cost effective. (i.e. cost-recovery cannot be ensured).</p>

	<p>2. Percentage increase in agricultural production at all pilot sites.</p> <p>3. Number of cases of hepatitis and typhoid fever reduced in all five pilot sites.</p> <p>4. Percentage of land surface covered by forest tree canopy.</p>	<p>standards.</p> <p>2. Crops are largely rain-fed with a very basic (and inefficient) drip irrigation system in place in Bandasamlini.</p> <p>3. Poor water quality causes frequent cases of hepatitis and typhoid fever in the Comoros (The baseline number of cases will be determined in the pilot sites in the inception phase.)</p> <p>4. The extent of forest degradation at both of the reforestation pilot sites will be determined during the implementation phase.</p>	<p>2. By the end of the project, agricultural production has increased by at least 10% at these pilot sites.</p> <p>3. By the end of the project, the number of cases of hepatitis and typhoid fever is reduced by at least 25% in the pilot sites.</p> <p>4a. Mid-way through the project, at least 30ha at each of the two pilot site where reforestation will be piloted has been restored.</p> <p>4b. At least 50% of alive forest cover by the end of the project.</p> <p>5. All interventions will be designed and implemented using gender-sensitive planning tools.</p>	<p>2. Surveys and end of project evaluation reports; VRAs.</p> <p>3. Statistical data from hospitals near pilot sites and surveys conducted at pilot sites.</p> <p>4. Running line transects conducted every 12 months after rehabilitation through the restored area.</p>	<p>Communities may not adopt reforestation activities.</p>
<p>Outcome 3 Awareness and knowledge of adaptation good practice for continued process of policy review and development increased.</p>	<p>1. Number of men and women (public and decision makers) aware of climate change vulnerability and adaptation responses.</p> <p>2. Number of knowledge products generated and disseminated.</p>	<p>1. At present, rural communities' understanding of climate change and its impacts is minimal. The baseline will be determined in the inception phase. A survey is needed.</p> <p>2. At present, the national policies and autonomous islands' development plans do not address climate change and adaptation.</p>	<p>1a. By the end of the project, at least 30% of the population within pilot site communities are aware of climate change impacts and adaptation options.</p> <p>1b. Mid-way through the project, at least 10% of the population within pilot site communities are aware of climate change impacts and adaptation options based on their involvement with pilot site interventions.</p> <p>2a. By the end of the project, project lessons are distributed in hard copy (e.g. pamphlets, briefing notes, newsletters, booklets etc), electronically (e.g. via the project</p>	<p>1. Gender-sensitive surveys among communities on each islands regarding climate change impacts and adaptation options.</p> <p>2. Project evaluation reports. ALM, GAN, and IW platform.</p>	<p>Pilot sites are best placed to demonstrate the benefits of measures to adapt to climate change.</p> <p>Government remains stable and commits itself to incorporate climate change adaptation into its policy documents as a matter of priority.</p> <p>Policy stakeholders are unwilling to make changes in policies within the time frame of the project.</p>

			<p>website), via radio broadcast and via one national and three island-level workshops.</p> <p>2b. Mid-way through the project, a project website is operational and is regularly updated with project information.</p>		
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e. Logical framework as modified in the 2013 PIR

Project objective and Outcomes	Description of indicator ²⁴	Baseline level ²⁵	Mid-term target ²⁶	End-of-project target	Level at 30 June 2013	Progress rating ²⁷
Objective²⁸ To reduce the risk of climate change on lives and livelihoods from impacts on water resources in the Comoros.	1. The degree of vulnerability of men and women living in the pilot sites to climate change risks on availability and quality of water (domestic and irrigation).	Moroni: rating of 4 (on a scale of 1-5): quite vulnerable; Plateau Djandro in Moheli: rating of 4 on average for four villages; Lingoni-Pomoni in Anjouan: rating of 4: quite vulnerable; High Nioumakele in Anjouan: rating of 4: quite vulnerable; Bandamsamlini: rating of 3: moderately vulnerable.	N/A	Rating to be improved to 2: Not very vulnerable	No measurement of the objective indicator yet as field based works related to water and land use) have yet to begin. There is satisfactory progress, however, made towards delivering the various outputs that contribute to the objective.	S

²⁴ Add rows if your project has more than 3 key indicators per objective or outcome.

²⁵ Depending on selected indicator, quantitative or qualitative baseline levels and targets could be used (see Glossary included as Annex 1).

²⁶ Many projects did not identify Mid-term targets at the design stage therefore this column should only be filled if relevant.

²⁷ Use GEF Secretariat required six-point scale system: Highly Satisfactory (HS), Satisfactory (S), Marginally Satisfactory (MS), Marginally Unsatisfactory (MU), Unsatisfactory (U), and Highly Unsatisfactory (HU). See Annex 2 which contains GEF definitions.

²⁸ Add rows if your project has more than 4 objective-level indicators. Same applies for the number of outcome-level indicators.

<p>Outcome 1: Institutions at a national (i.e. Ma-Mwe and ANACM) and community (i.e. UCEA and UCEM) level strengthened to integrate climate change information into water resource management.</p>	<p>1. Number of policy documents at the Union decisional level, the island decisional level and the community/local level revised or elaborated to include regulations and provisions that promote gender equitable adaptation in the water sector.</p>	<p>1. Water Act for the Union of Comoros does not have any regulations for application. There is one environmental law and environment strategy, but lack of regulation for adaptation. The Comoros agricultural strategy dates back from 1994 and has not been implemented. Water management is only considered from the point of view of intensification, not rainfall scarcity or intensification of rainfall.</p>	<p>N/A</p>	<p>The Water Act is revised and includes regulations and provisions that promote gender-equitable adaptation.</p> <p>One water programme with priority actions by 2030 is elaborated by the end of the project.</p> <p>Water Acts at the local level in the pilot sites in Moheli and Anjouan are revised to include regulations and provisions that promote gender-equitable adaptation</p>	<p>No measurement of outcome indicator yet, however there is some positive progress towards the delivery of activities under this outcome, specifically towards the development of the information system through the procurement and installation of weather stations, and a plan to increase hydrological data information availability.</p>	<p>MS</p>
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	<p>2. The number of policy-makers and planners at the Union and island levels using adjusted processes and methods (eg collecting water data and climate data, modelling climate trends and monitoring water quality and supply) to develop gender-equitable water management policies that integrate climate change projections.</p>	<p>Policy makers and planners at the Union and Island levels do not currently integrate knowledge of climate change into policies related to water and agriculture and they lack capacities to collect water data, to model climate change and to monitor water quality and supply. At the Union level there are a total of 20 policy makers and planners.</p>	N/A	<p>By the end of the project, at least the following numbers of planners are using adjusted processes and methods, in terms of collecting water and climate data, modeling climate trends and monitoring water quality and supply, to develop water management policies that integrate climate change projections: 7 policy makers and planners at Union level, 5 in MaMwe; 10 in ANACM; 3 in the Directorate of Environment in Moheli; 5 in the Directorate of Environment in Anjouan; 2 in UCEM and 7 in UCEA,</p>	<p>There has been some progress in mobilizing policy makers and interministerial cooperation during the various steering committees and technical meetings on each islands. Project stakeholders are increasingly aware of the project goals and objectives and are expressing strong buy-in.</p>	MS

Outcome 2: Water supply and water quality for selected pilot communities to combat impacts of climate change improved.	1. Overall perception of the population per pilot site on: i) the daily quantity of water accessible for domestic uses ii) the facility of access to this water and iii) the quality of the water used (as per WHO standards) on a rating of 1-4 (1 = very satisfied, 2 = satisfied, 3 = unsatisfied, 4 = very unsatisfied).	Moroni: Quantity = 3, Access = 3, Quality = 3; Djandro: Quantity = 4, access = 4, Quality = 4; High Nioumakele in Anjouan: Quantity = 3, Access = 2, Quality = 3; Lingoni=Pomoni in Anjouan: Quantity = 2, Access = 4, Quality = 3.	N/A	Raise the rating to 2 for all three criteria across all project sites.	No measurement of the outcome indicator yet. The feasibility studies are near completed and provide detailed technical design and specifications for the anticipated works, as well as environmental assessments. Lists of equipment for procurement are established and works are expected to begin during second part of 2013.	No rating (see UNDP PIR for detail)
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	2. Annual number of cases of typhoid and acute diarrhoea in pilot sites.	Djandro (Wanani sanitary district - 4830 inhabitants): # of typhoid cases (2009): 40; # of cases of acute diarrhoea (2009): 28 (15 men, 13 women). Pomoni sanitary district in Anjouan- 4824 inhabitants): # of typhoid cases (2009): 29 (19 men, 10 women) ; # of cases of acute diarrhoea (2009): 731 (368 men, 363 women). Mremani sanitary district in Anjouan- 35000 inhabitants): # of typhoid cases (2009): 9 (5 men, 4 women); # of cases of acute diarrhoea (2009): 252 (125 men, 127 women). Moroni sanitary district in Grande Comoros- 42000 inhabitants): # of typhoid cases (2009): 75; # of cases of acute diarrhoea (2009): 141.	N/A	2. By the end of the project, the number of cases of hepatitis and typhoid fever is reduced by at least 25% in the pilot sites.	No change yet since water works have yet to begin. An additional activity has been added into the project to support the installation of ecologically-friendly water purification basins thanks to a new financial contribution from the Flemish Government.	No rating provided as the indicator refers to UNDP supported activities
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	3. Number of surviving trees in reforested areas.	The GDT project has planted 10000 fruit and forest trees in Lingoni-Pomoni. None in Bandasamlini. There are no protection measures for forests currently.	N/A	2 sites of 95ha each to be reforested (Bandasamlini & Lingoni-Pomoni). At 1000 trees/ha = 180,000 trees. Target is an 80% survival rate which gives 144,000 living trees by the end of the project.	To date, approx.. 7000 fruit and forest trees have been planted:, 2000 trees in Bibavou, 3000 trees in Diboini (Grande Comore), and 2713 trees in Mbatsé-Hoani (Mohéli), 2000 trees and seedlings in Anjouan near the DAGI-Mroni water source. This represents approximately 17 ha. These sites are located in and around the project sites. The remainder of the reforestation is expected to take place during future annual campaigns and during the implementation of the land use plans that are being developed in 2013.	MS
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Outcome 3: Awareness and knowledge of adaptation good practice for continued process of policy review and development increased.	1. Percentage of men and women (public and decision makers) aware of climate change vulnerability and adaptation responses.	Currently knowledge on specific climate change risks and adaptation options is low among the public and decision-makers. It is estimated that 10% of decision makers and less than 5% of the population in the pilot sites know much about climate change and adaptation.	N/A	1a. By the end of the project, at least 30% of the population within pilot sites and 50% of decision-makers have better knowledge on climate change impacts and adaptation options by having taken part in seminars and workshops.	There have been a number of workshops, seminars and awareness raising events, including a capacity assessment workshop (1 in each island), a series of meetings with communities (at least 7), but progress on awareness has not yet been measured	S
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	2. Number of newspaper articles, booklets and pamphlets highlighting lessons learned during the project and # of technical documents on lessons learned submitted to knowledge networks.	Except for the National Communications and the NAPA there are currently no available documents and reports about good practices on CCA and water in Comoros.	N/A	2a. By the end of the project, project lessons are distributed in hard copy (e.g. pamphlets, briefing notes, newsletters, booklets etc), electronically (e.g. via the project website), via radio broadcast and via one national and three island-level workshops.	The project produced pamphlets and fact sheets, articles on the reforestation campaign, and 4 feasibility studies whose dissemination will be facilitated through the project's web linkages. Lessons learned from the project will be extracted at the end of the project.	S

	Activities	Expected completion date [as per budget revision 1 – June 2013]	Implementation status as of 30 June 2011 (%)			As per real starting date, June 30 2013 represents end of Q6. Comments if variance[2]. Describe any problems in delivering outputs	Progress rating[3]
			30 June 2011	30 June 2012	30 June 2013		
1.1 Improved Information on climate change risks to water availability in Comoros . (UNEP)	1.1.1a definition and adoption of the water and climate monitoring parameters	Q1 – march 2012	0	100%	N-A	Completed.	S
	1.1.1b. Identification, in collaboration with ANACM of the equipment needs and sites for monitoring stations	Q2 – march 2012	0	100%	N-A	Completed.	S
	1.1.2 Acquisition and installation of hydrometeorological and agrometeorological stations	Q6- march 2013	0	0%	80%	The stations have been acquired and are being delivered and installed. Three technicians from the ANACM have been sent for training on the premises of the company supplying the stations.	S
	1.1.3 conversion of existing available data on microfile to a usable format	Q6* March 2013	0	0	50%	Following difficulties in locating the equipment to perform the work, and the failure of ACMAD to provide anticipated assistance, this work has been tasked to a sub-contracting company in Comoros. Work is underway through the services of a Comorian Company. Work should be completed in October 2013.	MU
	1.1.4 analyze available climate data to validate the models (link to 1.2.2)	Q7 30 June 2013	0	0	0	This activity has been delayed, as the team and the ANACM are working to establish a more coordinated strategy to the activities under this output. So far the team has noted significant data gaps, and new data (climate or hydrological) is not yet coming in. Discussions are underway to coordinate activities 1.1.4, 1.1.5, 1.1.6 and 1.3.1 to provide additional climate and hydrological data on which to perform local models.	U
	1.1.5 Develop data collection, conservation and analysis systems in each island	Q9 October 2013	0	0	0	The need for a coordinated data collection and sharing platform is being discussed among the ANACM and island stakeholders, along with the material needs that could also arise for this activity, as part of a more coordinated strategy for the Output. The activity has been delayed to Q3 and Q4 of 2013.	U
	1.1.6 Acquire and analyze data from the tide gauges in Ngazidja to determine links between salinity and tides as well as to measure sea level (reformulated activity as tidal gauge is already available in Comoros)	Q6 – March 2013	0	0%	0%	There has not been any progress on this activity as the data has not yet been made available. Discussions are underway to gather the data and to input it into a shared database (see activity above), to be analyzed in a report linking SLR and salinity (a potential new activity). This is expected in Q4 of 2013.	U

1.2. Increased capacity in assessing and managing changes in water availability and quality (UNEP)	1.2.1 stakeholder analysis and assessment of needs towards the development of a capacity building plan to strengthen monitoring and assessment capacity for availability and water quality.	Q6 – March 2013	0	75%	90%	The institutional capacity assessment exercise was completed and the findings are being compiled into a report. The report will form the basis for the capacity development plan to be developed in 2014.	MS
	1.2.2 Training of ANACM staff on climate data collection and analysis and on climate model downscaling	Q7 30 june 2013	0	0	0	These activities were postponed to Q7 as a result of the Project's Steering Committee in February 2012, who decided to place a priority on the initiation of concrete works for the year. The activities have been delayed due to lengthy procurement processes. The procurement is now expected to start Q3 of 2013	MU
	1.2.3 Training of MAMWE staff on integration of climate data and on water related climate risk management	Q7- 30 june 2013	0	0	0		U
	1.2.4. Training of UCEA and UCEM staff on the operation and management of hydraulic infrastructures	Q6*- 30 june 2013	0	0	0		U
1.3. Preparation and provision of improved climate information for water resource management policies and spending plans (UNEP)	1.3.1 Undertake hydrological modelling on the three islands (availability, recharge and exploitation rates, climate)	Q7 – June 2013	0	0	10%	This activity is being reformulated as it was noted that there is insufficient local data on hydrological flows to enable this modeling. The activity will likely be reformulated to allow for the acquisition of hydrological monitoring equipment, in line with a more coordinated strategy to achieve Outcome 1 and output 1.1 in particular. A list of needed equipment and potential sites for installation is being compiled for feasibility assessment.	MU
1.4. Integration of improved climate information with water resource management policies and spending plans, and other relevant policies (UNDP)	1.4.1 Analysis of sectoral policies that facilitate or hinder community resilience	Q6 – march 2013	0	0		UNDP-led output (see UNDP PIR)	
	1.4.2. Develop policy notes showing impacts, costs, benefits of resilience in the three islands	Q6 – march 2013	0	0		UNDP-led output (see UNDP PIR)	
	1.4.3 Revise the water Code and regulations	Q17 - 31 december 2015	0	0		UNDP-led output (see UNDP PIR)	
	1.4.4 Develop recommendation on the changes to national budget or water prices and tariffs, including on cost recovery	Q13* December 2014	0	0		UNDP-led output (see UNDP PIR)	
	1.4.5. Review and revise development legislation and policy, the environmental action plan and the poverty reduction strategy	Q17* 31 december 2015	0	0		UNDP-led output (see UNDP PIR)	
	1.4.5b. Training on the recovery of costs related to hydrological infrastructure	Q19 - December 2013	0	0		UNDP-led output (see UNDP PIR)	
1.5. A capacity development plan for policy	1.5.1 Develop a capacity development plan for policy revision and planning related to adaptation (following 1.2.2)	Q6-march 2013	0	10%	10%	This activity is being initiated with the institutional needs assessment mentioned above, which will provide input into the development of a CD plan. It is expected in Q8.	MU

review and design among decision-makers, developed based on best known scientific and technical evidence (UNEP)	1.5.2 Train planners and decision-makers on revisions and proposed changes to existing legislation and regulations	Q16* 30 september 2015	0	0	0	Activity not yet started	N/A
1.6. Implementation of the capacity development plan for policy review and design among decision makers (UNDP)	1.6.1. Establish an intergovernmental and interministerial process for revising policies related to water	Q17 - december 2015	0	0	0	UNDP-led output (see UNDP PIR)	
2.1 Construction and rehabilitation of water conservation and adduction infrastructures for household and agricultural uses (UNDP)	2.1.1 Feasibility study for the rehabilitation of Moroni's main water line and system	New activity – Q6 –June 2013	0	30%	90%	As agreed in budget revision from June 2013, UNEP is supporting this activity. This activity is near completed, with all final reports submitted and only minor revisions being made to the technical designs. Final Call for Proposal Documents are expected at the end of June 2013. Lists of equipments and procurement files are being forwarded to UNDP.	S
	2.1.2 Environmental and Social Impact Assessment for construction and rehabilitation works on three islands	New activity – Q6 –June 2013	0	30%	90%	As agreed in budget revision from June 2013, UNEP is supporting this activity. This activity is near completed, with all final reports submitted and only minor revisions being made to the technical designs. Final Call for Proposal Documents are expected at the end of June 2013. Lists of equipments and procurement files are being forwarded to UNDP.	S
	2.1.3 Feasibility study for the reservoirs and harvesting structures in Anjouan	New activity – Q6 –June 2013	0	30%	90%	As agreed in budget revision from June 2013, UNEP is supporting this activity. This activity is near completed, with all final reports submitted and only minor revisions being made to the technical designs. Final Call for Proposal Documents are expected at the end of June 2013. Lists of equipments and procurement files are being forwarded to UNDP.	S
	2.1.4. Feasibility study on the implementation of a water piping network for drinking and agricultural purposes in Moheli	New activity – Q6 –June 2013	0	30%	90%	As agreed in budget revision from June 2013, UNEP is supporting this activity. This activity is near completed, with all final reports submitted and only minor revisions being made to the technical designs. Final Call for Proposal Documents are expected at the end of June 2013. Lists of equipments and procurement files are being	S

						forwarded to UNDP.	
	2.1.5 Feasibility and ESIA for the rehabilitation and construction of water conservation structures for agriculture in Bandassamlini Sangani and Hamalengo (Grance Comore)	New activity – Q6 –June 2013	0	30%	90%	As agreed in budget revision from June 2013, UNEP is supporting this activity. This activity is near completed, with all final reports submitted and only minor revisions being made to the technical designs. Final Call for Proposal Documents are expected at the end of June 2013. Lists of equipment and procurement files are being forwarded to UNDP.	S
	2.1.6 Conduct rehabilitation works for the Moroni water network	Q8 June 30 2013	0	0%	0	This is a UNDP implemented activity	
	2.1.6b Conduct rehabilitation works for Bandassamlini and surroundings	Q8 June 30 2013	0	0%	0	This is a UNDP implemented activity	
	2.1.7 Conduct rehabilitation and piping works in Anjouan	Q8 June 30 2013	0	0%	0	This is a UNDP implemented activity	
	2.1.8 Conduct water mobilization and conservation works in Moheli	Q8 June 30 2013	0	0%	0	This is a UNDP implemented activity	
	2.1.9. Work supervision and develop a replication plan	Q16 30 September 2015	0	0%	0	This is a UNDP implemented activity	
	2.1.10 Develop indicators and targets to measure adaptation in the water sector	Q13 – 30 december 2014	0	0%	0	This is a UNDP implemented activity	
2.2 Technologies to improve water access and quality that mitigate climate change risks are piloted (UNDP)	2.2.1 Establish and train a water management committee in Ngazidja under supervision of MAMWE	Q6* - March 2013	0	0%	0	This is a UNDP implemented activity	
	2.2.1b Assess previous experience on water treatment and propose adapted and replicable technologies for water quality control and treatment	Q5* - March 2013	0	0%	0	This is a UNDP implemented activity	
	2.2.2 Train MAMWE technical staff in charge of operations and maintenance (chlorination, pump maintenance, leak detection)	Q9* - 31 december 2014	0	0%	0	This is a UNDP implemented activity	
	2.2.3 Capacity development for local water stakeholders towards a sustainable management of rehabilitated water structures	Q7* - June 2013	0	0%	0	This is a UNDP implemented activity	
	2.2.4 Introduce technologies for water potabilization and treatments at local level, including ecological sanitation systems (Mbatse, Hoani and Lingoni-Pomoni)	New activity Q9- December	0	0	15%	This is a new activity that will be supported from Flemish Funds through UNDP. Please see UNDP PIR for detail.	

		2013					
2.3. Degraded agricultural and forested lands in pilot sites are the object of sustainable land use plans and vegetative cover increases (UNEP)	2.3.1a finalize the state of reference on agricultural planning and perform participatory species selection for reforestation works (formerly part of 2.1.5)	Q5 – Dec 2012	0	90%	90%	A preliminary species selection exercise has been conducted and a report is available, with a long list of species. The report needs to be supplemented with additional scientific information on various species behavior under various climate conditions, which the team is seeking with cooperation from CIFOR. Once this information is compiled, the list will be validated with communities. The state of reference on agricultural planning is underway and will be delivered by the Island Coordinators during the Land use Planning (below).	MS
	2.3.2 elaborate a land use plan in each site	Q5* - December 2012	0	0%	10%	Recruitment of experts is close to finalization for this activity. It is expected to begin in July 2013, and to end in September 2013.	MU
	2.3.3. Train and support communities during reforestation using an agro-sylvo-pastoral approach that promotes resilience	Q8 September 2013	0	0%	0%	This activity will take place after the land use plans have been developed; therefore it has been delayed and is not expected to start until end of September 2013.	MU
	2.3.4 Participatory reforestation within communities in the framework of the national campaign "1 Comorian, 1 tree"	Q7* 30 september 2013	0	0%	30%	The project has contributed labor, tools, materials towards the national Reforestation Campaign. To date, approximately 17 ha have been reforested.	MS
	2.3.5 Training and support to producers towards the sustainable and resilient land use for agriculture (Bandassamini and Nioumakele)	Q10 – march 2014	0	0	0	This is a new activity that will be supported from Flemish Funds through UNDP. Please see UNDP PIR for detail.	
3.1. Knowledge management and communications products on lessons learned, for decision makers, communities and development partners (UNEP)	3.1.1 compile project results and identify potential barriers to their replication	Q17* 31 december 2015	0	0%	0	n-a	
	3.1.2 Launch and disseminate knowledge products and communications products	Q17*31 december 2015	0	10%	20%	This activity was intended as an ongoing activity. Some products have been produced, and a number of others slated for productions. The project has its own Facebook page, and has produced T-shirts, caps and logos for distribution, as well as some press articles.	MS
3.2. Learning disseminated through a platform for national learning and sustainability, and integrated in the global water networks (ALM, GAN and Integrated Water	3.2.1 Create a parliamentary working group and organize seminars on risks posed by climate change	Q17*31 december 2015	0	0%	0	This is a UNDP Activity. Please see UNDP PIR	
	3.2.2 organize national workshop and 3 islands workshops for the dissemination of project lessons and results	Q17*31 december 2015	0	0	0	This is a UNDP Activity. Please see UNDP PIR	
	3.2.2a Inception workshop	Q1 March 2012	0	100%	100%	Completed.	MS
	3.2.3 Organize community workshops on the project	Q17* ongoing to 31 december	0	0	25%	This is a UNDP Activity. Please see UNDP PIR	

Learn) (UNDP)		2015					
	3.2.4 Publish workshop reports and distribute documents	Q17* ongoing to 31 december 2015	0	0	15%	This is a UNDP Activity. Please see UNDP PIR	
	3.2.5 Publish a monthly newsletter, newspaper articles, pamphlets and other documents on the project	Q17* ongoing to 31 december 2015	0	10%	20%	This is a UNDP Activity. Please see UNDP PIR	
	3.2.6 intervene through local media (radio, TV)	Q17* ongoing to 31 december 2015	0	10%	10%	This is a UNDP Activity. Please see UNDP PIR	
3.3. Disseminate Comorian experience in knowledge networks and through regular updating of the project's website (UNEP)	3.3.1 Create, validate and launch project website	Q17* ongoing to 31 december 2015	0	10%	10%	Plans are underway to develop a coordinated internet platform and presence for the project, using existing and available structures, including UNDP hosted facebook page, website and linkages to ongoing internet forums	MU
	3.3.2 compile information and technical documents and submit them to various networks	Q1y* ongoing to 31 december 2015	0	0	0	There has yet to be any formal compilation of technical documents available for publication, but these will be posted online as soon as they become available.	MS
	3.2.4 develop a document summarizing project lessons for publication in an academic journal and presentation at an international conference	Q16* December 31 2015	0	0	0	N-A	

***Due to early delays in implementation (see column 5 for details), the expected completion dates have been revised in consultation with the PSC and UNEP TM. All intended dates of completion have been revised as a result of the inception meeting in February 2012.**