Climate Change Adaptation Action and Mainstreaming in Mozambique

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Final Evaluation Report

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List of acronyms and abbreviations

AAP	Africa Adaptation Program
AfDB	African Development Bank
ATLAS	Enterprise Resource Planning system used by UNDP
AWP	Annual Work Plan
CFMP	Mid-Term Expenditure Framework
CO	Country Office
CONDES	National Council for Sustainable Development
CPR-E	Crisis Prevention and Recovery-Environment Unit
CSO	Civil Society Organization
CTA	Chief Technical Advisor
DNA	National Water Directorate
DRR	Disaster Risk Reduction
ECCWG	Environmental & Climate Change Working Group
FUNAB	Mozambique's Environmental Fund
GoM	Government of Mozambique
INAM	National Meteorology Institute
INGC	National Disaster Management Institute
IP	Implementing Partner
IRTSC	Interregional Technical Support Component
MICOA	Ministry of Coordination of Environmental Action
MoF	Ministry of Finances
MOPH	Ministry of Public Works and Housing
MPD	Ministry of Planning and Development
MTR	Mid-Term Review
NAPA	National Adaptation Plan of Action
NEX/ NIM	National Execution/ National Implementation Modality
NGO	Non-Governmental Organization
OE	State Budget
PARP	Mozambique's Action Plan for the Reduction of Poverty
PEDD	Strategic District Development Plan
PES	Economic and Social Plan
PMU	Project Management Unit
PQG	Government's Five Year Plan
QPR	Quarterly Progress Report
SETSAN	Technical Secretariat for Food Security and Nutrition
SMART	Specific, Measurable, Actionable, Realistic, and Time Bound
UEM	Eduardo Mondlane University
UNDP	United Nations Development Programme

Executive summary

The final evaluation of the Mozambique's project of the Africa Adaptation Programme was conducted at the request of the UNDP country office to provide a detailed assessment of the status of its outputs and outcomes and what factors have facilitated and/or hindered the achievements, and if the effects observed can be attributed to the project. The evaluation was based on project documents (annual reports, annual work plan, mission reports etc.) and other related documents, as well as interview with stakeholders and representatives of implementing partners.

Mozambique is vulnerable to climate change due to its exposure to climate related threats its high sensitivity to social and environmental factors and its low adaptive capacity. Climate projections for the mid and late 21st century foresee an intensification of these threats and a real risk for the country's development objectives[i].

The government of Mozambique responded to these challenges through studies on impact of climate change and strategic plans, particularly the National Adaptation Plan of Action (NAPA) and the Study on the Impact of Climate Change on Disaster Risk in Mozambique. Adaptation action is taking place through government programs on natural resource management, disaster risk reduction, water and agriculture, as well as initiatives supported by bilateral and multilateral donors.

The following were identified as the main barriers for climate change adaptation[ii]:

1. Lack of coordination and clarifications of roles and responsibilities between government institutions that has led to scattering and even duplication of activities.
2. Poor awareness of importance of impacts of climate change at key ministries such as tourism, transport, public works, energy, trade, agriculture and health.
3. Weak human and financial capacity for the implementation of plans and strategies.
4. Lack of data and information technology (e.g. data on gender disaggregated vulnerability, climatic data).

The project document for the AAP Mozambique project, ***Climate Change Adaptation Action and Mainstreaming in Mozambique*** was signed in 2009 and started implementation in March 2010 as a UNDP NEX project. The project intended to mainstream climate change adaptation mechanisms in Mozambique's policy, development and investment frameworks. The project was funded with US$ 2,987,620 with an implementation timeframe of three years (2009-2011). However, delays in implementation of this and of other AAP country projects led to a no-cost extension till December 31st, 2012.

The AAP Mozambique project responded to the regional AAP design and was articulated in five outcomes:

- **Outcome 1:** Long term planning mechanisms to cope with climate change in Mozambique strengthened.

- **Outcome 2:** Leadership and institutional frameworks to manage climate change risks and opportunities harmonized, coordinated and strengthened.
- **Outcome 3:** Climate-resilient policies and measures implemented in priority sectors and through demonstration projects.
- **Outcome 4:** Financing options to meet national adaptation costs expanded at the provincial and national level and integrated into sectors.
- **Outcome 5:** Knowledge on adjusting national development processes to incorporate climate change risks/ opportunities generated and shared.

The project supported national priorities as expressed in key national strategic documents and was also aligned with the UNDAF and the UNDP country program.

The main accomplishments of the AAP Mozambique are:

- The development of strong commitment among implementing partners, particularly MPD, INGC and MICOA to continue mainstreaming of climate change in planning and investment instruments;
- The enhancement of capacities of key institutions to generate and manage information on climate change for use in decision-making
- The formulation of a National Strategy on Climate Change that sets the basis for institutional arrangements and climate finance
- Awareness-raising on climate change among different stakeholders

Despite the initial problems the project teams managed to complete almost all activities achieving important milestones and thus strongly contributing to set the basis for the mainstreaming of adaptation in planning and investing instruments of public and private institutions. In December 2012 the project had achieved a 93% delivery rate.

The key findings of this evaluation are as follows:

- The design of AAP Mozambique presented some weaknesses that affected the implementation. The logical framework exhibited results and indicators not according to SMART standards and the design logic should have involved careful timing and adequate coordination among of all implementing partners. Moreover, the design should have included a proper assessment of the institutional and timing risks involved.
- The project could have profited from a more participatory consultation at the design stage, involving multiple implementing partners at national, subnational and sectorial levels.
- The project governing structures (board, national project director) were established only after one year of project implementation. The project steering committee was never formed.

- These factors caused misunderstandings and differences in approach that contributed to the serious delays the project was confronted with during its first year of implementation.
- The project's financial management and its efficiency and timeliness were burdened by the insufficient operational planning and allocation of resources for a more agile administration.

The evaluation concludes that the AAP Mozambique has partially achieved its outcomes and thus made significant contributions to the institutional coordination and technical capabilities Mozambique needed to address the threats posed by climate change. The project fostered partnerships among government institutions and with other national and international partners and, together with other initiatives supported by bilateral and multilateral donors, consolidated the institutional commitment with climate change issues.

The sustainability of the achievements would still require external financial support to consolidate the achievements in institutional coordination and technical capacity development. There are already commitments to continue this support by donors such as the World Bank, the AfDB and GEF as well as other donors within the ECCWG.

1. Introduction.

1.1 Purpose of the evaluation.

The final evaluation of the Mozambique's project of the Africa Adaptation Programme was conducted at the request of the UNDP country office to provide a detailed assessment of the status of its outputs and outcomes measured against the results and resources framework, how they were achieved and what factors have facilitated and/or hindered the achievements and if the effects observed can be attributed to the project.

The evaluation should serve the implementing partners of the AAP Mozambique, the UNDP CO and the Environment and Energy Group (EEG) of the UNDP to learn about what approaches are more effective to mainstream climate change into planning and investment instruments.

Based upon this, the objectives of this final evaluation are:

- To analyze the implementation of the project, and the progress achieved towards delivering the specified development objective and outcomes.
- To establish the relevance, effectiveness, efficiency, timeliness and sustainability of the results.
- To collate and analyze specific lessons and best practices pertaining to the strategies employed and implementation arrangements, which may be of relevance to other projects in the country and in similar contexts.

1.2 Methodology of the evaluation

To answer the evaluation objectives, primary and secondary data was collected and analyzed in the following steps from January 7th till February 8th, 2013:

- Mission to Maputo (10 days) for briefing, scoping key issues, collecting documents provided by the project team and interviews with key actors and stakeholders
- Skype interview with representative from the AAP regional office
- Review and analysis of documents and financial information provided by the project team
- Submission of the draft evaluation report
- Review of the draft report by stakeholders
- Submission of final evaluation report

Secondary data from reports such as annual reports, mission reports, data, annual work plans, minutes of steering committee meetings, as well as national strategies and plans such as the Government's Five Year Plan, PARP, NAPA, National Climate Change Strategy MDG progress reports, and context documents of bilateral and multilateral actors, such as the UNDP country program, UNDAF and other independent assessments were used to establish the status of project outputs, level of involvement of national and provincial

government, M&E system, efficiency of administrative processes and disbursement of funds as well as the institutional, sociopolitical, financial and environmental contexts.

In order to ensure participation by all levels of stakeholders, from project management, implementation partners and beneficiaries, the evaluation recorded their views and perceptions on the design, implementation, results and sustainability of the project through semi-structured individual and group interviews. A list of all interviewed stakeholders is attached in annex 2.

The extent of achievement and success in the different aspects of the project according to the evaluation criteria was established based on success indicators listed in the evaluation matrix in annex 1.

Constraints of the evaluation

By the time the consultant for the final evaluation was recruited the project had ended and the PMU team has ceased their contractual relationship with the project with the exception of the chief technical advisor.

The last annual report had not yet been elaborated and the documentary base for the assessment of the last year of implementation (2012) was based on the annual work plan, quarterly progress reports, minutes of board meetings, mission reports and combined delivery report (CDR).

1.4 The project and its development context

Mozambique is vulnerable to climate change as evidenced by climate related loss & damages that have cost the country almost 650 million USD[iii] since 2000. Droughts, floods and cyclones are the main climatic threats to a predominantly agrarian country with a 30% contribution of the primary sector to the GDP with 95% of its agricultural area depending exclusively on rain water. Adaptation capacity is low, with 55% of the population below the national poverty line[iv], weak infrastructure development[v] except in some coastal areas where also 60% of the population live (exposed to floods, cyclones and sea level rise).

Climate projections for the mid and late 21st century foresee a very likely increase in mean temperatures and variability, as well as alterations in the rain seasonality that will likely increase aridity in semi-arid and sub-humid areas and will have an impact on agriculture and likely on hydropower development. Frequency and intensity of tropical cyclones and associated floods are likely to increase and together with sea level rise could potentially affect the main ports and most densely populated coastal areas[vi].

Therefore, Mozambique is faced with a significant risk to its future development. The Government of Mozambique has responded to this challenge by preparing a national

adaptation plan of action (NAPA) in 2007 led by MICOA and a comprehensive climate change risk vulnerability assessment (2009) or INGC Phase I. Bilateral and multilateral donors, as well as international NGOs, are also supporting adaptation action. The Environment and Climate Change Working Group is a coordination body of key donors' support to environmental action including climate change in Mozambique, and has helped information exchange and coordination amongst donors, and between donors and GoM

Despite these efforts, the following barriers hampered the institutional response to the challenges posed by climate change:

- Lack of coordination and clarification of roles and responsibilities between government institutions, which has led to uncoordinated funding support by donor and scattering and even duplication of activities;
- Lack of awareness on the importance of climate change impacts in key government ministries such as tourism, transport, public works, energy, trade, agriculture and health.
- Weak human and financial capacity for the implementation of plans and strategies.[vii]
- Lack of data and information technology (e.g. data on gender disaggregated vulnerability, meteorological data).

2. Findings

2.1 Project formulation

2.1.1 Relevance.

Relevance to country priorities

The country priorities relevant for this project were set in the Government's Five Year Plan (Plano Quinquenal do Governo, PQG) 2005-2009 and the Strategic Plan for Poverty Reduction II (Plano Estratégico de Reduçao da Pobreza, PARPA II) 2006-2009.

The goal of the PQG is to create an environment to stimulate economic growth and reduce poverty by strengthening governance, expanding education and health access, including water and sanitation, stimulating structural transformation of agriculture and sustainable energy development. Although climate change is not explicitly mentioned, the PQG addresses the need to prepare to deal with vulnerability to natural disasters, to reduce loss and damage by promoting a culture of prevention with measures such as mapping of vulnerability, development of early warning systems, improvements in watershed management, increasing water supply through reservoirs and rain water collection and strengthening knowledge management and institutional coordination.

Specifically to climate change, national objectives are set in the National Adaptation Plan of Action (NAPA) of 2007 and the Study on the Impact of Climate Change on Disaster Risk in Mozambique (INGC Phase I) of 2009.

The NAPA, submitted to the UNFCCC in 2007 develops these priorities in four areas:

- Strengthening early warning systems
- Increase agricultural adaptation capacity in line with other governments programs
- Reduction of climate change impacts in coastal zones
- Strengthened management of water resources

The AAP Mozambique intended to support the national government in setting the conditions to allow state institutions to address vulnerability through strengthened and climate proof planning instruments, strengthened institutional coordination to promote funding and action on adaptation, as well as generation and management of knowledge on climate change. Due to some limitations, it was not designed to address the root causes of vulnerability, such as weak agricultural development, social inequality and poverty.

Relevance to UNDAF and UNDP country program

The United Nations Development Assistance Framework 2007-2011 (UNDAF) is closely aligned with the PARPA II and it is organized in five programmatic areas, governance, human capital, HIV, economic development and cross-cutting issues. The area of governance includes the outcomes of:

- *Planning capacity strengthened at provincial and district levels and national and subnational levels,* and
- *Capacities for DRR and climate change adaptation strengthened*

The AAP supported the development of planning capacities at subnational level by mainstreaming climate change in planning instruments and the generation and management of climate and vulnerability information to be used in planning for climate change adaptation and disaster management. As such it directly contributed to the identified outcomes of the UNDAF.

The UNDP country program document 2007-2009 -and its extension till 2011- articulates UNDP's contribution to the common UN system outcomes through 7 program areas including ***Reduction of risks to disasters, environmental management and Support development capacity.*** The AAP directly and specifically supported UNDP's country program to achieve the outcomes set in the DRR and Environment area.

2.1.2 Barrier analysis

The project document identified climate change as a major threat to national efforts towards human development. The risks of climate change were related to the observed and projected trends of climate parameters (temperature, precipitation, storm intensity and frequency) and the high sensitivity of a socially unequal, agriculture-dependent country.

The objective the project was to mainstream climate change adaptation in Mozambique's policy, planning and investment instruments.

Four barriers to the realization of this objective were identified in the project document:

1. Policy makers and planners have a low level of awareness and skills on climate change.
2. Weak inter-sectorial coordination on issues of climate change and insufficiently defined institutional roles and responsibilities
3. Limited data and information availability, dissemination and application
4. Limited integration of gender-sensitive planning and programming

Validity of barrier 1: Policy makers and planners have a low level of awareness and skills on climate change

Stakeholders confirmed the relative novelty of climate change as a cross-cutting issue: it was widely understood as an environmental issue under the responsibility of MICOA. Even within the Ministry of Environment, awareness and knowledge on the issue were found insufficient. Although policy instruments mention vulnerability to climate-related factors they failed to explicitly mention climate change or to propose an integrated approach to adaptation.

Validity of barrier 2; Weak inter-sectorial coordination on issues of climate change and insufficiently defined institutional roles and responsibilities

There were two approaches to climate change: one DRR approach led by the INGC in their Study on the Impacts of Climate Change Phase I and another "environmental" approach led by MICOA in the National Adaptation Plan of Action (NAPA). Other institutions worked on several issues related to climate change, such as INAM, and DNA and SETSAN through their respective programs, namely program to combat drought food security strategy but these initiatives were not implemented in a coordinated manner.

Validity of barrier 3; Limited data and information availability, dissemination and application

Key informants confirmed the low capacity to manage information relevant to climate change by key institutions. Moreover, knowledge management, i.e., the capacity to disseminate information relevant for different users, did not have the necessary structures and therefore, available information was dispersed in different institutions, which hampered its utilization.

Validity of barrier 4; Limited integration of gender-sensitive planning and programming

This barrier is indeed relevant to the wider development strategies in Mozambique and will certainly need to be a consideration in climate change mainstreaming, especially in subnational planning instruments and in generation and use of socio-economic data on vulnerability. Nonetheless, the gender approach played only a subordinate role in this

project as it tried to address root causes of absence of climate change in planning instruments and limited information available to inform policy-making processes.

2.1.3 Risks and assumptions

The logical framework rested on the following assumptions:

1. *The National Execution (NEX) modality of the project will build up institutional ownership of activities and outputs of the project.*

   The NEX modality, while giving responsibility to a leading national institution for the execution of the project, does not necessarily create ownership, particularly in an intervention set-up to be implemented by several national partners. Pre-conditions for ownership lie rather in the appropriation of the project's objectives during the planning stage and the consequent allocation of human and other resources to the project.

2. *Role clarification and capacity support will foster leadership and will strengthen institutional response in climate change adaptation*.

   This assumption is valid given the fact that climate change is a relatively new concept but adaptation actions, without being given that name are already being conducted by state institutions; e.g. the program to combat drought and DRR plans and strategies.

3. *Economic evidence, i.e. what will the costs of a business as usual policy against adaptation costs and benefits will establish the case and promote the institutional arrangement and action needed for climate change adaptation in Mozambique.*

   This assumption is valid since institutional action on adaptation should be guided by the sound use of public resources to safeguard current and future development initiatives and associated infrastructure. However, this will only be true if an evidence base is compiled and disseminated in a first phase of the project, to set the conditions for the institutional arrangements and the mainstreaming of adaptation in sector plans.

4. *Technical expertise/competency will be built within civil service, rather than relying on consultants to do the work.*

   The assumption is valid and was indeed a requirement for the sustainability of results achieved within the project but it also required the project strategy to have clearly established how the technical expertise could be built in which government institutions and how it could be sustainable.

The project document also listed the following assumptions:

- *Gender consideration shall cut through all programme intervention areas*, and that
- *The Government-led Adaptation unit provides following key functions: i) standard setting ii) conveners of Ministries and multistakeholder platform iii) synthesizing information from sectoral studies, pilot projects and feeding such information back into multi-stakeholder processes; iv) coordinating the knowledge management*

component; v) providing or soliciting technical advice, as needed for the implementation of the various project components; vi) project M&E and reporting

However, these are a) recommendation for a gender approach b) description of the roles and responsibilities of the project implementation unit rather than real assumptions.

The project document identified five risks (and mitigation actions) to the achievement of the project's outcomes:

Risk	**Mitigation action**
Natural disaster	Not relevant
(Problems with) Implementation arrangements	Strong adaptation technical support at MICOA
Exchange rate fluctuations	Contingency budget
Lack of government commitment and political will to adequately address climate change risks and coordinate activities	Strong ownership component for various line Ministries
Technical capacities not adequate for managing complex and large project	Include a Technical Advisor position in project design, and other adaptation team members to strengthen Government capacity i.e. through capacity building function

The identified mitigation actions were not properly formulated and were not relevant to the risks.

2.1.4 Design logic

The terminology used in the project document does not correspond to the Results Based Management terminology used by the UNDP. In the Handbook on Planning, Monitoring and Evaluating for Development Results the results are defined as follows:

- ***Outcome:*** *short to medium term change in the development situation*
- ***Output:*** *product and services tangible/ intangible delivered or provided by the project.*
- ***Activity:*** *task undertaken in order to produce the projects outputs.*

The project document used ATLAS terminology naming the short to medium term changes as **outputs**, the products and services delivered by the project as **activity results** and the tasks undertaken to reach the products and services **activities**, which has led to confusion during the evaluation period.

Based on the assumptions described above, namely that scientific and economic evidence will make the case for adaptation action and that national ownership of the project will promote building-up of capacities and better institutional coordination, **the project's objective was to mainstream climate change adaptation in Mozambique's policy,**

planning and investment instruments. The five project outcomes were set at regional level and country project documents under AAP had to include all five.

Outcome 1 Long term planning mechanisms to cope with climate change in Mozambique strengthened.

- **Output 1.1:** Information base on climate change adaptation is improved and is incorporated into long term planning and decision-making (to be implemented by INGC).
- **Output 1.2:** Climate change adaptation integrated in the preparation of PARP, the Government Five Year Plan 2011-2016[viii], provincial and other relevant plans, as well as in relevant UN instruments (to be implemented by the MPD).

The logic of this outcome was that the INGC would generate economic evidence on the costs of impacts and adaptation measures to be used to mainstream adaptation at national, subnational and UN planning instruments. This assumed the conclusion of the studies of output 1 prior to the process of mainstreaming, i.e. the time horizons of the planning processes are of utter importance for the success of this outcome.

The formulation of output 2 assumed that the project could deliver planning instruments rather than set the stage for the appropriate institutions to do so, the latter being the realistic scope of the project.

Outcome 2 Leadership and institutional frameworks to manage climate change risks and opportunities harmonized, coordinated and strengthened.

- **Output 1:** Institutional arrangement for effective CCA management and coordination in Mozambique agreed, established and capacitated (to be implemented by INGC/MICOA).
- **Output 2:** CCA multi-stakeholder technical coordination/expertise platform functioning effectively at national level (to be implemented by INGC/MICOA).
- **Output 3:** Decision makers, technical ministries, civil society, private sector, education institutions sensitized, informed and empowered in CCA, partnership building and affirmative action (to be implemented by INGC/MICOA).

The logic of this outcome was that a dialogue process among strengthened institutions would lead to the creation of a technical council with participation of all relevant institutions. The participating institutions would be strengthened through capacity building and then engaged in a dialogue process that would conclude with effective institutional arrangements as part of a national climate strategy including a technical body for coordination of climate change adaptation action with representatives from a wide array of institutions including government, civil society, academia and private sector.

Outcome 3 Climate-resilient policies and measures implemented in priority sectors and through demonstration projects.

- **Output 1:** Line ministries adjust their spending plans and policies to improve climate risk management (to be implemented by line ministries).
- **Output 2:** Line ministries implement pilot projects to learn about what works for effective adaptation (to be implemented by line ministries and INGC).

- **Output 3:** Mainstreaming climate change in decentralization strategy (to be implemented by MPD and provincial and district governments).

The logic of this outcome was that after conducting a policy assessment that would reveal gaps or vulnerabilities of selected sector policies, the project would foster a dialogue process to make the corresponding adjustments in the investment plans of the line ministries involved. This process would be enlightened by pilot projects that would illustrate the costs and effects of adaptation measures in different sectors. The mainstreaming process facilitated in outcome 1 would be replicated under this outcome in the provincial and district level.

The outputs of this outcome were vaguely formulated: under output 1 the project will come up with "adjustments" in planning and investment instruments after a gap assessment has been conducted; output 2 implies the design and conduct of small-scale demonstration projects to enlighten the process of adjusting sector policies. This formulation implied a potentially long time frame involving initial sector analysis to identify the critical sectors, a policy analysis and its acceptance by the line ministries as the design, implementation and evaluation of the small scale demonstration projects for their lessons learned to be fed back into the policy assessments. Moreover, the project could take responsibility for the decisions made internally at line ministries and could, at most, set-up analysis and assessments to influence/ advocate for policy and investment adjustments.

Outcome 4 Financing options to meet national adaptation costs expanded at the provincial and national level and integrated into sectors.

- **Output 1:** Developing the evidence base and the capacity at the MoF and MPD for adaptation planning (to be implemented by MoF/MPD).
- **Output 2:** Consolidating the evidence base into a national financing strategy for adaptation (to be implemented by MoF/MPD).

The formulation of these outputs was extremely vague and did not follow SMART criteria. It can be easily assumed that the outputs really mean i) *evidence on economic impacts of climate change and costs of adaptation developed* and ii) *national adaptation financial strategy based on the evidence developed*. In fact, activities described for these outputs included the conduct of studies on adaptation costs, adjustment of fiscal and regulatory instruments, development of tools and guidelines for long term investment in adaptation and development of a financial strategy for adaptation.

The outcome assumed that a national adaptation strategy has already been developed and approved (necessary requisite for a financial strategy is to have a clear understanding of what is to be funded), called for new studies on adaptation costs to support the financial strategy (studies already conducted under outcome 1) and adjustment to regulatory and fiscal instruments. Any of these activities could have easily constituted an output or even an outcome of a three-year project; the capacity building activities, the dialogue process and the information needs involved, notwithstanding the non-existence of one of the conditions for the financial strategy (i.e. the national adaptation strategy) would have needed a very careful coordination with the other outcomes of the project and a good part of its financial resources.

Outcome 5 Knowledge on adjusting national development processes to incorporate climate change risks/ opportunities generated and shared.

- **Output 1:** Integrated National Knowledge Management System on climate change adaptation functional (to be implemented by INGC).
- **Output 2:** Climate change adaptation knowledge, lessons and experiences from the region are used to inform national and regional policies and CC interventions at community level (to be implemented by MICOA/ INGC).

The logic of this outcome was that a national center (the term 'integrated' remains undefined) would be designed and hosted at an appropriate government or academic institution. The center would collect all information on climate change, be it generated by this project or from other national or international sources, and manage it for the use of national actors to inform policy processes, research or academic work.

Analysis

The logic of the project design involved links and feedback between the outcomes and planning and decision-making processes in the country.

The information generated in output 1.1 should have fed the formulation process of key planning mechanisms (output 1.2) and compiled and managed by the knowledge management system the project was set to impulse (outcome 5). At the same time, pilot projects (output 3.2) on adaptation measures should have generated lessons learned and together with information generated under output 1.1, should have informed reform processes in the sector planning and investment instruments (output 3.1) and subnational planning instruments (output 3.3).

More information on financial aspects of adaptation should have been generated (output 4.1) and together with all possible information gathered (outcome 1 and outcome 5), lead to reformed fiscal and regulatory instruments and a strategy to fund adaptation action (outcome 4).

This design logic would have involved careful timing and agile implementation of all the activities and a near perfect coordination with Mozambique's planning and decision-making timeframes. Moreover, the project set out to achieve outputs that were beyond its capacity, such as the approval of fiscal reforms, the modification of sector plans and adoption of finance strategies. These issues should have been properly addressed as risks.

2.2 Project implementation

2.2.1 Institutional arrangements and stakeholder participation.

The NEX implementation modality involves national ownership with a project management unit supported by the UNDP responding to a national director, who has full authority over

project implementation. A project board with high level representation from the participating ministries, in this case MICOA, MAE-INGC and MPD as well as UNDP will oversee project implementation and approve annual reports and work plan. Day to day implementation is managed by a project management unit (PMU) with the support of a steering committee formed by technical members of the national institutions involved, as well as a UNDP program officer and the project's national director. The PMU is budgeted with project funds and is composed of a project coordinator, assisted by a chief technical advisor and an administrative assistant, with the support of a programme assistant at the UNDP country office.

The project document of the AAP Mozambique maintained the general project organization structure described above plus a *Climate Change Unit* composed of MICOA and INGC that should have supervised the work of the PMU, but which functions were not clearly described and clearly overlapped with the project steering committee.

Regarding project governing structures, the board met for the first time in May 2011 (supposedly the last year of project implementation), which was then presided by the Vice-Minister of MICOA, members the permanent secretariat of MICOA, the director of INGC, representatives from MPD, Foreign Affairs, the embassy of Japan and the UNDP deputy director. In its first session, decision was made to appoint the technical secretariat of the Council of Sustainable Development (Conselho de Desenvolvimento Sustentável, CONDES) as steering committee of the AAP and to appoint a national director[ix]. The permanent secretary of MICOA was appointed shortly thereafter as national project director; but the technical steering committee, a fundamental body to advice, support and supervise the work of the PMU, as well as to inform the board on progress report, was never formed.

Other than the problems related to the project governing structures, lack of clarification of roles and to some degree, misunderstanding among implementation partners, hampered the implementation of the project during its first year.

The Ministry of Planning and Development, a key partner for the implementation of the project, despite being represented at the Local Project Approval Committee in August 2009, did not sign the document and would not do it for almost a year. During that time none of the activities of the logframe outputs under MPD responsibility was executed.

The INGC's and initial UNDP understanding of the AAP was that the project would support the implementation of the INGC Phase II with the addition of a policy mainstreaming component led by MICOA.[x] Phase II was a nationally conceived undertaking to explore in-depth the conclusions of Phase I, including a detailed study of climate change impact and adaptation costs in selected sectors (river basin management, coastal infrastructure and private investment), as well as to formulate a national strategy for climate change. Phase II was prepared in close consultation with the working group of donors and was to be funded by DANIDA, Iris Aid, USAid, AFD, Norway, UNEP, Spain, the European Union the World Food Program, as well as the AAP. Despite the seemingly common understanding, changes in the direction of the UNDP forced the INGC to renegotiate the terms of their engagement. The AAP eventually funded five of the nine

areas of study in INGC Phase II. The PMU also expected INGC to act as implementing agency for the "minor" (financially speaking) partners of the project (INAM, UEM, DNA) but this was not the understanding of INGC, which did not accept this role. Moreover, under pressure by its commitments with Phase II, INGC followed a very independent path during the whole project implementation.

At MICOA, the Department of Environmental Management (Direção Nacional de Gestão Ambiental, DNGA) was assigned to implement the project but was not initially involved in the project formulation, since the climate change focal point and focal point for development cooperation falls within the Department of Cooperation (Direção Nacional de Cooperação). This, and the fact that coordination among the Direções Nacionais is not always as fluid as would have been needed, meant investment of staff time to internalize the project and make adjustments to the original work plans.

2.2.2 Management effectiveness

Although project implementation technically started in March 2010 with the recruitment of the project coordinator and the inception workshop, delivery remained very low until 2011 mainly due to the following causes:

- Without the project governing structures, the PMU was not empowered and had little leverage to coordinate the implementation of the project.
- Changes in management at the UNDP country office and the vacancy of the head of unit of the CPR-E unit did not allow more support to the project.
- The UNDP CO support was limited to one program assistant for administrative matters.
- The different approaches and visions by the main partners, INGC, MPD and MICOA and the weak formulation and coherence of the project results as formulated in the logframe led to misunderstanding and lack of coordination.
- The PMU remained understaffed, with the chief technical advisor arriving only at the end of 2010.

The project management unit was hosted at the National Meteorological Institute although the chief technical advisor had her office at the DNGA. This physical separation had negative consequences for the coordination of the project implementation.

The appointment of the permanent secretary of MICOA as project director provided the PMU with the political leverage needed to resolve conflicts and effectively coordinate implementation. This, together with activation of the board and the earlier appointment of AAP focal points in all participating institutions, was crucial for the much better implementation pace from 2011 onwards. The AAP focal points acted as *de facto* technical steering committee and supported the coordination of the execution of the activities. The UNDP country office also increased its commitment to the project from 2011 onwards by appointing a programme officer to support project management.

The efforts made by the PMU, as well as the implementing units of all the participating partners to turn the tables on very unfavorable initial conditions are remarkable.

Implementation and coordination of the AAP took a commendable pace during 2011 and continued until the project ended in 2012.

2.2.3 Monitoring and evaluation.

The M&E instruments used in this project were the annual and quarterly reports, the UNDP management system ATLAS, the project logical framework indicators, the mid-term review and final evaluation.

The logical framework as M&E tool

The project document assumed a firm and direct link and attribution of the project objective to the outcomes of the UNDP country program and it did not include indicators for the project objective. Nonetheless, due to the specific nature of the project, the inclusion of several objective indicators would have been welcome.

The initial outcome and output indicators of the AAP Mozambique were weakly formulated, none of them was SMART and in many cases, did not even inform about the achievement of the result and were therefore not useful as management tools. Collection methods, timeframe and means of verification were indicated sketch-wise.

During the first quarter of 2011 the PMU undertook a review of the indicator frame and introduced important modifications that greatly improved the quality of the indicators at **output level**. The reviewed indicator framework permitted a more systematic reporting as reflected in the 2011 annual report that consistently referred to the targets and the indicators. Despite the improvements introduced by the review of the monitoring system, no appropriate instruments for monitoring data collection and analysis were ever developed and monitoring remained rather unsystematic. The original and reviewed indicator framework is included in annex 4.

Project reports

As a UNDP implemented project, the project manager of the AAP Mozambique had to submit annual progress reports to the national project board for the annual project review and to serve as basis to design the next annual work plan. The annual report should include a summary of results achieved against pre-defined annual targets at the output level. Two annual reports were submitted by the PMU to the project board. A final annual report for 2012 had yet to be elaborated at the time of the final evaluation.

In the first quarter of 2011 an IRTSC Mission introduced the new format for the quarterly progress reports to be submitted to the AAP regional office. The new format is linked to the five outcomes of the AAP and permits an easy tabulation of information based on key actions to advance towards the achievement of the outcomes. It also includes a quarterly and overall rating of achievement. These ratings remained subjective without any criteria or indices to systematically rate the progress.

ATLAS

As required for UNDP implemented projects, a management component for the AAP Mozambique was activated in ATLAS, including indicators and risk and issues log. However, the indicators in the management component of ATLAS were the same as in the framework and the monitoring schedule and logs were not updated regularly since neither the project coordinator nor the chief technical advisor were granted access to ATLAS. However, the CO assigned a program officer to support in the management component of ATLAS. The lack of SMART quality indicators at outcome level and/ or impact indicators that would link with the UNDP country program outcome indicators made reporting of the contribution of the AAP Mozambique to the CP (ROAR) difficult and time-consuming.

Evaluation

A mid-term review and a final evaluation are mandatory for all UNDP implemented projects. However, in the case of the AAP Mozambique, the MTR was conducted within the frame of the regional MTR of the AAP by the Mozambique Task Manager from the IRTSC in the context of the concerns of the donor and the senior UNDP management about the low rates of project delivery throughout the region. The MTR of the Mozambique AAP national project, called light touch MTR, was conducted in November 2011. The objectives of the MTR were to identify bottlenecks in delivery and analyze the relevance of the project's strategy and activities. The MTR made several recommendations. An official management response was not submitted but there were closely monitored actions on most of the recommendations made by the MTR, especially those related to the IRTSC.

2.2.4 Results

This section reviews the progress made by the project towards the achievement of its objective and outcomes against the targets stipulated in the logframe.

Project objective

The shortcomings of monitoring described above made it very difficult to assess the impact that the project has had towards the attainment of the objective of mainstreaming climate change adaptation in Mozambique's policy, planning and investment instruments. As the project was working with other initiatives at national and subnational levels, which were also supported by donors within the environmental working group, as well as the Government of Mozambique's own goal to come up with effective measures to cope with the impact of climate change, it was not possible to establish a clear attribution of the results observed.

Nonetheless, based on the evidence examined, it can be stated that **the AAP strongly contributed to set the basis for the mainstreaming of adaptation in planning and investing instruments of public and private institutions**. Partially, successful integration has already taken place at both national and subnational levels.

Project outcomes and outputs

Outcome 1: *Dynamic, long-term planning mechanisms to cope with the inherent uncertainties of climate change in Mozambique strengthened.*
Output 1.1: *Information-base improved and incorporated in decision-making.*
Output 1.2*: CCA integrated in the preparation of PARPA III, the Government five year plans, provincial and other relevant plans, as well as in relevant UN instruments.*

The logic of this outcome was to generate quality information on impacts of climate change and to use it to strengthen national planning and investment instruments. The AAP supported capacities of government institutions to generate and manage useful information on impacts and costs associated with climate change and it has strongly contributed to the inclusion of climate change considerations in national and UN planning instruments. Nevertheless, it did not achieve its original and ambitious target of influencing the main national planning processes.

The initial ambiguous formulation of indicators and targets for this outcome and its outputs was corrected, clearly defining the measure of success for this outcome as:

1. Generation of useful information for decision making (output 1.1)
2. Integration of climate change considerations in national and UN planning instruments (*strategic programmatic documents*) (output 1.2)
3. Capacity building at key institutions to support climate change mainstreaming (output 1.2)

The original connection between the two outputs was lost, since the formulation of planning instruments that were supported by the project did not use the information generated but included rather general climate change related measures.

The outcome has been partially achieved in that quality information has been generated and climate change has been mainstreamed in planning instruments but the originally targeted instruments, PQG 2010-1014 and PARP 2011-2014 were not supported by the AAP due to the late start of implementation. Moreover, the Mid-Term Expenditure Framework that was published in 2012 did not include climate change considerations.

Generation of information for decision making:

The INGC studies on impacts and adaptation in the water and private investment sectors commissioned by the AAP produced a decision support system and early warning system for the Zambezi basin that includes an information management system with a web-based graphical interface and a river basin model. *The decision support system will serve as an*

important scenario analysis tool for water resource management in the Zambezi river and can be expanded to include other river basins[xi].

A strategic environmental and climate vulnerability study in the province of Cabo Delgado produced a sustainable investment opportunity map that can guide investors to adapt their business to the changing environmental conditions and could become a model decision-making support tool in other provinces and outside Mozambique

Mainstreaming climate change in planning instruments:

The AAP supported the mainstreaming of climate change in key planning instruments through training and technical advice to national and provincial officials of the MPD and other government institutions involved in developing strategic plans. The project fell short of its goal of lobbying for the Five Year Plan (PQG) and the Poverty Reduction Strategy (PARP), which formulation cycles were concluded in 2010.

The PQG 2010-2014 includes *priority actions* on promotion of adaptation policies and technologies, as well as research on climate change. The PARP 2011-2014 includes climate change as a government program under the objective *Increase Output and Productivity in Agriculture and Fisheries* with the goal of *Promote environmental quality and policies and strategies for mitigating and adapting to climate change*, but it would be hard to attribute this to the work of the AAP team.

The AAP team succeeded through coaching and provision of technical inputs in having climate change included in the Economic and Social Development Plan (PES). The PES 2013 includes actions on climate change, including planning (inclusion of climate change in spatial planning), adaptation measures in agriculture and forestry (drought resistant cultivars, reforestation, conservation agriculture, irrigation), water supply enhancement (rain water harvest), disaster risk reduction (risk mapping) and capacity building (trainings). The actions include targets (# of hectares, # of persons trained, # of spatial planning documents etc.) and an estimation of the number of beneficiaries. Nevertheless, climate change remains relegated to environmental concerns including only MICOA and the INGC as responsible institutions and leaving key sectors such as infrastructure and energy out.

Two other strategic documents were formulated with support of the AAP: the INGC's National Strategy on Disaster Risk Reduction (ENARC) and the National Climate Change Strategy (Estratégia Nacional de Adaptação e Mitigação de Mudanças Climáticas, ENAMMC), led by MICOA. Particular aspects of both strategies are discussed under outcomes 2 and 4.

The AAP also supported process of formulation of the UNDAF 2012-2015 and the corresponding UNDP country program document with technical inputs. Climate change issues were included in outcome three: *Sustainable and effective management of natural resources and disaster risk reduction benefit all people in Mozambique particularly the most vulnerable*. The UNDP country program for 2012-2015 is completely aligned with

UNDAF and would contribute to its Outcome 3 by *Capacity development to draft national disaster management law and strategies on climate change, environment and gender, revise national disaster policy and environmental laws, and improve disaster risk assessments*, with two relevant outputs: 3.1 *Institutions strengthened to develop/improve policies, strategies and plans for CC, environment and disaster risk reduction.* 3.2 *Info systems strengthened on CC, environment, and DRR.*

Capacity Development

Technical capacities at key government institutions were developed. The National Meteorological Institute was supported with the acquisition of a high performance computer server to run regional climate models and by trainings and financial support of data management, including the digitalization of all historical meteorological data that would now be available to use in downscaling of regional and global circulation models.

The technical capacities at the Ministry of Planning and Development, as well as National Water Agency (Direção Nacional de Aguas, DNA) have been enhanced with training in planning tools (T21 model) and hydrometeorogical models.

Outcome 2, *Leadership and institutional frameworks to manage climate change risks and opportunities harmonized, coordinated and strengthened*

Output 2.1: *Institutional arrangement for effective CCA management and coordination in Mozambique agreed, established and capacitated*
Output 2.2: *CCA multi-stakeholder technical coordination/expertise platform functioning effectively at national level*
Output 2.3: *Decision makers, technical ministries, civil society, private sector, education institutions sensitized, informed and empowered in CCA, partnership building and affirmative action.*

This outcome initially sought the creation of a technical platform where representatives from all sectors (government, civil society, private sector) would coordinate adaptation action and define roles and responsibilities within a national strategy for climate change. The modifications introduced in the logical framework in 2011 included more realistic targets of strengthening key institutions, such as government, civil society and the private sector and facilitating the formulation of a national strategy for climate change. It also included institutional arrangements and the creation of a technical platform for coordination of climate change action by conducting institutional analysis, fostering partnerships and dialogue and enhancing awareness among representatives from different sectors. Therefore, the measure of success of this outcome was based on:

1. Conduct of institutional analyses to provide a sound basis for dialogue and development of a national climate change strategy (Output 2.1).

2. Facilitation of the design of a proposal for a mechanism for coordination of climate change action with involvement of technical teams from government, civil society, academic and private sector (Output 2.2).
3. Raising awareness among different sectors of society on climate change (Output 2.3).

This outcome has been achieved because institutional arrangements for coordination were adopted as part of the National Climate Change Strategy, which implementation will be promoted by the inter-institutional climate change group supported and strengthened by the AAP. The AAP also supported awareness-raising activities on climate change among decision-makers and general society by supporting MICOA's environmental education program PECODA.

Institutional analysis for the development of a national climate change strategy

The INGC conducted an institutional analysis that identified institutional leadership and coordination mechanisms. Based on that analysis, the INGC proposed a coordination structure centered on an institutional unique point of contact: the Inter-Institutional Technical Secretariat for Climate Change (Secretariado Técnico Interinstitucional de Mudanças Climáticas, STIIMC). This body would be composed of national directors and other senior officials of key institutions and would coordinate and guide adaptation action, develop proposals and implementation plans and assess and approve projects to be implemented and funded under the national strategy for climate change.

Mechanism for coordination of climate change action

The analysis and proposal described above were considered in the process of formulation of the National Strategy for Climate Change (Estratégia Nacional de Adaptação e Mitigação de Mudanças Climáticas, ENAMMC) led by MICOA.

The ENAMMC sets up an institutional framework for coordination of action on climate change that entails the creation of a Climate Change Unit associated to the secretariat of the Sustainable Development Council (Coselho Nacional de Desenvolvimento Sustentável, CONDES) advised by the Interinstitutional Group on Climate Change (Grupo Interinstitucional de Mudanças Climáticas GIIMC) with functions similar to the proposed STIIMC .

The GIIMC[xii] prepared the ENAMMC with the support of the AAP and other external advisors from the ECCWG. There was a degree of confusion among key informants about the nature of the GIIMC[xiii] and the role that the AAP had in its strengthening. The GIIMC was created during the process of elaboration of Mozambique's First National Communication to the UNFCCC (with few academics and government institutions), but it has been strengthened by the AAP during the process of formulation of ENAMMC to include a wide array of technical officials from different ministries, civil society and private sector representatives. The GIIMC would be further strengthened as an advisory body for the implementation of the ENAMMC.

The ENAMMC's goals are to increase national resilience and to promote a low carbon development through actions aimed to 1. Reduce climate risks, 2. Improve water resources management 3. Increase resilience in agriculture and fisheries and improve food security 4. Improve social conditions through investments in safety nets and health, 5. Promote conservation of biodiversity and forests 6. Adapt infrastructure development and 7. Promote a green low emissions development path. As a frame strategic document it needs expression in specific instruments such as planning and investment or regulatory instruments.

INGC's National Strategy on Disaster Risk Reduction and Climate Change Adaptation (ENARC) developed at the same time as the ENAMMC has the vision of coordinating action aimed at *reducing the risk of vulnerability of people, communities and infrastructure, including a different approach in agricultural production, urbanization and construction, tourist activities, protection of persons and goods, humanitarian assistance, in the face of natural disasters and protection of risk zones*. The ENARC is organized in five areas: 1. Capacity build-up, 2. Institutional coordination, 3. Finance, 4. Knowledge and 5. Partnership with the private sector. The ENARC was formulated as an action plan and has clear short (five years) and mid-term (20 years) targets and presents an estimate of the budget needed per objective.

The institutional coordination scheme proposed in ENARC is superseded by the ENAMMC since the latter has been officially approved by the Council of Ministers in November 2012. The institutional agreements contained in ENAMMC are expected to become operative during 2013.

Outside duly constituted coordination bodies, the AAP also contributed to better coordination among institutions through the designated focal points at all the implementation partners. The focal points of the AAP, all technical officials of MICOA, MPD, INGC, INAM, UEM, SETSAN and DNA did not meet regularly but acted as an advisory group to the project board and hence *de facto* technical steering committee. Interviewed key informants agreed on the benefits that this group had for a better inter-institutional understanding and coordination.

<u>Raising awareness on climate change</u>

There were a number of awareness activities with different actors: youth, civil society representatives and journalists. The awareness activities conducted were public discussions held in three of the provincial capitals (Maputo, Nampula and Niassa), as well as one forum with journalists (supported by the AAP regional office).

Additionally the project supported the training of environmental educators coordinated by MICOA, and it will be further supported in the future through the publication of a manual on good practices on environment and climate change adaptation; the environmental educators are meant to increase awareness on environmental issues among the general public at the local level.

Outcome 3, *Climate-resilient policies and measures implemented in priority sectors and through demonstration projects.*
Output 3.1, *Line ministries adjust their spending plans and policies to improve climate risk management.*
Output 3.2, *Line ministries implement projects to learn about what pilot project works for effective adaptation.*
Output 3.3, *Climate change adaptation mainstreamed in decentralization strategy.*

This outcome initially sought to facilitate adjustment in sector (ministries) planning and investment instruments as well as (sector) fiscal and regulatory instruments based on a sound policy gap analysis and lessons learned from demonstration (pilot) projects. Under this outcome, the mainstreaming process at national level would be replicated at subnational (provinces and district) level.

The modified logical framework was more adjusted to the capabilities of the project and sought intended to strengthen line ministries to incorporate climate change into their investment plans; to obtain and disseminate best practices of adaptation with focus on gender and vulnerable sectors and to replicate experiences of mainstreaming in provincial and district planning instruments. The measure of success was thus set by:

1. Incorporation of adaptation into investment plan of at least one key sector (Output 3.1)
2. Documentation and dissemination of best practices on adaptation with focus on gender and vulnerability (Output 3.2)
3. Replication of climate change mainstreaming into district planning instruments (Output 3.3).

This outcome was only partially achieved; no lobbying was achieved and very little work was undertaken with sectors outside planning, environment and disaster risk management, i.e., the implementing partners of the AAP. Although the pilot projects were implemented, the best practices are yet to be properly documented and used. Nonetheless, successful replication and strengthening of climate change mainstreaming into several planning instruments of different districts were achieved.

<u>Incorporation of adaptation into sector investment plans</u>

The AAP did not succeed in mainstreaming climate change in sector planning and investment instruments but it contributed to set the stage for it by the information and decision-making tools prepared in the studies commissioned by the INGC. It also consolidated climate change as a cross cutting theme in the disaster risk reduction strategy (INGC) and in selected District Land Use Plans (MICOA).

<u>Adaptation and gender best practices</u>

The logic of implementing the pilot projects was initially to inform policy making at sector level. Five pilot projects were identified by the project's implementing partners:

1. MICOA, National Department of Spatial Planning (DNPOT), mainstreaming of climate change in district land use plans.
2. UEM, design and simulation of a short course on climate change.
3. INAM, digitalization of historical climate data.
4. DNA, enhancing rain water collection and water supply and sanitation facilities.
5. SETSAN, drought resistant crops for food security.

The time available to design and select the pilot project proposals, to set the implementation arrangements and to implement the projects, prevented the effective use of the lessons learned, which should have informed the policy reform and policy making processes.

The focus of the pilot projects was very diverse, ranging from projects rather connected to other outcomes, such as UEM's pilot with outcome 5, and INAM's pilot with outcome 1 or 5 (they are discussed under outcome 5 in this report). Of the other three pilots, MICOA's pilot had a clear connection with output 3 of this outcome and the other two (DNA and SETSAN) had an implicit focus on gender (particularly DNA's) and vulnerable groups; these two pilots were also part of established government programs. The connection and contribution of the pilots to the outcomes of the project were never made explicit and reporting was inconsistent, appearing under different outcomes in different reports. Funds for all pilots were limited to 35,000 USD each. The pilot projects implemented by the DNA and the SETSAN are described in detail in annex 6.

Sub-national planning instruments

The AAP has supported the MPD and the other state institutions at provincial level to strengthen planning processes by climate proofing District Development Plans (PEDD) by conducting trainings for provincial level officials in the provinces of Nampula and Zambézia (focusing on Chinde, Mopeia, Morrumbala, Quelimane city, Nicuadala, Namacurra, Angoche and Mogovolas districts) and using the manual on mainstreaming climate change in planning for development (based on IUCN's CRISTAL), developed by the Joint Programme on Environmental Mainstreaming and Climate Change Adaptation.

Also supporting mainstreaming of climate change in decentralized planning instruments was the pilot project led by the Department of Spatial Planning of MICOA (Direção Nacional de Ordenamento Territorial, DNPOT). Under this project, climate change issues were incorporated into district land use plans in selected districts in the provinces of Inhambame, Zambézia and Tete.

Outcome 4, *Financing options to meet national adaptation costs expanded at the provincial and national levels, and integrated into sectors.*
Output 4.1, *Evidence base and the capacity at the MoF and MPD for adaptation planning developed.*
Output 4.2, *Evidence based consolidated into a national financing strategy for adaptation*

The weaknesses in the formulation of this outcome were discussed in section 2.1.4. It should have involved further policy analysis and the development of an adaptation strategy as pre-conditions to identify finance options. The modified logical framework set the following targets for this outcome:

1. Inclusion of adaptation costs in state budget and Mid-Term Expenditure Framework.
2. Access to climate finance mechanisms through project proposals.

The outcome was not achieved in the sense that the national investment instruments did not include adaptation costs and that Mozambique does not yet count with a climate finance strategy. Nonetheless, the ENAMMC includes a proposal of a financial strategy for adaptation: the Environmental Fund (Fundo do Ambiente, FUNAB) would assume the role of a national climate change fund to blend funding from external (bilateral, multilateral) and internal sources. In this role the FUNAB would have the following functions:

- Coordinate the design of projects on climate change
- Identify funding sources
- Monitor and evaluate implemented climate change projects.

The Government of Mozambique is currently in the process of obtaining accreditation for FUNAB as a National Implementing Entity for GEF.

Adaptation costs included in investment instruments

The AAP supported capacity building of the MPD, MoF, and MICOA in climate change finances through training. The participation of the Ministry of Finance in activities related to this outcome was less than optimal but the support given to the MPD and MICOA, as well as initiatives from other donors strengthened their capacity in the issue.

Access to climate finance mechanisms

As described above, a clear finance strategy for adaptation is currently only a sketch but the GoM has received support from the AAP team to design projects on adaptation of which two proposals submitted to GEF have been approved.

Outcome 5, *Knowledge on adjusting national development processes to fully incorporate climate change risks and opportunities generated and shared, including through an advocacy strategy.*
Output 5.1, *Integrated National Knowledge Management System on CCA functional*
Output 5.2, *Climate change adaptation knowledge, lessons and experiences from the region are used to inform national and regional policies and CC interventions at community level*

This outcome sought the design and function of a National Climate Change Knowledge Center that would collect all information on climate change, be it generated by this project or from other national or international sources, and manage it to be used by national actors

to inform policy processes, research or academic work. The revision of the log frame fine-tuned the targets defining the measure of success as:

1. Establishment of a knowledge management concept and strategy
2. Capacity building through training in sharing platforms and university curricula proposals that include climate change topics.
3. On-line platform to share best practices and data.

This outcome was partially achieved. The concept and proposal of a Knowledge Center was developed and the basis was set to enhance tertiary education curricula and best practices and data sharing through a short course simulation and the creation of web-pages managed by INGC and MICOA. These achievements, although significant, represent only concepts and tools that have yet to become operational.

Knowledge Center

The AAP through the work commissioned by the INGC provided the Government of Mozambique with the design, including structure, operational budget and work plan of a knowledge center on climate change. The design of the center involved the study of 72 projects globally. The knowledge center is expected to address the climate change related learning and information demands of official, policy makers and researchers by implementing professional programs or targeted information campaigns.

Training and curricula

Supporting this result, the UEM designed and conducted a simulation of a master course on climate change as a pilot project of the AAP. The simulation was conducted with the support of the AAP through 2 short courses with a duration of two days each. The simulation was a success. The master course is in the process of being approved by the office of the rector of the UEM and it is estimated that the actual masters would need financial support at least during the first 5 years before it is able to sustain itself with student fees.

On-line platform to share best practices and data

Information on climate change should also be made public through web-based tools already functional in the INGC web page http://moz-adapt.org and a MICOA website on best practices that is yet to become operational.

The experiences of the AAP in Mozambique were shared with other AAP practitioners during the regional meetings organized by the regional office. Although the project did not have a communications strategy, it did disseminate information and experiences on adaptation to climate change through publication of brochures, and an exhibition, Expo-Adapt, that which coincided with the project's final workshop and which showcased the results of the AAP.

2.2.5 Gender aspects

The project document underlined that *Gender consideration shall cut through all programme intervention areas and approaches: and all activities shall be planned and implemented in a gender sensitive and cognizant manner.* Although it is undeniable that women have been empowered and benefited from the AAP and that decision-making structures in Mozambique are gender-sensitive, the only gender-specific activity implemented by the project was the conduct of one training on Gender and Climate Change. Notwithstanding this lack of gender-specific activities, the focus of the project was to develop national capacities to promote and mainstream adaptation action, among which is an enhanced knowledge management on climate change issues. Thus, setting the basis for a better collection and management of gender segregated socio-economic data and its use for development measures and initiatives may be the greatest gender-related contribution of the AAP in Mozambique. The pilot projects implemented by DNA and SETSAN (see description in annex 4) did not have any explicit gender aspect but did contribute to gender issues within their scope.

2.2.6 Financial management

The total budget for the project was 2,987,620 USD for a time frame of three years as per conditions set by the donor.

Delivery rates during the first year of implementation were low, only reaching 6% by the end of the year. The main causes for this were the problems encountered in the procurement process for the conduct of INGC's studies and the management issues described above: absence of governing structures and lack of appropriation of the project by some IPs, which led to readjustments in activities and budget.

The recruitment process initiated by the INGC to start the studies of its Phase II took longer than expected; INGC, as a state institution had to follow government procurement rules. Since the studies were to be outsourced to international consulting consortia and their national partners, the international and national procurement process had to undergo approval by the administrative court (Tribunal Administrativo, TA). The process would normally have taken up to four months, but due to the volume of EOIs received, half a year was necessary to come up with a short list. Moreover, the recruitment got queued up at the TA. The result was that the funds initially transferred to the INGC had to be returned to the UNDP.

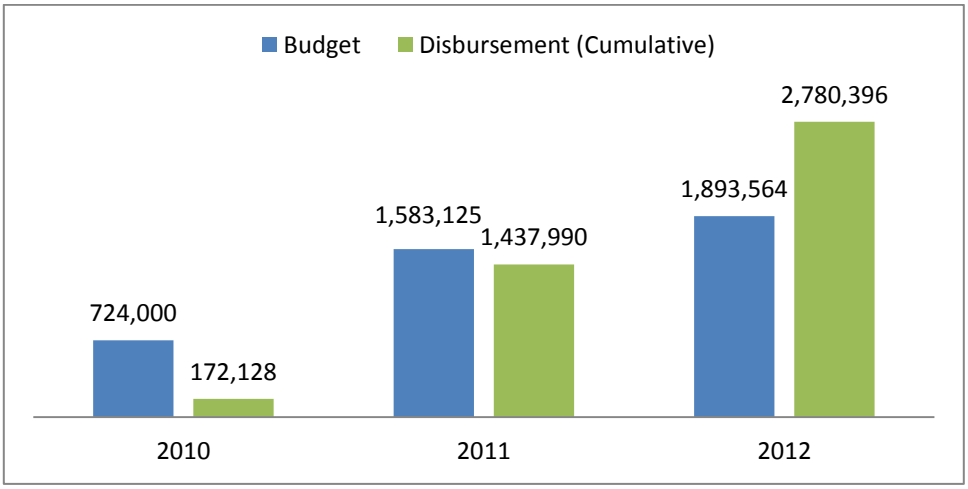
The technical nature of the studies commissioned by INGC were, as technical activities, accurately planned and budgeted and amounted to 55% of the total funds allocated to the project. This was not the case of the other IPs, which had to find their place within the project results and activities as formulated in the logframe. The necessary addition of activities and budgetary readjustment created a perception of insufficiency of funds by the other major IPs, particularly at MICOA, which was faced with logistical challenges (transport, communication) to implement the project activities within the allocated project funds and without compromising their own scarce financial resources.

This problems were solved in the course of 2010 and beginning of 2011. The improvement in delivery was remarkable, reaching 48% by the end of the year. Despite the advancement in progress, the situation was far from optimal; by the time the mid-term review was conducted in November 2011, delivery was only at 34%.

By February 2011, facing the low delivery rate in all AAP projects, the AAP regional board endorsed a request for a no-cost extension of one year that was accepted by the donor.

This development allowed the AAP Mozambique to continue implementation at a reasonable pace and to be able to finish almost all activities budgeted, with the exception of the pilot project led by the DNA and the manual for environment educators (best practices on environment and CC adaptation) led by MICOA. **By December 2012 the delivery rate reached 93%.**

Figure 2 Yearly budget and cumulative disbursement as stated in the signed AWPs and CDR. *The improvement in delivery rate is evident in 2011 and 2012.*



Most of the funds allocated to the project were invested in achieving the outcomes and only 10% was spent in project management (PMU staff and operation, M&E). Nonetheless, since the project objective was to set the basis for the mainstreaming of climate change in the country's planning and investment instruments based on economic evidence, a major part of the budget went to INGC's phase II. Thus, most of the funds were invested in paying the international consortia commissioned to conduct the studies.

There were relevant shortcomings in the project's financial management. As a project under the NEX modality of implementation, all procurement procedures need to follow government rules that are notoriously bureaucratic and lengthy. An additional problem involving government procedures was the need of new bank accounts; for a government institution, opening a bank account is a lengthy, time-consuming and cumbersome procedure that is not considered worth the work load for the amounts handled in the implementation of the AAP. In some cases, solutions were found by using IP's bank accounts of closed projects. The risks involved (delayed payments and frictions with some

national and international service providers) were not taken into consideration in the initial planning and remained largely unsolved till the project's end.

The information flow on administrative procedures between the UNDP CO, the PMU and the IPs was not optimal. CO administrative support could not keep pace with the IPs implementation needs and causing bottlenecks and delays in the resolution of payment requests. Moreover, due to the long times involved in the resolution of the requests presented by the partners, frictions and misunderstandings arose when some of them were returned to the IPs for corrections or modifications.

The requisites for payments were a main concern in activities taking place on the field: MICOA's awareness activities, mainstreaming climate change in land use plans, SETSAN's food security pilot project and MPD's mainstreaming and training at district level. Requirements such as three quotations for goods and services, bank accounts for transfers, official receipts and fiscal and bank identification numbers are simply not feasible in remote districts. Solving these problems required a lot of the implementing teams' time and attention and caused delays in payments that made the reputation of the project suffer at field level.

Figure 3 Budget distribution per year per IP according to the signed AWPs

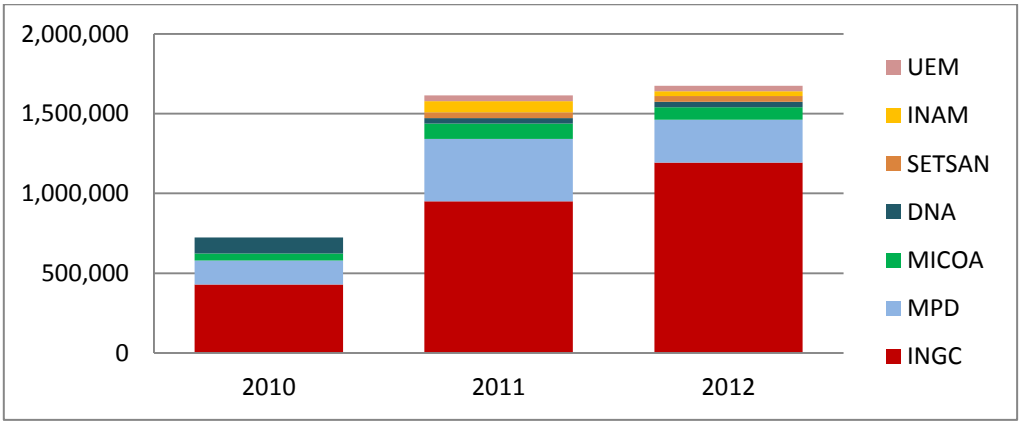
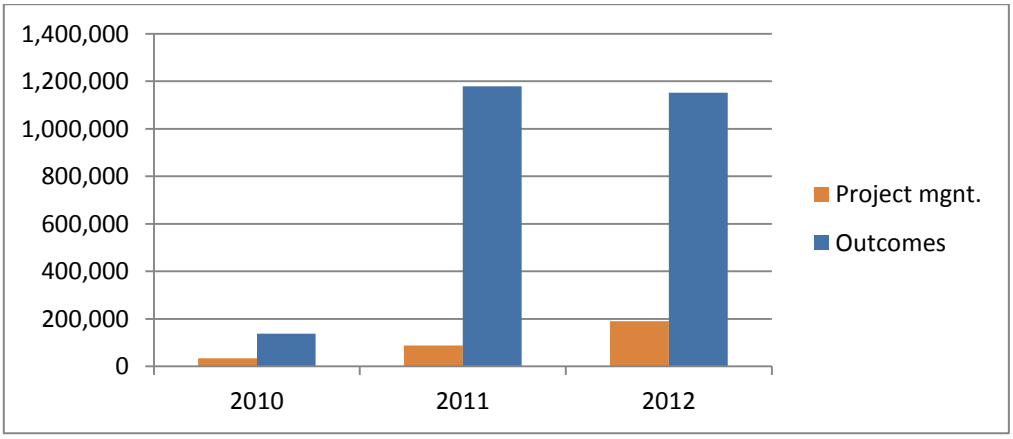


Figure 4 Expenses in outcome execution and project management per year



2.2.7 Partnerships

Other than the partnership between the project implementation partners and the AAP regional office the project fostered partnerships detailed below:

Other development initiatives:

The project team collaborated with the environmental and climate change working group (EWCCG) of donors in Mozambique through the joint implementation of INGC Phase II and some support to the formulation of the National Strategy on Climate Change.

The Poverty and Environment Initiative collaborated with the AAP with joint trainings and coaching of MPD and MICOA and other technical staff involved in national (PES) and subnational (PEDD) planning.

AAP capitalized on the experience of the Joint Programme *Environmental Mainstreaming and Climate Change Adaptation* having replicated the use the manual produced on mainstreaming climate change in district strategy plans (PEDDs) in AAP-MPD training missions to other districts (8 districts in 4 provinces); it has also counted with the collaboration of a JP staff member in the first round of AAP-MPD trainings in 2011

UNDP/UNEP's CC DARE project initiated the digitalization of historical meteorological data that was completed by the AAP.

AAP organized, in collaboration with the Global Gender and Climate Alliance (GGCA), a joint training on Gender and Climate Change, targeting climate change focal points of different ministries and the media.

International partners:

UNDP Environment and Energy Group provided technical support for training on climate change finance.

The UEM team exchanged experience and explored possible partnerships with the ADPC center in Bangkok, which is a leader in training and research on disaster risk management.

The International Center of Journalism collaborated with the AAP to organize a workshop on climate change and the role of media in Maputo.

The UEM prepared the design of the master course on climate change in collaboration with the Universities of Lund and Copenhagen.

National partners

Officials of the Ministry of Finance and the Ministry of Energy participated in trainings and awareness activities on climate change and climate change finance.

The Mozambican Civil Society Organizations (CSO) Platform on Climate Change was facilitated and supported in connection with the COP 17 in Durban.

Communities of Massagena and Chigubo were beneficiaries of the pilot project on food security implanted by SETSAN and collaborated in project design (designating planting areas) and implementations (as community trainers/ facilitators).

The community of Mahatlane in the Chicualacuala district is a beneficiary of the pilot project on water supply and sanitation implemented by the DNA. It will also provide the work force for the termination of the infrastructure.

The governments of the districts of Chinde, Mopeia, Morrumbala, Quelimane city, Nicuadala, Namacurra, Angoche and Mogovolas of which the strategic development plans were climate proof.

2.2.8 Sustainability

This section will assess the financial and political, financial and institutional risks to the continuation of benefits contributed by the AAP.

Political risks

The political risk is low. There is a strong commitment among AAP stakeholders to continue action on climate change. MICOA was strengthened as the coordinating agency of the state in matters of climate change and is leading the implementation of the climate change policy. MPD will continue enhancing capacity and efforts to include climate change in investment instruments. INGC is committed to continue with a Phase III of its evaluation of impacts of climate change and will support MICOA and the MPD in their mainstreaming efforts.

Financial sustainability

The sustainability of adaptation measures still requires significant external financial contributions to consolidate the case of climate change and support the national budget:

- INAM still needs to consolidate their data base management capacities and their meteorological network to support development of adaptation solutions with more accurate projections of climate variables.
- INGC would need to expand their knowledge base and expand the results of the developed decision-support tools to other parts of the country.
- MICOA needs to consolidate their capacity on climate change issues to continue to coordinate the implementation of adaptation measures and to continue to open dialogues with different sectors of society on issues related to climate change.
- MPD still needs to build-up capacity at subnational level on mainstreaming climate change in planning instruments and their capacity to integrate climate change in investment instruments and sector planning.

The financial capacity of the GoM to fund adaptation action and the involvement of private capital are still limited, but capacity development and mainstreaming of climate change

were supported in a coordinated manner by the ECCWG and aid flow to these issues is expected to continue in the **mid-term:**

- The World Bank and the AfDB have committed a combined grant (50 million USD) and loan (52 million USD) within the frame of the Strategic Program for Climate Resilience for Mozambique that integrates climate change budget support (to be delivered through a DPO), technical assistance for knowledge management, capacity-building and studies, and pilot investments in transport, coastal infrastructure, hydrometeorology, agriculture and natural resources.

- The UNDAF and the UNDP country program documents include outcomes and concrete outputs to strengthen capacity to strengthen institutions to develop/improve policies, strategies and plans for climate change, environment and disaster risk reduction as well as to strengthen information systems on climate change, environment, and DRR. GEF funding has already been secured through the UNDP for a project on climate change adaptation on coastal zones.

Institutional framework and governance risks

Lack of coordination, competition for resources and financial support could jeopardize the political commitment to climate change. Although there have been considerable advances in the institutional coordination on climate change issues, to which the AAP has strongly contributed through its climate change focal points, there is a certain risk posed by the following factors:

- The institutional coordination structure is not yet functional and there are still two strategies for climate change adaptation, one led by the INGC and the other by MICOA. Both lines are compatible and in fact the ENARC (INGC) could be understood as a mid-term action plan for adaptation within the frame of ENAMMC.
- MICOA needs strengthening to effectively coordinate all climate change efforts.
- The Ministry of Finances and other line ministries, such as the MOPH have only been marginally included in the mainstreaming and the MPD has yet to include climate change in investment instruments. Hence, there is risk of maladaptation if not enough effort is made to widen the institutional base for adaptation.

3. Conclusions and lessons learned

3.1 Conclusions:

Project formulation

The AAP in Mozambique was highly relevant and correctly identified barriers for climate change action. It developed solutions within the regional AAP and the UNDAF frame and in strong support of the national priorities identified in strategy documents.

The design logic followed the regional framework closely but did not appropriately adapt it to the national realities. The result was a rather ambitious and risky set of activities that depended on the coincidence of many external factors and an unrealistic pace of implementation for all the activities to have followed in the planned sequence.

The implementation timeframe responded to the logic of the donor but not to the national realities. A project with the strategic vision of the AAP should have been given more time for the preparation of the project document and to allow more flexibility in order to avoid dispersion of limited funds in all fronts covered by the AAP.

Result formulation was weak and not up to SMART standards. Outputs were vaguely formulated and were not always in vertical coherence with their outcomes. Thus, the project had to be readjusted and refocused before implementation kicked off. A more careful and consulted design would have mitigated the lack of coordination and understanding that hampered the first year of implementation.

Stakeholder involvement in the design phase was unsatisfactory in terms of number (line ministries), scope (subnational level) and coordination (operational and implementing departments). This led to lack of appropriation and a year's delay in implementation. The project design incorrectly assumed that the NEX modality of implementation would necessarily cause the involvement of all the implementing partners.

Capacity assessments were made for two of the key implementing partners during the design phase but not in-depth enough to account for their internal divisions and coordination issues, as well as capacity development needs at all levels.

The design failed to include the risks of late implementation affecting the elaborated link with planning cycles. As a result the project lost effectiveness as it could not influence the formulation of the main national planning instruments.

The pilots did not yet serve their original purpose, which was to document best practices of adaptation measures with focus on gender and vulnerable groups, mainly because the project design did not provide the time frame necessary to design, implement, document and disseminate best practices.

The project initial M&E system was weak and of no use for adaptive management since it did not include SMART indicators with clearly defined baselines and targets at all levels of

the results chain. The PMU, the CO and the IRTSC made considerable efforts to correct these weaknesses but an effective M&E system, including regular systematic data collection and analysis were never in place.

Project implementation

The PMU managed to solve the serious design problems with proactive involvement and suggested changes on the logical framework to adapt the project to the implementation realities. These changes did not have all the effect they could have because they were approved only during the last year of implementation (2012).

The project's governance structures were established late in the project's timeframe and then not completely: the technical steering committee was never set up. Project implementation gained pace dramatically after the establishment of the project board and the appointment of the national project director. The consequence of the late establishment of the governing structures was the loss of one year in implementation due to the isolation and lack of leverage of the PMU without a functional board and steering committee.

The PMU would have needed more support by the UNDP CO in terms of project management, administrative procedures, and monitoring and evaluation. The CO was understaffed during most of the project life and thus unable to provide the needed support.

There was insufficient attention to operational issues, such as bank accounts, procurement procedures and conditions for field activities. Field activities were particularly affected as neither the UNDP CO nor the implementing partners carefully calculated the administrative requirements before project implementation.

Results and sustainability

The AAP strongly contributed to strengthening the base for Mozambique's climate change action by supporting institutional and technical capacities and awareness at key institutions. This has led to the formulation of a National Strategy for Climate Change that includes institutional arrangements for coordination of adaptation action.

The AAP made a significant contribution to knowledge on climate change in the region through the studies on impact and cost of adaptation, including the design of decision making support tools for watershed management and infrastructure investment planning.

The AAP supported the capacity development of the National Meteorological Institute to improve meteorological data gathering, processing and modeling capacities that can support more accurate climatic and impact projections.

National appropriation and leadership on climate change issues were effectively fostered by the implementation of the AAP in Mozambique, particularly at the MPD, key to climate proof the country's planning and investment instruments.

Although it succeeded in supporting the incorporation of climate change issues in subnational and national planning instruments, the project did not manage to fully mainstream climate change outside environmental programs. More involvement of line ministries, particularly MOPH and the Ministry of Energy would have been needed.

The institutional leadership and coordination on climate change issues needs yet to become operational. There still are two climate change "lines" a "disaster risk reduction" an "environmental" line and some degree of confusion about the nature and role of the GIIMC exists even among AAP implementation partners. Consolidation and effective action on climate change adaptation is at risk if institutional coordination and capacity issues are not given attention.

The AAP supported public awareness on climate change impacts but the awareness-raising activities were geographically scattered and with a wide scope of participation, i.e. there were no specific target groups, particularly decision-makers.

The achievements of the AAP Mozambique would still need external funding to be consolidated. This support seems to be granted in the mid-term by the commitment and coordination within the ECCWG and the support of UNDAF to climate change related outcomes.

3.2 Lessons learned:

More **time and resources should be allocated for the design** of a strategic program for national implementation to allow for adequate consultations at different national and subnational institutional levels. The time and resources invested in the preparation phase will save unnecessary delays and misunderstanding in the implementation phase. Alternatively, a more focused objective based on a sound **context and institutional analysis** that includes the individual, organization and context levels of implementing partners and/ or target groups and institutions would also facilitate an efficient consultation process, e.g. by focusing on a particular set of planning instruments/ institutions to be climate proof/ strengthened.

National implementation projects (NEX/NIM) of mid financial size should be able to **focus on a concrete strategic outcome/ outputs of the country program**, provided this is well aligned with national priorities and not allow resources to be dispersed trying to score results in many areas. A clear link to established country program or UNDAF targets would allow a better assessment and evaluation of attribution and impact that would strengthen the next planning cycle.

A National implementation project (NEX/NIM) needs to **set-up governing structures before implementation starts**, including a project board, a national project director and a **technical steering committee of technical officials** of the implementing partners, including the UNDP and presided by the national project director that would meet regularly, can effectively support the implementation teams and provide solutions to

problems and bottlenecks by having the capacity to solve **technical and operational issues,** while having easy access to and leverage with higher decision making levels.

Monitoring and evaluation should not be considered a requisite to be included in the project document but rather as a **core of the project management**. Accurate measurement of development results, including assessment of attribution effectiveness and efficiency of implementation strategies depend on an adequate M&E system. This involves allocating enough resources for M&E in terms of staff time and expertise to develop the instruments needed to collect and analyze monitoring information in a clear, transparent manner.

Risks assessments and their mitigation measures need to be conducted more carefully and updated during project implementation. Risks should be formulated in a more specific manner, (e.g. instead of "lack of political will" the risk of "different capacity needs of different IPs would cause different pace of implementation") that will also facilitate the design of feasible mitigation measures.

Capacity needs assessments, at the right levels (political, technical, implementation units) that include technical and functional capacities, and the organizational and individual level, including the risk posed by staff and correct assessment of the expertise and manpower needed by the implementation units should be given more attention in project design including realistic mitigation measures.

A NIM/NEX project needs management and administrative support by the CO; assigning a program officer and assuring that administrative procedures are clearly understood by partners and providing agile follow-up on administrative matters is a must for a successful and effective implementation.

More attention needs to be given to operational detail during the design phase; this should include at least an assessment of time and resources involved in coming up with all the administrative requisites, such as setting up bank accounts and procurement procedures. Also, feasibility and/ or alternatives should be assessed for solution of administrative matters related to field activities. **Operations and/ or administrative officials of implementing and executing agencies/ partners should actively participate in the project design.**

Coaching and training on administrative manners, an enabling environment (staff, time, equipment) for a good information flow and a pro-active, solution oriented administrative support must be in place **to facilitate efficient implementation**. Concentrating efforts on technical aspects of the project to the detriment of operational planning would only hamper implementation and impede the achievement of development goals.

Awareness activities would be more effective if the scope and target groups are chosen strategically, e.g. a specific group of decision makers, or alternatively a general public awareness campaign rather than trying to score at all levels. A **method to measure and assess the extent to which this awareness has been changed** at different target groups must be explicitly described and budgeted in the project document and annual work plans.

[ii] UNDP, 2009, Project Document: Climate Change Adaptation Action and Mainstreaming in Mozambique
[iii] Université Catholique de Louvain, The OFDA/CRED International Disaster Database (EMDAT) consulted 11/12/2012
[iv] World Bank Data, consulted, 11/12/2012
[v] INGC, 2009, Study on the impact of climate change on disaster risk in Mozambique, synthesis report, first draft
[vi] INGC, 2009, Study on the impact of climate change on disaster risk in Mozambique, synthesis report, first draft
[vii] INGC, 2009, Study on the impact of climate change on disaster risk in Mozambique, synthesis report, first draft
[viii] The PQG was 2010-2014 not 2011-2016.
[ix] Minutes of the First Meeting of the AAP Mozambique Project Board, May 23rd, 2011.
[x] Minutes of the Meeting of the Local Project Approval Committee, August 21st, 2009.
[xi] Van Logchem, B. & Queface, A.J. (eds.) 2012. Responding to Climate Change in Mozambique: Synthesis Report. Maputo INGC.
[xii]Government of Mozambique. Methodology, Estratégia Nacional de Adaptacão e Mitigação de Mudanças Climáticas. 2012. Maputo MICOA
[xiii] Project Management Unit. 2nd Quarterly Report. 2012, Output 2.2.