

# REPORT MID-TERM PROJECT REVIEW

## INTEGRATED ADAPTATION PROGRAMME TO CONTROL THE ADVERSE EFFECTS OF CLIMATE CHANGE ON AGRICULTURAL PRODUCTION AND FOOD SECURITY IN BENIN (NAPA1)



SEPTEMBER 2013

ALEXANDRE BORDE & RENE TOKANNOU

**COPYRIGHT**

**INTEGRATED ADAPTATION PROGRAMME TO CONTROL THE ADVERSE EFFECTS OF CLIMATE CHANGE ON AGRICULTURAL PRODUCTION AND FOOD SECURITY IN BENIN (NAPA1); PANA / MEPN / PNUD 2013**

French version translate in English by International Building and Trade (IBT),  
E-mail: [contact@ibt-sarl.com](mailto:contact@ibt-sarl.com) COTONOU - BENIN



**CONTENT**

- 1. INTRODUCTION \_\_\_\_\_ 13**
- 1.1. Project outline \_\_\_\_\_ 13**
  - 1.1.1. Climate Change in Benin \_\_\_\_\_ 13
  - 1.1.2. The measures taken by Benin as part of the adaptation to climate change \_\_\_\_\_ 15
- 1.2. Background and Objectives of the mid-term evaluation \_\_\_\_\_ 15**
  - 1.2.1. Context of the mid-term evaluation \_\_\_\_\_ 15
  - 1.2.2. Objectives of the mission \_\_\_\_\_ 15
- 1.3. Mid-term evaluation methodology \_\_\_\_\_ 16**
  - 1.3.1. Approach \_\_\_\_\_ 16
  - 1.3.2. Mission Calendar \_\_\_\_\_ 17
  - 1.3.3. Field surveys \_\_\_\_\_ 17
  - 1.3.4. Investigations at central level \_\_\_\_\_ 18
  - 1.3.5. The meetings of the checklist presentation and validation of the final report \_\_\_\_\_ 18
- 2. BACKGROUND AND CONTEXT OF NAPA1 \_\_\_\_\_ 19**
- 2.1. Preparation of the intervention \_\_\_\_\_ 19**
  - 2.1.1. The identification of priority projects NAPA programme intervention \_\_\_\_\_ 19
  - 2.1.2. Identification \_\_\_\_\_ 19
  - 2.1.3. Formulation \_\_\_\_\_ 19
- 2.2. Political and institutional context \_\_\_\_\_ 20**
- 3. ANALYSIS OF THE CURRENT LOGICAL FRAMEWORK \_\_\_\_\_ 21**
- 3.1. Specific Objectives \_\_\_\_\_ 21**
  - 3.1.1. Improve the ability to predict and respond to climate change in agriculture \_\_\_\_\_ 21
  - 3.1.2. Minimize the impacts of climate risk on agricultural production at the community level  
21
  - 3.1.3. Capitalize and disseminate experiences and best practices \_\_\_\_\_ 21
- 3.2. Components \_\_\_\_\_ 21**
  - 3.2.1. Component 1: Improved forecasting capacity and response to climate change in  
agriculture \_\_\_\_\_ 22
  - 3.2.2. Component 2: Reducing the impact of climate risk on agricultural production at the  
community level \_\_\_\_\_ 22
  - 3.2.3. Component 3: Accumulation and dissemination of experiences and best practices 23
  - 3.2.4. Component 4: Project Management and Organization \_\_\_\_\_ 23
- 3.3. Assumed indicators and risk \_\_\_\_\_ 24**
  - 3.3.1. Indicators reformulation \_\_\_\_\_ 24
  - 3.3.2. A need for caution when interpreting indicators \_\_\_\_\_ 24
- 3.4. Assumptions \_\_\_\_\_ 25**
  - 3.4.1. Confronting assumptions of conception and risks during the project \_\_\_\_\_ 25
  - 3.4.2. Continuous risk management \_\_\_\_\_ 25
- 4. IMPLEMENTATION AND ACHIEVEMENTS \_\_\_\_\_ 26**
- 4.1. Component 1 – Improved capacity to predict and respond to climate change in agriculture  
26**
  - 4.1.1. Progress status \_\_\_\_\_ 26

4.1.1.1. Output 1.1: Plans for local and national development, sectorial strategies (that is to say, City Development Plans, PRSP, PSRSA, the Agricultural strategies) are resilient and address the risks of climate change	26
4.1.1.2. Product 1.2: Municipalities and budgets of the decentralized agricultural and national sectors incorporate allowances for the prevention and management of risks and impacts of climate change and variability	26
4.1.1.3. Output 1.3: The national strategy for delivering effective agro-meteorological services to local farmers is implemented.	26
4.1.1.4. Product 1.4: Training programs for technical services (national, departmental, municipal and local level) take into account the risks of climate change and the components of weather forecasting	27
4.1.1.5. Output 1.5: The climate change vulnerability and risk maps for agriculture (crop and livestock) are developed for four agro-ecological zones	27
4.1.2. Indicators	27
4.1.3. Difficulties	28
4.1.4. Recommendations	28
<b>4.2. Component 2 - Reducing the impact of climate risk on agricultural production at the community level</b>	<b>28</b>
4.2.1. Progress status	28
4.2.1.1. Output 2.1: Nine pilot municipalities (representing four agro-ecological zones) with annual adaptation plans and support capacities to adaptation	28
4.2.1.2. Output 2.2: Nine demonstration villages strengthened in terms of adaptability	29
4.2.1.3. Product 2.3: Suitable methods for Resilience to Climate Change (crop, livestock and fisheries) are tested in nine villages demonstration and reproduced	29
4.2.1.4. Output 2.4: Setting functional networks for the production and dissemination of climate resistant varieties and short cycle in the four agro-ecological zones	29
4.2.2. Indicators	30
4.2.3. Difficulties	30
4.2.4. Recommendations	31
<b>4.3. Component 3 - Capitalization and dissemination of experiences and best practices</b>	<b>31</b>
4.3.1. Progress status	31
4.3.1.1. Output 3.1: A Strategy of Communication and Sansitization developed (SCS) and implemented	31
4.3.1.2. Output 3.2: A website developed and regularly updated	31
4.3.1.3. Output 3.3: Experiences of the project documented and disseminated	31
4.3.2. Indicators	31
4.3.3. Difficulties	32
4.3.4. Recommendations	32
<b>4.4. Component 4 - Organization and project management</b>	<b>32</b>
4.4.1. State of progress	32
4.4.1.1. Output 4.1: Assured project management	32
4.4.1.2. Output 4.2: Monitoring and evaluation of the project is guaranteed	32
4.4.2. Indicators	33
4.4.3. Difficulties	33
4.4.4. Recommendations	33
<b>5. PROJECT REVIEW</b>	<b>34</b>
<b>5.1. Basic criteria</b>	<b>34</b>
5.1.1. Relevance and coherence	34

5.1.1.1. Relevance regarding the needs of the grassroots target groups _____	34
5.1.1.2. Relevance of NAPA1: consistency with national policies and strategies _____	34
5.1.1.3. Relevance of NAPA1: consistency with the policies and strategies of financial partners (UNDP, GEF) _____	35
5.1.1.4. Relevance of monitoring - evaluation indicators of NAPA1 to account for the effectiveness of implemented measures _____	35
5.1.1.5. Relevance to the current national context _____	35
5.1.1.6. Efficiency _____	35
5.1.1.7. Search for efficiency by selecting the lowest bidder _____	36
5.1.2. Efficiency in project coordination _____	36
5.1.3. Effectiveness _____	36
5.1.3.1. Evaluation of effectiveness through PTA reading _____	36
5.1.3.2. Initial delays of certain activities being made up _____	36
5.1.3.3. Evaluation of effectiveness in mobilizing resources _____	37
5.1.3.4. The innovative and outstanding co-financing by Municipal Councils on track to succeed _____	37
5.1.3.5. A major effort of the beneficiaries, source of increased effectiveness _____	38
5.1.3.6. Relevance and effectiveness of the developed partnership strategy _____	38
5.1.3.7. Adequacy and effectiveness of management structures in place _____	39
5.1.3.8. Effective performance of the national coordination of the project but a system of monitoring and evaluation to be improved _____	40
5.1.3.9. The need to enhance the effectiveness of CCCT _____	41
5.1.4. Durability _____	41
5.1.4.1. Significant ownership by the beneficiaries _____	42
5.1.4.2. The importance of institutional anchoring _____	42
5.1.4.3. The importance of sustaining the national and local funding _____	42
5.1.5. Impact _____	43
5.1.5.1. The focus put on impacts for beneficiaries _____	43
5.1.5.2. Indirect impacts on non-target groups _____	43
<b>5.2. Cross-cutting themes _____</b>	<b>44</b>
5.2.1. Gender Equality _____	44
5.2.2. Environment and climate change adaptation _____	45
5.2.3. Social Economy _____	45
<b>5.3. Criteria-HARMO _____</b>	<b>45</b>
5.3.1. Harmonization _____	45
5.3.2. Alignment _____	45
5.3.3. Development results-oriented management _____	46
5.3.4. Mutual responsibility _____	46
5.3.5. Appropriation _____	46
<b>6. ORGANIZATION, MANAGEMENT AND STAKEHOLDERS _____</b>	<b>47</b>
<b>6.1. Framework, Management Bodies &amp; Personnel of the intervention _____</b>	<b>47</b>
<b>6.2. Management of resources (financial, personnel &amp; equipment) _____</b>	<b>47</b>
<b>6.3. Institutional Partners _____</b>	<b>48</b>
<b>6.4. Beneficiaries _____</b>	<b>48</b>
6.4.1. Demonstration villages _____	48
6.4.2. Extension villages _____	48

6.4.3. The local authorities _____	49
<b>7. CONCLUSIONS AND RECOMMENDATIONS _____</b>	<b>50</b>
<b>7.1. Main findings _____</b>	<b>50</b>
7.1.1. Relevance _____	50
7.1.1.1. An issue more topical than ever _____	50
7.1.1.2. An ever increasing demand for support from vulnerable populations _____	50
7.1.2. Efficiency _____	50
7.1.2.1. An efficient choice in the selection of service providers to be continued _____	50
7.1.2.2. A small but efficient team _____	50
7.1.3. Effectiveness _____	50
7.1.3.1. Proven effectiveness with appropriate consideration of needs _____	50
7.1.3.2. The need for an extension of the project implementation time _____	51
7.1.3.3. From demonstration to extension _____	51
7.1.3.4. The difficulty of establishing a quantitative database for in-depth assessment of the of the project effectiveness _____	51
7.1.4. Durability _____	51
7.1.4.1. The reliability of the project framework for its durability _____	51
7.1.4.2. The continuity of funding _____	51
7.1.4.3. Sustainability and capacity building _____	51
7.1.5. Impact _____	51
7.1.6. Other evaluation criteria (HARMO) _____	52
7.1.6.1. Achieving harmonization _____	52
7.1.6.2. More than alignment, an emerging integration _____	52
7.1.6.3. Result oriented management... on the basis of qualitative data _____	52
7.1.6.4. Mutual responsibility respected _____	52
7.1.6.5. A delicate exercise of ownership _____	52
7.1.7. Cross-cutting themes _____	53
<b>7.2. Recommendations _____</b>	<b>53</b>
7.2.1. To the project management team _____	53
7.2.1.1. On the continuation of the intervention _____	53
7.2.1.2. The importance to respect the five year period planned for the project _____	53
7.2.1.3. The urgency of strengthening the monitoring and evaluation system _____	53
7.2.1.4. The need to better anticipate cash flow from co-funding _____	53
7.2.2. To the Ministry in charge of managing climate change _____	53
7.2.2.1. Benefit from the creation of the Directorate General on Climate Change _____	53
7.2.2.2. Capitalize the first successes of the project and build capacity _____	54
7.2.3. To the Steering Committee _____	54
7.2.3.1. Validate the mid-term successes of the project _____	54
7.2.3.2. Initiate the development of a sustainability strategy _____	54
7.2.4. To the UNDP _____	54
7.2.4.1. Set the deadline of the project to March 2016 _____	54
7.2.4.2. Capitalize on the experience of NAPA1 _____	54
<b>8. AGREEMENTS &amp; EXPECTATIONS _____</b>	<b>55</b>
<b>8.1. Agreements between the parties _____</b>	<b>55</b>

<b>9. ANNEXES</b>	<b>56</b>
<b>9.1. Terms of Reference</b>	<b>56</b>
<b>9.2. Mission schedule</b>	<b>60</b>
<b>9.3. List of people interviewed</b>	<b>62</b>
<b>9.4. NAPA1: Journal of risks (From the PTA 2013)</b>	<b>64</b>
9.5. Table of agreements and financial contributions of municipalities	69
9.6. Ministries and departments involved in the project and their specific roles	70
9.7. Matrix of midterm activities and achievements of NAPA1	73
9.8. Photos of the fieldwork	101

## **LIST OF FIGURES**

**Figure 1:** Map of priority agro-ecological zones in Benin

**Figure 2:** Project Organization

## **LIST OF TABLES**

**Table 1 :** Evaluation of demonstration villages of NAPA1

**Table 2 :** Initial and retranslated Indicators

**Table 3 :** Budgets planned and mobilized

**Table 4 :** Contribution and funds released at national level

**Table 5 :** Mid-term achievements of technical partner structures of NAPA1

**Table 6 :** Rate of achievement submitted by the EGP / CSR

**Table 7 :** Mid-term status of indicators of the logical framework



## **ABBREVIATIONS AND ACRONYMS**

<b>CCA</b>	: Climate Change Adaptation
<b>CCCT</b>	: Municipal Technical Coordination Committees
<b>UNFCCC</b>	: United Nations Framework Convention on Climate Change
<b>CENATEL</b>	: National Centre for Remote Sensing of Benin (Centre National de Télédétection et de suivi écologique du Bénin)
<b>CERF</b>	: Center for Forest Education, Research and Training
<b>CPAP</b>	: Country Programme Action Plan
<b>CVA</b>	: Driver of Administrative Vehicle (Conducteur de Vehicule Administratif)
<b>DAGRI</b>	: Department of Agriculture
<b>DCN</b>	: Second National Communication to the UNFCCC
<b>DE</b>	: Department of Livestock (Direction de l'Élevage)
<b>DGAB</b>	: Deputy Director General of Budget
<b>DGE</b>	: Directorate General for the Environment
<b>DGFRN</b>	: Directorate General of Forests and Natural Resources
<b>DICAF</b>	: Directorate for Innovations, Agricultural Advisory and Operational Training (Direction des Innovations, du Conseil Agricole et de la Formation opérationnelle)
<b>DNM</b>	: National Directorate of Meteorology
<b>DP</b>	: Directorate of Fisheries
<b>(D/Fisheries)</b>	
<b>DPP</b>	: Directorate of Planning and Forecasting
<b>DPPC</b>	: Department of Prevention and Civil Protection
<b>DPPGRE</b>	: Directorate of Pollution Prevention and Environmental Risk Management
<b>EGP</b>	: Project Management Team
<b>MTR/MTE/EMP</b>	: Mid-Term Evaluation/Review (Evaluation à mi-parcours)
<b>FADEC</b>	: Municipalities Development Fund (Fonds d'Appui au Développement des Communes)
<b>CFA</b>	: CFA Franc
<b>GEF/FEM</b>	: Global Environment Fund
<b>FSA</b>	: Faculty of Agronomic Sciences, University of Abomey-Calavi
<b>GAF/AFM</b>	: Administrative and Financial Manager
<b>IPCC</b>	: Intergovernmental Panel on Climate Change
<b>GTPA</b>	: Multidisciplinary Working Group for Agro-meteorological Assistance (Groupe de Travail Pluridisciplinaire d'assistance Agro-météorologique)
<b>INRAB</b>	: National Institute of Agricultural Research of Benin / Institut National des Recherches Agricoles du Bénin
<b>ITCZ</b>	: Intertropical Convergence Zone / Zone de Convergence Intertropicale
<b>LDCF</b>	: Least Developed Countries Fund / Fonds des Pays les Moins Avancés
<b>LSSEE</b>	: Laboratory of Soil Science, Water and Environment INRAB
<b>MAEP</b>	: Ministry of Agriculture, Livestock and Fisheries

<b>MEGCCRPRNF</b>	: Ministry of Environment responsible for Managing Climate Change, Reforestation, and the Protection of Natural Resources and Forestry
<b>MEHU</b>	: Ministry of Environment, Housing and Urban Development
<b>NEX</b>	: National Execution modality of the UNDP
<b>ONASA</b>	: National Office to Support Food Security (Office National d'Appui à la Sécurité Alimentaire)
<b>NGO</b>	: Non-Governmental Organizations
<b>ONS</b>	: National Office for Agricultural Income support (Office National de Soutien des revenus agricoles)
<b>ORTB</b>	: Office of Radio and Television to Benin
<b>PAI</b>	: Annual Investment Plans
<b>NAPA</b>	: National Action Plan for Adaptation to Climate Change in Benin
<b>PANA 1</b>	: Integrated adaptation programme to control the adverse effects of climate change on agricultural production and food security in Benin
<b>PAPA</b>	: Agricultural Policy Analysis Programme (INRAB, Programme Analyse de la Politique Agricole)
<b>PDC</b>	: Municipal Development Plan (Plan de Developpement Communal)
<b>PFI</b>	: Project Identification Form
<b>UNDAF</b>	: United Nations Development Assistance Fund
<b>UNDP</b>	: United Nations Development Programme
<b>PRSP</b>	: Poverty Reduction Strategy Paper
<b>PSRSA</b>	: Strategic Plan for Agricultural Recovery (Plan Strategique de Relance du Secteur Agricole)
<b>PTA</b>	: Annual Work Plans
<b>PTF</b>	: Technical and Financial Partners
<b>RDR</b>	: Responsible/Head of Rural Development (Responsable du Developpement Rural)
<b>MEO</b>	: Monitoring and Evaluation Officer (Responsable Suivi-Evaluation)
<b>CPRS</b>	: Growth Strategy for Poverty Reduction
<b>SGM</b>	: Secretary General of the Ministry
<b>UAC</b>	: University of Abomey-Calavi
<b>USD</b>	: United States Dollars
<b>VRA</b>	: Perception Basic Study

## ABSTRACT

Climate change is felt in Benin with a moderate warming and an increase in frequency of extreme weather events, whether it is the shortening of the rainy season, more heavy rains followed by devastating floods, high winds or drought. The average annual temperature of the country is projected to increase from 1.0 to 3.0 ° C before 2060 years and 1.5 to 5.1 ° C before 2090 years.

The country has developed since 2008 a National Action Plan for Adaptation to Climate Change (NAPA) identifying priority projects and defining four agro-ecological areas considered mostly vulnerable: regions 1 (Far North Benin ), 4 (West Atacora, North Donga), 5 (cotton Central Zone) and 8 (Fishery Zone)

The first priority project is entitled "Integrated Adaptation Programme to control the adverse effects of climate change on agricultural production and food security in Benin (NAPA1) " and has been subject of a funding agreement between the Benin Government, implementing partner and UNDP for funding and implementation that started in April 2011.

This report is the product of the mid-term NAPA1 review. This evaluation took place in August 2013, specifically from the 12 to 28 of August. It was conducted in accordance with the appropriate analysis criteria of this type of exercise. The criteria of relevance, efficiency, effectiveness, sustainability, impact, coordination, management for results, mutual responsibility and ownership have provided methodological framework for this evaluation.

It shows a general result quite in favour of continuing the project. The areas for improvement include the strengthening of the monitoring and evaluation and the need to continue the efforts of co-financing.

It is recommended to consider the gap between the scheduled dates for implementation of the project (January 2010 to December 2014) to make them consistent with the effective start date of April 2011. Clearly, the evaluation concludes that it is appropriate to set a new end date of the project on March 31, 2016. It is also suggested to continue to implement the project according to the *modus operandi* of the project document, to set up a strategy to perpetuate the activities after the project, or to strengthen the management team of the project.

**BENIN - REPORT OF THE MID-TERM REVIEW****Integrated adaptation programme to control the adverse effects of climate change on agricultural production and food security in Benin (NAPA 1)**

Atlas Award ID	: 00059395
Project ID	: 00074252
Institutional partner	: DG Environment (ex MEHU)
Duration of the project	: 2009-2014
Date of start of the intervention	: 1 April 2011
EGF	: 3 410000 USD
UNDP contribution	: 500000 USD
Contribution Government of Benin (cash)	: 850000 USD
Contribution Government of Benin (in kind)	: 4 114381 USD
Contribution of Pilot Municipalities (cash)	: 341000 USD
Contribution of Pilot Municipalities (in kind)	: 2091619 USD
Total contribution:	: 11310000 USD
Sectors	: Climate Change Adaptation

## 1. Introduction

Like other least developed countries (LDCs), parties to the UN Convention Framework on Climate Change (UNFCCC), the Republic of Benin has developed in 2008 its National Action Programme for Adaptation Climate Change (NAPA), with five (05) priority adaptation measures to be implemented. The first step identified, devoted to agriculture is implemented through the project entitled "Integrated adaptation programme to control the adverse effects of climate change on agricultural production and food security in Benin " (NAPA1 ), is the subject of this mid-term review.

Officially started on 1 April 2011, this project conducted in accordance with the Project Document (Prodoc) a number of actions. The Prodoc planned a mid-term review to determine the efforts achieved to reach the results obtained so far and to identify current deficiencies if necessary, for guidance on how to improve the implementation of the project during the second half term. This assessment was conducted from August 13 to 28, 2013 by MM. Alexandre Borde, climate economist, international consultant, and René Tokannou agricultural economist Engineer, national consultant and co-author of the report.

In accordance with the Terms of Reference (TOR) of the mission, this mid-term evaluation report is organized around the following main headings:

- Project outline;
- Mid-term review methodology;
- Analysis of the current Logical Framework;
- Implementation and achievements;
- Evaluation;
- Organization, Management and Stakeholders;
- Agreements & expectations;
- Recommendations.

### 1.1. Project outline

#### 1.1.1. Climate Change in Benin

The Republic of Benin is a country with an area of 114,763 km<sup>2</sup> and nearly 10 million inhabitants (World Bank, 2012). Its economy is based mainly on agricultural production, and about 70% of the country's population depends directly on the sector (World Bank, 2012). The climate is tropical and strongly influenced by the West African monsoon. The rainy seasons observed in Benin are under the influence of the Intertropical Convergence Zone (ITCZ). Northern Benin is subject to a single rainy season from May to November and a dry season between December and March known as Harmattan (dry wind). The northern and central ones receive 200 to 300mm of rain per month in the culminating months of the wet season (July to September). The southern regions of Benin have two rainy seasons and two dry seasons, one from March to July and a shorter rainy season from September to November, corresponding to the the northern and southern passages of the ITCZ across the region<sup>1</sup>.

In Benin, like elsewhere in the intertropical area, rainfall is the determining factor of the climate, particularly for agriculture.

Benin annual rainfall varies greatly on an interannual and inter-decadal basis. Like most other parts of the world, it is difficult to determine the long-term trend. A climate risk study commissioned by the MEPN (2009)<sup>2</sup> showed a decrease in rainfall between the periods 1940-1970 and 1971-2003. Other studies make no long-term trend in reports of annual rainfall in Benin between 1960 and 2006, although this period is strongly marked by periods of high humidity and severe droughts. Seasonal rainfall amount decreased between April and June, months mainly critically substantial in the

---

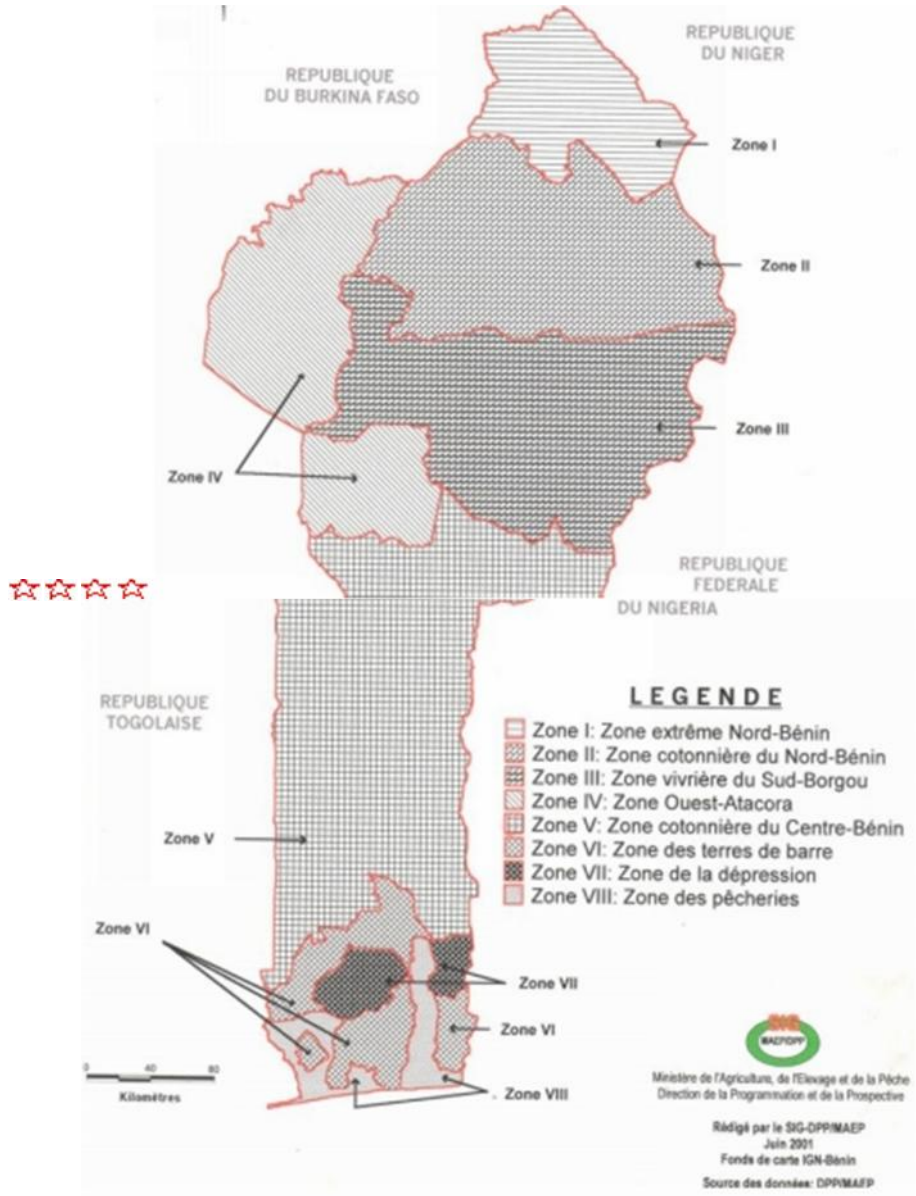
<sup>1</sup>Prodoc PANA1

<sup>2</sup>MEPN – PPG 4, 2009

frequency of days and nights that are considered 'hot' and decreases in the frequency of days and nights that are considered 'cool' to the current climate.

The rainfall projections indicate a variety of changes in Benin (increases and decreases). Forecasts predict decreases between January and June and increases between July and December. The proportion of annual extreme rainfall (natural disasters) tends to increase.

These climate changes, added to anthropogenic activities, increase pressure on the environment and natural resources, particularly in four agro-ecological areas identified as particularly vulnerable from the 8 in the country: Zone 1 (Far North Benin) 4 (Donga North, West Atacora), 5 (Central cotton Zone) and 8 (Fishery Zone).



Source: ProDocPANA based GIS - DPP / APR (2001)

Figure 1: Map of the eight agro-ecological zones identified in Benin. The areas covered by the project are shown on the map by a red star.

These changes have impacts on key sectors of the economy including agriculture, fisheries and forestry. Thus, adaptation to climate change is a major issue in Benin Republic, in order not only to ensure the sustainable development of the country but also food security for the most vulnerable populations.

## **1.1.2. The measures taken by Benin as part of the adaptation to climate change**

Benin, being aware of the challenge posed by climate change, signed the UN Framework Convention on Climate Change (UNFCCC) June 13, 1992, ratified it June 30, 1994 and become effective on 28 September 1994. In addition, Benin has ratified the Kyoto Protocol on 25 February 2002 and which come into force on 16 February 2005. Benin has completed and submitted two National Communications to the UNFCCC, the first on October 2002 and the second one on November 2011.

In line with its international commitments, Benin has strengthened its institutional capacity in the field of adaptation to climate change. Bodies have been set up in the early 2000s to develop adaptation and mitigation strategies. And a National Committee on Climate Change has been set up by the Decree No. 2003-142 April 30, 2003. This enable to develop a National Action Plan for Adaptation to Climate Change (NAPA) which resulted in the identification of priorities and identified urgent needs.

It is in the context of the implementation of Decision 28 / CP.7 of the Conference of Parties to the UNFCCC at the 7th session in November 2001 on the development of National Action Programmes for Adaptation to Climate Change (NAPA) that Benin has received funding from the Fund of Least Developed Countries (LDCF). This funding has identified five (05) priority and urgent measures to be implemented to reduce the vulnerability to the adverse effects of extreme weather events and climate change. For the implementation of the first priority measure for the agricultural sector, a project entitled "Integrated adaptation programme to the control the adverse effects of Climate Change on crop production and food security in Benin (NAPA1) " has was developed.

## **1.2. Background and Objectives of the mid-term evaluation**

### **1.2.1. Context of the mid-term evaluation**

The NAPA1 aims to strengthen the capacity of farming communities to adapt to climate change in four (04) vulnerable agro-ecological zones in Benin. Specifically, it aims to i) the development of capacity planning and response of sectors related to climate change by ensuring that national development plans, municipal and sectorial policies and associated budgets incorporate adaptation needs, ii) to the expertise and environmental support that communities must have to effectively adapt to the adverse weather conditions, iii) to share experiences in adaptation at the national and international and local levels. The mid-term review comes after 28 months of implementation of the project.

Until August 11, 2013, the authority of NAPA1 was provided by the Ministry of Environment, Housing and Urban Development (MEHU) through the General Directorate of the Environment (DGE), in partnership with the UNDP. The cabinet was reshuffled on August 12, 2013, day of the starting of the midterm mission assessment, and the Ministry of Environment in charge of Climate Change Management, of Reforestation and the Protection of Natural Resources and Forestry (MEGCCRPRNF) was created.

### **1.2.2. Objectives of the mission**

The mid-term review mission was to determine whether the project objectives have been achieved at the end of the first 5 semesters of implementation, to identify the factors that helped or hindered the project, and find out the lessons for the continuation.

The objectives of the evaluation mission are:

- assess the implementation rate at a global level and by product;
- analyze the strengths and weaknesses of the project implementation;
- assess the quality (effectiveness and efficiency) of the project;



- assess the current configuration of the Project Management Team (PMT) and its action with respect to the implementation of the project;
- assess the level of progress in the development of national capacities for implementation;
- evaluate the results of the project and its visibility;
- check whether the indicators for monitoring and evaluation are appropriate to link these products to the effect or whether there is a need to improve?
- appreciate the synergy between indicators of the project's logical framework with those of MEHU;
- recommendations.

These objectives have been recalled and met throughout the mission by two evaluators.

The mid-term review mission was conducted from August 12 to 28, 2013 by MM. Alexandre Borde, climate Economist, international consultant, and René Tokannou agricultural economist engineer, national consultant and co-author of the report. During the mission, strengths and weaknesses of the project were analyzed, the degree of overall progress and activity was assessed using the UNDP evaluation criteria grid, and the dynamics and the importance of Project benefits were appreciated. These analyze led to the formulation of recommendations to all stakeholders in the project through a checklist and this final report is the principal document expected from the assessment mission.

The next section presents the methodology used for this mid-term review.

### 1.3. Mid-term evaluation methodology

#### 1.3.1. Approach

The assessment was to compare expected outputs of the first term of the project (the first 28 months of NAPA1) results, as they were formulated in the project document (ProDoc), the actual results taking into account the problems that have arisen, and shifts in expectations.

The consultants met with stakeholders of the project, and went to the field, in the four most vulnerable, to climate change, agro-ecological zones of the countries (zones 1, 4, 5 and 8). They gained access to all project documents, the permanent collaboration of the project management team to answer questions and facilitate the work of the mid-term review. Then the management team of the project took all the appointments requested by consultants with stakeholders deemed appropriate to meet, at the village, municipal and national levels. Finally, a presentation of the results of the midterm assessment mission was held on Tuesday, August 27, 2013 and about 50 participants from different technical departments of the ministries involved in the implementation of the project responded to the invitation. Experienced resource persons with expertise related to climate change also participated. The detailed mission schedule is attached.

The methodological approach for the mid-term review focused on the essential criteria of analysis (the basic criteria, the criteria and cross HARMO criteria) in order to fully appreciate the quality design, performance implementation of the activities and the first results in terms of effects of NAPA1.

The questions that guided the mid-term work review were:

Do the objectives of NAPA1 meet the expectations of the beneficiaries, the needs of villagers in Benin and global priorities of the partners? This is to assess the mid-term relevance of the intervention. Are they also in harmony with the activities of other donors?

- To appreciate the effectiveness of the project, which targets have been partially or fully achieved potentially at mid-term, taking into account their relative importance?
- Is the implementation of NAPA1 efficient? Were the first impact especially obtained with the minimum possible resources?
- In terms of results, were programming, monitoring and evaluation oriented into that direction?



- Does the project appear sustainable? Thus will adaptation efforts continue after the end of the project? If so, how likely on the long-term? Is there, for example, mutual responsibility and proper ownership of the project in anticipation of the future?
- Halfway through do we already see positive long-term effects and / or negative results by the intervention, directly or indirectly, expected or unexpected? are the first effects visible?
- In terms of coherence and alignment, did the project activities allow to achieve the objectives of national policy?
- Finally, were cross-cutting themes considered?

Moreover, the mid-term review used participatory and consultative approaches involving all stakeholders in the reflections on the findings, analysis and recommendations.

### 1.3.2. Mission Calendar

The timing of the evaluation mission has been a preliminary meeting with the Project Management Team (PMT) on the starting day, that was Monday, August 12, 2013. It was decided to articulate the mission field meetings in five of the nine villages involved in the NAPA1, meetings with national stakeholders of the project in Cotonou and Porto Novo, and a feedback workshop August 27 in Cotonou. The detailed schedule is presented in Appendix.

### 1.3.3. Field surveys

*Five demonstration villages visited out of the nine villages evaluated:* The midterm evaluation team met 55% of the project beneficiaries of NAPA1 in the field, because 5 of the 9 demonstration villages were visited: Houèdowo, Sèhomi, Damè, Kadolassi and Tomboutou. These villages are located in the four agro-ecological priority zones for adaptation as shown in Table 1 below.

Table 1: Evaluation of demonstration villages of NAPA1

Name of the village and commune	Midterm review method
Toumboutou, Malanville	Field visit and assessment of documents and other administrative documents
Kankini-Seri Matéri	Evaluation of documents and other administrative documents
Kadolassi, Ouaké	Field visit and assessment of documents and other administrative documents
Damè Savalou	Field visit and assessment of documents and other administrative documents
Lagbavé, Aplahoué	Evaluation of documents and other administrative documents
Adame, Ouinhi	Evaluation of documents and other administrative documents
Sehomi, BOPA	Field visit and assessment of documents and other administrative documents
Houédo-Wo, Adjohoun	Field visit and assessment of documents and other administrative documents
Ahomey-Ounme, Sô-Ava	Evaluation of documents and other administrative documents

*Organization of a typical field trip:* At each village visit, an established order was respected, organized in two phases:

- 1) the first key step of a field visit was to have a meeting with the villagers who benefited most often at the center of the village (in a courtyard or a school class for example). The number of beneficiaries present ranged from 30 to 70. The opening words were most often made by the Head of Rural Development (RDR) of the Commune and village chief, before the evaluators begin their investigation.

2) The meeting with the villagers continued with a tour of the facilities (for fish, livestock, etc.), management (inland valleys, community forests, etc.), farm plots (planting short cycle crops, plots used for the collection of phenological data, etc.) on which the project operates. The rain gauges were systematically visited at each site. Evaluators have always been able to discuss with villagers individually, without being, at any time, hindered in their evaluation work.

*Meetings with local authorities:* exchanges are often organized (usually after field visits and interviews with villagers), with officials at the municipal level involved in the implementation of the project: Mayors, Responsible of Rural Development (RDR) and municipal officials for the protection of the environment (ReCPN).

#### **1.3.4. Investigations at central level**

The NAPA1 mid-term evaluation team met with national stakeholders in the project on several occasions and in different contexts. Thus, the evaluators participated as observers at a meeting of the Multidisciplinary Working Group of Agro-Meteorological Services (APWG) August 14, 2013 in Porto Novo.

Moreover, the evaluators had bilateral meetings with many members of the Steering Committee and the Technical Committee of the project, in particular the Ministry of Environment in charge of managing climate change, reforestation and protection of natural resources and forestry and with different technical departments of the Ministry of Agriculture, Livestock and Fisheries (MAEP).

#### **1.3.5. The meetings of the checklist presentation and validation of the final report**

On Tuesday, August 27, 2013, local and national stakeholders were invited to the feedback of the first results of the mid-term review by the consultants. This workshop review was held at SeaView Hotel in Cotonou, from 9:30 to 2:30 p.m. in the presence of several elected representatives of project intervention municipalities, beneficiary villagers, members of the Steering Committees and Technical Project and ARTG and media. The workshop was co-chaired by the Technical Advisor for Environment and Climate Change Focal Point of the Government and the Head of Unit Environment, Energy and Sustainable Development UNDP. It raised the stakeholder comments for consideration in preparing the final report of the evaluation. The latter was approved on December 24, 2013 at the Sun Beach Hotel Cotonou, mainly by members of the Technical Committee of NAPA1.

## **2. Background and context of NAPA1**

### **2.1. Preparation of the intervention**

#### **2.1.1. The identification of priority projects NAPA programme intervention**

Following a process lasting several years, the National Action Plan for Adaptation to Climate Change Benin (NAPA) was made public in January 2008. It has identified twenty adaptation options grouped into five broad priority project proposals, including "implementation will lead people to consolidate their coping strategies and their improvement over the possibilities offered by modern intervention technology."

This exercise led to the development of a project profile in the NAPA document of 2008, including a plan for financing adaptation measures considered as most urgent. From there, a project document was drafted at the initiative of UNDP the following year, to contribute to the result 1 UNDAF 2009-2013.

This document was the basis for the signing of a funding agreement between the Government of Benin, implementing partner and UNDP for funding and implementation of the "Integrated Programme for Adaptation to control the effects adverse climate change on agricultural production and food security in Benin (NAPA1) ", first project on adaptation to climate change in Benin.

We should also remember that this intervention is consistent with the expected effects of CPAP, as it is to strengthen the capacity of national structures and local communities to preserve the environment and to better adapt to climate change , through strategies and adaptation measures implemented in the most vulnerable areas.

Finally, the intervention has been prepared on the recommendations and meeting the eligibility criteria of the Fund for Least Developed Countries (LDCF) managed by the Global Environment Fund (GEF / C.28 / 18, 12 May 2006)

The proposed project has been from its origin in connection with the country's priorities regarding the improvement of food security, agricultural production and Growth Strategy for Poverty Reduction (CPRS).

#### **2.1.2. Identification**

From this favourable context, the project has been formulated to concentrate actions to reduce the vulnerability of people in the most vulnerable, to the adverse impacts of climate change, agro-ecological regions. The villages where the project is implemented have been identified because they are characterized by high levels of poverty, dependency on subsistence agriculture and difficult access. These factors also increase the vulnerability of target populations.

The modernization of the forecasting ability and adaptation to climate change in the agricultural sector and the need to take into account the impacts of climate change on agricultural productivity at the community are identified as priority issues.

#### **2.1.3. Formulation**

Durant the formulation, it was emphasized the need to strengthen the capacity of agricultural demonstration communities of targeted municipalities to adapt to extreme events and climate change impacts in the four most vulnerable agro-ecological zones in Benin.

The expected outcomes of the project were made in three areas: i) an improvement in the ability to anticipate and respond to climate change in agriculture, ii) a reduced impact of climate risk on agricultural production at the community level, iii) the capitalization and dissemination of experiences and best practices.

## 2.2. Political and institutional context

The political and institutional context is marked by a particular situation at the time of the mid-term review in that a cabinet reshuffle took place on the first day of the mission, with the split of the former Ministry of Environment, Housing and Urban Development (MEHU) into two ministries, on the one hand, a Ministry of Urban Development, Housing and Sanitation (MUHA), and secondly a Ministry of the Environment responsible for the management of climate change reforestation and protection of natural and forest resources (MEGCCRPRNF). It is the latter department that should remain the implementing partner of NAPA1. However, the functions of the various departments were not yet known at the time of writing this report. It is likely that a Directorate General on Climate Change will be created within it with a Department of Climate Change Adaptation.

While the project faced, at the beginning, institutional difficulties, in the role and positioning of various key partners (including difficulties in understanding the interface between EGP and MEHU), it is important that the operating mode in place since the spring of 2012 remains unchanged in view of its effectiveness.

### 3. Analysis of the current Logical Framework

It should first be recalled that the NAPA1 aims to strengthen the capacity of farming communities to adapt to climate change in four (04) vulnerable agro-ecological zones in Benin. The logical framework is structured on the basis of this general objective and to specific objectives. The team analyzed each specific objective and planned interventions to achieve it.

#### 3.1. Specific Objectives

##### 3.1.1. Improve the ability to predict and respond to climate change in agriculture

One of the specific objectives of the project aims to improve the adaptability of Benin in the agricultural sector. The proposed intervention during the formulation of the project, which are still valid, aim to acquire the tools, to provide political and technical structures in the agricultural sector, and to put in place financial mechanisms and strategies - for example through Municipality Development Plans - to promote adaptation at the national level and increase the resilience of rural communities to climate change. The mission believes that these interventions can, to a large extent, to achieve the specific objective of improving the capacity of adaptation in the agricultural sector.

##### 3.1.2. Minimize the impacts of climate risk on agricultural production at the community level

The second specific objective of NAPA1 is to minimize the risk to food security issues. This objective should be achieved by supporting agricultural research, providing educational programs by developing nationwide decentralized service delivery in these areas.

The aim is to support nine pilot municipalities in coping skills, starting with nine demonstration villages during the first half of the project life, and extend it to nine other expansion villages during the second half of the project period. Given recent weather events, this specific objective is still valid and can be reached by the interventions being considered and implemented.

##### 3.1.3. Capitalize and disseminate experiences and best practices

Benin, at the time of formulation of NAPA1 project did not have a specific mechanism for disseminating and sharing information of adaptation experiences.

One goal of the project is to improve knowledge on adaptation mechanisms and disseminate this knowledge and successful experiences in a systematic way and on a scale that is as wide as possible. The latter also requires systematic documentation of the outstanding processes, their results, effects and impacts. This objective is then relevant and feasible and can help to enhance the contribution of NAPA1 through research strategies to cope with the adverse effects of climate change on agriculture and food security.

#### 3.2. Components

The project is not explicitly divided into components. But in terms of its architecture, we easily identify three (3) technical and one administrative and management components. The mission conducted an analysis of all the products or results which implementation helps to make visible the specific objective (s) of each component.

### **3.2.1.Component 1: Improved forecasting capacity and response to climate change in agriculture**

Expected products for Component 1 are:

- Output 1.1: Local and national development plans, sectoral strategies (Municipality Development Plans, PRSP / PSRSA, Farming Strategy) have integrated resilience to climate change and include actions against risks associated with climate change
- Output 1.2: Municipalities and budgets of the decentralized and national agricultural sector and incorporate allowances for the prevention and management of risks and impacts of climate change and variability
- Output 1.3: The national strategy for providing useful agro-meteorological services to local farmers is implemented
- Output 1.4: Training programs for technical services (local and national, departmental, municipal, by DICAF) taking into account the risks of climate change and the components of weather forecasting.
- Output 1.5: The vulnerability to climate change map and risk maps for agriculture (crop and livestock) are developed for four agro-ecological zones.

The implementation of this component through these products contributes to develop capacity of planning and response to climate change in the agricultural sector by ensuring that national and municipal development plans as well as sectoral policies and associated budgets incorporate adaptation needs. In this context, the corresponding methodologies for integration and budgeting adaptive measures to Climate Change are developed. They have made available to local and national actors through sensitization of policy makers and the capacity building of technical staff. It is therefore expected, the installation of rain gauges and other climatic parameter measuring equipment in the nine demonstration villages of the project to maximize crop yields that is an important asset for achieving the Millennium Development Goals (MDGs) which would strengthen the National Weather park.

Thus, the analysis of this component through these products / results allows to conclude that they are able to lead to a modernization of the forecasting ability and response to climate change in agriculture.

### **3.2.2.Component 2: Reducing the impact of climate risk on agricultural production at the community level**

Four products are expected for Component 2:

- Output 2.1: Nine pilot municipalities (representing four agro-ecological zones) have annual adaptation plans and support capabilities
- Output 2.2: Nine demonstration villages have strengthened their adaptation capacities
- Product 2.3: suitable methods for Resilience to Climate Change (cultivation, animal husbandry, fisheries) are tested in nine demonstration villages and are reproduced in the expansion villages
- Output 2.4: Networks for the production and dissemination of climate resistant varieties and short cycle are established and operate in four agro-ecological zones.

This second component aims through its products / results to mitigate the adverse effects of climate change on agricultural production, livestock and fisheries and in turn, on food security at the demonstrations village level. In this context, actions to adapt to climate change self-identified by these communities are planned and operationalized. Similarly, these beneficiaries receive support in terms of agricultural inputs (short-cycle seeds and forestry and agro-forestry adapted plants), equipment and farm machinery for the implementation of these predefined actions.

Some of these partner organizations with expertise in conducting experimental research will be exploited by NAPA 1 for the implementation of research on adaptation to climate change in the demonstration villages through protocols / agreements / conventions, etc. This will enable beneficiaries to participate in action research and benefit from their performance in the areas affected by climate change.

In addition, the implementation of research actions on production methods (crop, livestock and fisheries,) adapted and resilient to climate change are tested in the demonstration villages and replicated; which promotes environmental expertise and support that communities must have to effectively adapt to the adverse weather conditions.

Finally, the sustainability of these actions and farmers empowerment, are ensured by the establishment and the development of networks of production and marketing of basic material of agricultural production (seeds, fry, etc.).

Analysis of these products, let's say that this component remains in the logic of experimentation (pilot project) of NAPA1. As such, the mission believes that these products / results will result in a reduction of the impact of climate risk on agricultural production at the community level. They also fall within the limits of what can be expected of a participatory development initiative adapted to the village level technologies involved.

### **3.2.3.Component 3: Accumulation and dissemination of experiences and best practices**

The products included in the project document for this component are:

- Output 3.1: Communication and sensitization strategy are implemented.
- Output 3.2: A website is developed and updated to disseminate the project information.
- Output 3.3: Successful experiments of NAPA1 are documented and disseminated by various means: printing, radio and / or television.

Component 3 through the implementation of the communication strategy and awareness is intended to share experiences in adaptation at the international, national and local level. Thus, good practices and lessons learned from the project are documented, spread to other vulnerable communities and serve as a repository for future interventions on adaptation to climate change.

As designed, these products help reach various targets including communities. For this, the radio and television facilities provided must also rely on local languages for more impact.

Success stories and lessons learned from this project will help achieve various targets including communities, parliamentarians, PTFs, etc. due to communication actions, visibility and awareness

### **3.2.4.Component 4: Project Management and Organization**

The two products of this component on the organization and management of NAPA1 are listed below:

- Output 4.1: The NAPA1 is well organized.
- Output 4.2: The NAPA1 is well managed technically and financially.

Because of the role of facilitation and interface between the partner organizations implementing and beneficiary communities that NAPA1 coordination plays, the visibility and good organization of activities with committees and good resource management with technical and financial plans<sup>3</sup> seem adequate.

---

<sup>3</sup> No complaint was registered by the mission regarding financial management.

### 3.3. Assumed indicators and risk

#### 3.3.1. Indicators reformulation

The proposed project indicator framework follows the example of UNDP and M & E regarding adaptation. It matched the indicator structure of theme 1 on food safety and agriculture. Indicators at results and objectives level are specified. The result of the project framework develops further the achievement of indicators.

Indicators as expressed in the original project document are generally well formulated, but the translation induced biases that do not allow adequate operationalization. The project team realized it and organized a workshop on indicator re-translation held on February 26 and 27 2013 in Porto Novo. The result of this re-translation is presented below.

**Table 2: Initial and retranslated Indicators**

Initial indicator	The percentage change in agricultural vulnerability (incl. Agriculture and livestock), fisheries and food security sectors climate risk through the study of basic perception (VRA).
Retranslated indicator	Population vulnerability Rate (farmers, livestock and fisheries) to climate risks in agriculture
Result 1: the ability to anticipate and respond to climate change in agriculture sector	
R1 initial indicator	Number of programme and development policy related to agriculture / fishing, incorporating climate change risks.
Retranslated R1 indicator	Number of policies, programme and plans development related to agriculture, livestock and fisheries integrating climate change risks in their goals.
Initial Outcome 2: the risk of impacts due to climate on agricultural productivity: reduced productivity	
Outcome 2 retranslated: the impact of climate risks in agriculture is reduced	
R21 initial indicator	Many farmers (including breeders) and fishermen engaged in capacity building for climate change risk management
Retranslated R21 indicator	Number of producers (farmers, breeders and fishermen) engaged in adaptation activities to reduce risks associated with climate change
R22 initial indicator	The change of percentage of the adaptive capacity in demonstration villages
Retranslated R22 indicator	Percentage of producers who have developed the capacity to adapt to climate risks in demonstration villages
3 initial result: experiences and best practices from pilot activities, capacity building initiatives and the extension policy change	
Outcome 3 retranslated: lessons learned and best practices from pilot activities, capacity development initiatives and policy changes are disseminated	
Initial indicator	Number of codified experiments and affecting all three project results
Retranslated indicator	Number of learned Lessons and good practices codified and disseminated

#### 3.3.2. A need for caution when interpreting indicators

On the whole, the problem of re-translation of indicators is relevant. The results of the retranslation workshop are also satisfactory in that they clearly show all the aspects to be taken into account to effectively measure the progress achieved through the support of NAPA1. However, some formulations still need improvements. For example, the <sup>2nd</sup> indicator of Outcome 2 is defined by the ratio:



*[Number of producers who implemented measures to adapt to climate risks] / [Total number of farmers trained and accompanied]*

The achievement of this indicator depends among other, of the identification and census of farmers (farmers, breeders and fishermen) of demonstration and extension villages of the project, Capacity building on the basic techniques of production, support equipment short crop cycle and agricultural equipment adapted, involvement of farmers in research action and follow-up of these communities.

However, this ratio provides the percentage of producers who have developed the capacity to adapt to climate risks in demonstration villages. This calculated value provides information on the rate of application of the measures to the farmers trained and accompanied but they represent only a portion of the population of the beneficiary villages. In other words, one must be careful not to equate systematically the trained and supported producers to all the population of each beneficiary village. At the same time with the application rate, it can also be interesting to calculate the rate of practical measures in relation to the size of each village. This gives a better idea of the impact of the project. We can also look at the rate of adoption but later.

### **3.4. Assumptions**

#### **3.4.1. Confronting assumptions of conception and risks during the project**

At the time of project design, several assumptions were stated. Thus, it was assumed:

- The pilot municipalities and others agreed to get involved in the project and take responsibility for its implementation;
- Effective adaptation measures be reproduced;
- Appropriate adaptations capacities are introduced to ensure the sustainability of project activities beyond the time expected.

These assumptions, however, were formulated taking into account the fact that there might be some problems at these levels. Thus the project document includes risks analyses.

Annex 1 of the project document listed the potential risks of the project. The mid-term review was an opportunity to study the situation, from the risks identified in the PIF (see below) to recently identified risks. Additional risk factors are included in the listed impediments section and are usually represented by the risks identified below. Most of the risks have organizational nature (ie related to institutional and individual capacities of the utility service, in terms of adaptation). In summary, the following ten key risks have been identified:

1. Insufficient qualified human resources (organizational risks)
2. The costs of adaptation technologies and maintenance (financial risks)
3. The appropriation of adaptation technologies by communities (organizational risk)
4. Social and Cultural resistance (organizational risk)
5. Delays in the disbursement schedule and administrative slowness (financial risks)
6. The occurrence of extreme natural disasters, storms, floods, drought (environmental risks)
7. The weakness of implementation capacity and / or institutional (organizational risks)
8. The arrangements of implementation dependent on institutional capacity (organizational risks)
9. The lack of commitment of Benin Government (political risk)
10. Disagreements in the strategic vision, planning and communication (strategic risk)

#### **3.4.2. Continuous risk management**

Reduction measures for each risk stated above are mentioned in the section on Risks (Appendix 1) and it appears that they were addressed in the design of the project.

With regard to risk management in the implementation of NAPA1, the mid-term mission could notice the level of implementation of the measures to reduce the identified risks.

The project team is monitoring these risks and reports on their levels in the reports prepared periodically. The mission encourages this arrangement.

## 4. Implementation and achievements

### 4.1. Component 1 – Improved capacity to predict and respond to climate change in agriculture

#### 4.1.1. Progress status

##### 4.1.1.1. Output 1.1: Plans for local and national development, sectorial strategies (that is to say, City Development Plans, PRSP, PSRSA, the Agricultural strategies) are resilient and address the risks of climate change

Five activities planned to achieve this, three are implemented and in progress. They have enabled the development of a strategy for the inclusion of climate change adaptation in local planning and the organization of the first trainings on the strategy.

However, the development of the strategy for the integration of climate change into planning documents at national level is yet stumbling because the public partner structure identified in accordance with the Prodoc has not the technical capacity to integrate CCA in these national documents. But the new structure commissioned also has troubles to develop the strategy. So, anything that impedes the implementation of related activities in the period. Progresses compared to this product are standard and some activities on monitoring and evaluation tools are still in the preparation stage (see Matrix of activities and achievements of NAPA1 attached).

##### 4.1.1.2. Product 1.2: Municipalities and budgets of the decentralized agricultural and national sectors incorporate allowances for the prevention and management of risks and impacts of climate change and variability

The Achievement of this product is blocked by the non-identification of a team of experts to develop the methodology to assess financial needs for adaptation and the method of taking into account expenses in the budget planning at the municipal level, at national and decentralized as well as the private sector and cooperation of donors levels. All activities in this framework are pending.

The desire to move forward on this issue was discussed with the coordinating team and it is possible that a team of experts be soon identified in accordance with the existing terms of reference.

Thus, the development of an evaluating methodology for the costs / impacts of climate change responses and budgeting adaptive actions or mitigation measures will serve, among other things, as the basis of analyzes of development tools as well locally and nationally.

Implementation strategy of the system to prevent agro meteorological hazards, and how to estimate the costs of adaptation to climate change in national and decentralized budgets remains relevant. As such the information on sectorial variables to be considered must be produced in order to propose an approach for the definition of the situation of reference with respect to the implementation of climate change adaptation actions.

Budgeting these strategies is essential to ensure the viability of adaptation and mitigation measures.

##### 4.1.1.3. Output 1.3: The national strategy for delivering effective agro-meteorological services to local farmers is implemented.

Of the seven activities planned as part of the product 1.3, the next two have experienced a fairly significant level of evolution. These are i) improving the network of agro-meteorological stations in pilot project areas and ii) the training of a permanent multidisciplinary working team on agro-meteorology, led by the MAEP with municipal and national representatives. These activities are experiencing a good dynamics of development.

However, the study on the assessment of agro-meteorological information needs and current capabilities at local and national level has been delayed. This study was finally integrated to the DICAF.

However, although some actors, in this case local farmers, seem to be well organized in associations at various levels, such as farmers and producers associations, women's groups, etc., it becomes increasingly difficult for them to control seasonal cycles, to deal with agro-climatic hazards (floods, droughts, winds, pests, etc.) and be able to plan production activities.

Farmers, breeders and fishermen communities need specific capacity building in crop production, livestock and fisheries and on agro-meteorological issues (Control of seasonal production cycles, crop management, techniques for sustainable land management pasture and water bodies, etc.)

#### **4.1.1.4. Product 1.4: Training programs for technical services (national, departmental, municipal and local level) take into account the risks of climate change and the components of weather forecasting**

The development of training modules taking into account the risks of climate change and the components of weather forecasting activities are well advanced.

Twelve technical studies have been commissioned and are on specific topics. Most are run by the public partner organizations; and parties responsible for the project. For some, the services of independent consultants were required. Considerations related to climate change were at the center of all these studies. Besides, they all have resulted in the development of training materials (modules of the learner and trainer modules) having themselves integrated considerations related to climate change. A total of sixty four training papers were developed and editing is underway. But already, a training of trainers took place and the process of integrating climate change considerations in training was taught to the staff responsible for training farmers, breeders and fishermen locally. Non-governmental organizations, consultant firms, members of the steering committees of communal development plans were also associated with this session capacity building.

Building sessions of generalized capacity is planned for the second term of the project.

#### **4.1.1.5. Output 1.5: The climate change vulnerability and risk maps for agriculture (crop and livestock) are developed for four agro-ecological zones**

None of the five planned product in the 1.5 related to the production of the map of vulnerability to climate change and risks for agriculture activities have been scheduled for the demonstration phase of the NAPA1 and all are awaiting the extension phase.

They are all scheduled for the second term of the project. The current term with much more emphasis on the physical implementation of the project at the community level on the one hand and on the other hand, the first series of twelve thematic studies had trouble to be carried out in due time because of their specificity and lack of control over the process of integrating climate change considerations, Management Team of the project has seen fit to launch during the second phase of the project: extension phase of the project in the subsequent villages.

### **4.1.2. Indicators**

The existence of a strategy document for the consideration of climate change adaptation in local planning and reports from the first training activities are the indicators available in relation to the development of plans (local and national) and resilient sectorial strategies that deal with the risks of climate change

Strengthening the network of agro-meteorological stations in the pilot project areas by rain gauges and the training of 18 rainfall observers across all sites also are indicators of performance of Component 1.

Finally, the development of agro-meteorological information bulletin of "NAPA1 AGROMET-INFO" No. 001 of June 2013, No. 002 of July 2013 and soon the No. 003 of August 2013 and No. 004 of September 2013 edition is a very positive indicator of performance and much appreciated by the

actors so that wishes to see this information bulletin translated into local languages were put forward by some actors encountered during the evaluation mission.

### **4.1.3. Difficulties**

The low capacity of some public institutions involved in the project in terms of their mission at the national level is the main problem that hampered the development of process initiated by NAPA1 coordination to provide for Benin a national strategy for adaptation to climate change in national planning.

The decision to withdraw the study to elaborate a strategy for the inclusion of adaptation to climate change in the plans / strategies on agricultural production and food security in the DPP / MAEP seems adequate. Indeed, the latter was unable to propose an appropriate methodology for validation by the Technical Committee after two years.

In addition the difficulty of identifying a public technical structure that can help develop the methodology for assessing financial needs for adaptation to climate change and adaptation costs in national and decentralized budgets continues to be an impediment to achieving some objectives of this component.

### **4.1.4. Recommendations**

The management bodies of NAPA1 must accompany the Agricultural Policy Analysis Programme (PAPA) structure of the National Agricultural Research Institute of Benin (INRAB) for speeding up the process of conducting the study on the development of a national strategy to "develop a strategy for the inclusion of climate change adaptation in the plans / strategies at national level in agricultural production and food security."

The involvement of resource persons with a strong background; an agronomist or an environmental specialist who has proven experience in evaluation or study of Vulnerability and Adaptation to Climate Change is highly recommended to give sustained support to this team of the Agricultural Policy Analysis Programme (PAPA) of the National Agricultural Research Institute of Benin (INRAB) in charge of the study.

Furthermore, it is desirable to set up a team of national experts to conduct the activity of developing the methodology for assessing financial needs for adaptation to climate change and the costs of adaptation of national and decentralized budgets with the assistance of an international expert with strong experience in economic matters.

## **4.2. Component 2 - Reducing the impact of climate risk on agricultural production at the community level**

### **4.2.1. Progress status**

#### **4.2.1.1. Output 2.1: Nine pilot municipalities (representing four agro-ecological zones) with annual adaptation plans and support capacities to adaptation**

Planned activities showed an advanced level of achievement in all municipalities of intervention although there is still some research to implement.

At the beginning of each year, the Project Management Team supports communities to identify and plan in a document (annual adaptation plan) relevant measures to implement over a year. These plans are also budgeted. Their implementation involves the public partner's organizations and close monitoring is done by the Municipal Technical Coordination Committee; a body of the project management following the project document and established by a decree signed by the Minister

supervising the project and taken up in orders signed by Mayors of pilot municipalities of the project. The Mayor of the municipality is the president. These budgeted-plans include self-identified local adaptation actions.

#### **4.2.1.2. Output 2.2: Nine demonstration villages strengthened in terms of adaptability**

Of the four activities planned in the realization of product 2.2, two have been programmed for the demonstration phase and have all had a good level of implementation.

During this first phase of the project implementation, the key actions contained in the action plans and implemented concerned the provision of short cycles seeds and agricultural materials adapted in each of the nine demonstration villages of the project. Indeed, during the floods of 2009 and 2010, these communities have lost all their seeds and their livelihoods. Substantial efforts are being made to provide each village community livelihoods; solution of adaptation and appropriation of adaptive responses to the adverse effects of climate change.

#### **4.2.1.3. Product 2.3: Suitable methods for Resilience to Climate Change (crop, livestock and fisheries) are tested in nine villages demonstration and reproduced**

The main activity related to this product is being implemented with public partners such as the Faculty of Agronomic Sciences, University of Abomey (FSA / UAC), the Livestock Directorate (D / Livestock) and the Directorate of Fisheries (D / Fisheries). These include research activities for which partnerships have been signed with these structures.

These research actions, a subject of training with local communities because of their involvement in all stages phases of the process, focus on innovative themes.

With the Faculty of Agronomic Sciences, University of Abomey (FSA / UAC), two protocol were signed and were first on an " Adaptation Test of four varieties of sorghum and capacity building of producers for the production of certified maize varieties resilient to climate change in nine demonstration villages NAPA 1 seeds, and the second on "Adaptation test and rearing of African catfish *Clarias gariepinus* in the areas of NAPA1 fisheries area ".With the Department of Livestock (D / Livestock), it is rather "development of rabbit breeding in the municipalities of Adjohoun, BOPA and Ouinhi" and "Introduction of sire cocks enhancers in the municipality of Ouaké" that were the subject of agreement protocol between technical leadership and the project. Finally, with the Directorate of Fisheries (D / Fisheries), action research focuses on "Introduction and extension of tilapia (*Oreochromis niloticus*) in aquaculture volta strain in the municipalities of Sô-Ava, Bopa, Adjohoun and Ouinhi."

All these actions researches have credit to have addressed issues whose results will immediately benefit the target communities. The premiere of these researches with the communities, is also adaptation testing of adapted short-cycle plant and animal material and likely constitutes a response to major climatic risks of these agro ecological zones vulnerable to climatic changes. These research-actions are still underway and according to the communities this could be the answer to their current concerns about climatic change.

#### **4.2.1.4. Output 2.4: Setting functional networks for the production and dissemination of climate resistant varieties and short cycle in the four agro-ecological zones**

Of the four planned activity for this product, two were scheduled for the demonstration phase and are in progress. It is the same research-action activities involving resources mutualisation for the purchase of inputs and raw materials for production, storage and collective marketing of short cycle products.

Planned and implemented actions are at the beginning stage. The training of producers of certified short cycle maize seed was held in each demonstration village. The choice of demonstration sites; school-fields for producers group learning by village is in the phase of identification, according to relevant and reliant criteria on production of certified seeds nationwide. The National Directorate in

charge of certified seed is heavily involved in the implementation of this adaptation key action. Conservation and storage Infrastructures of the seeds produced are also provided for this term of the project, but have not yet experienced a starting up. The tender documents have already been prepared nonetheless.

#### **4.2.2. Indicators**

The annual adaptation plans by municipality have been developed since 2011 and physical achievements of NAPA1 in terms of adaptation capacity building of 9 demonstration villages are visible in the field.

During the first term of the project the proposed measures in the village action plans are among others on: - the provision of seeds of maize, rice, soya bean, cowpea, etc., vegetable crops seeds, forestry and agroforestry seedlings for agroforestry and village plantations, the availability of suitable work equipment, adaptation testing and production of plant material and adapted and resilient animal to climate change, the installation of rainfall stations in each of the nine demonstration villages

The mission could also see the installed test plots as part of the research work agreed with the Faculty of Agronomic Sciences, University of Abomey-Calavi.

It is about the schools plots on which, the know-how in terms of certified seed production is taught to producers. Since the choice of the demonstration plots and basic seeds from the National Institute for Agricultural Research of Benin (INRAB), seed producer farmers are trained and follow the different phenological development stages of these short-cycle crops and progressively lessons are learned and recorded immediately. Given the apparent popularity of these engaged producers in these activities, the relevance of these actions is well established. The producers are awaiting the results of these farm research.

#### **4.2.3. Difficulties**

The main difficulties of implementation of Component 2 of NAPA1 are:

- Fair ownership roles and responsibilities of the CCTC members;

Indeed, the arrangement of the project management was provided at the level of each of the CCCT beneficiary communes. Due to the original character of this type of project, at the beginning, members of the management body have not well enough understood their roles and responsibilities despite the scoping workshops held at each of these municipalities and the municipal decrees that institute them. The EGP, repeatedly took advantage of his missions to monitor the project, has continued to re-explain the roles and responsibilities of CCCT members in the implementation of the project.

- Mission misunderstood by the independent consultant in charge of the study at the beginning that caused the delay;
- Insufficient capacity of some public partner structures to conduct studies;
- Insufficient ownership of the project financial management tools and reporting by public partners;

To this end, capacity building sessions were planned and executed in favour of the public partner organizations whose financial management arrangements do necessarily match with those of the project.

- Late planting of forest and agro-forestry seedlings on the agricultural plots and plantations;

It is the result of a late expression of community needs and especially for the first experience, negotiations for sites selection took longer than expected.

- Delays in starting action-research activities.

This first experience of responsible parties was not initially fairly well understood especially regarding cost sharing in the implementation of actions assigned to them. The involvement of the technical committee at the beginning and the steering committee helped overcome these few implementation difficulties of the project in its early years.

#### **4.2.4.Recommendations**

The mission recommends to see that all studies be accompanied by capacity building plans which constitutes the goals of the activity 2.1.5.

It recommends more capacity buildings of both partner structures as well as those of CCTC members from the project management and monitoring procedures and evaluation tools and reporting structures.

### **4.3. Component 3 - Capitalization and dissemination of experiences and best practices**

#### **4.3.1.Progress status**

##### **4.3.1.1. Output 3.1: A Strategy of Communication and Sansitization developed (SCS) and implemented**

With the identification of information and communication needs of target groups and the development of a communication strategy to build capacity to adapt to climate change on agricultural production and food security in Benin, this component has known an early implementation, which however remains hesitant.

The implementation of the communication strategy and its monitoring and evaluation, which are the objectives of this activity are not yet achieved.

##### **4.3.1.2. Output 3.2: A website developed and regularly updated**

The implementation of the four planned activities in the project document to obtain this product has not been scheduled for the demonstration phase, purpose of this mid-term review. They have therefore not been evaluated in terms of progress.

##### **4.3.1.3. Output 3.3: Experiences of the project documented and disseminated**

Like Product 3.2, the implementation of the six planned activities in the project document to obtain this product has not been scheduled for the demonstration phase, purpose of this mid-term review. They also have therefore not been evaluated in terms of progress.

However, it should be mentioned that this is a programming error because the documentation of project experiences should have been a systematic approach covering all processes, results, effects and impacts of the two phases of the project (demonstration and extension phase).

#### **4.3.2.Indicators**

The document of communication plan to build capacity to adapt to climate change regarding agricultural production and food security in Benin is the main indicator of progress in this component.



### 4.3.3. Difficulties

An important shortcoming characterized this component of NAPA1 which should have been given more attention by the Technical Committee in the direction of identifying future uses that might be made of the gained experiences through the various processes initiated in the project. Information needs identified should be the establishment of a system for the systematic collection for the purpose of analysis and future use.

These difficulties are inherent for all development projects of this type. But thanks to the daily involvement of the EGP in the implementation of the project, useful information reaching it are often subject to various issues discussed at the management bodies meetings particularly at the project meetings of the Technical and Steering Committee. Moreover, the involvement of the authorities of the supervisory ministry at the high-level and even sometimes UNDP had the credit to find in time practical solutions to many of these difficulties inherent to this type of project of locally grounded.

### 4.3.4. Recommendations

The project national coordination with the support of the Steering Committee shall ensure the establishment of an effective system of monitoring and evaluation to generate the data required for the capitalization and the dissemination of experiences and best practices of NAPA1. To that end, the implementation capacity of the current team of the project should be strengthened both in human and material terms. Specifically the mission recommends the training of the project team on result-based Management (RBM) and the effective implementation of the tools.

## 4.4. Component 4 - Organization and project management

### 4.4.1. State of progress

#### 4.4.1.1. Output 4.1: Assured project management

The activities that enable to highlight the management NAPA1 are:

- Planning project activities (PTA\_2011, PTA\_2012 and PTA\_2013) regularly defined in monthly programs;
- Implementation of project activities in accordance with the validated annual work plans;
- Regular monitoring of the implementation of activities shown in various reports of the project field mission;
- Capacity building of the management team on financial management tools and reporting on the inclusion of climate change into development plans, etc.;
- Support to the appropriate functioning of the management structures of the project, namely the Technical Committee, the Steering Committee, the Multidisciplinary Working Group on Agro-meteorological assistance (APWG) and the Communal Technical Coordination Committees (CCCT);
- Support the smooth functioning of the office, coordinating headquarters of NAPA1.

#### 4.4.1.2. Output 4.2: Monitoring and evaluation of the project is guaranteed

Regarding monitoring and evaluation, the activities to highlight it at the NAPA1 level are:

- Organization of the workshop to reformulate indicators of the logical framework;
- Regular organization of the meetings of project management structures (Technical Committee, Steering Committee and the Multidisciplinary Agro-meteorological assistance Working Group (APWG), the Communal Technical Coordination Committees (CCCT));



- Regular attendance at the quarterly projects reviews and programs of the Environment Unit. This is a quarterly mechanism for monitoring and evaluation of projects and programs of the Ministry but under UNDP funding. The main objective of this review is to analyze and assess progress, challenges, lessons learned and best practices identified during the execution of the various projects and programs during a quarter;
- Participation to Annual Work Plans Review of the Ministry in charge of the project;
- Conduct the evaluation and the mid-term review.

#### **4.4.2. Indicators**

The regular production of the various planning documents and reports for implementation of the project are the principal indicators of the effectiveness of the team coordination.

#### **4.4.3. Difficulties**

The main challenges identified by the mission at the level of organization and management of NAPA1 concern globally starting up delays related to inadequate staffing and the institutional approach to the project implementation sometimes characterized by administrative slowness. This is now overcome.

The lack of an effective system of monitoring evaluation of the processes, results, outcomes and impacts of the project is not favourable to the capitalization of experiences conducted during the NAPA1 demonstration phase.

The EGP becoming aware of this difficulty, had to develop tools for collecting data and reporting implemented activities at the local level and capacity building sessions for members of CCTC and especially team in charge of the monitoring at the local level (Climate change Focal Point of the municipality, the Municipal Manager of Agricultural Production and the Manager of the Municipal Section of Natural Resources Protection). Also, it has organized, the EGP, missions in the fields to facilitate the adoption of these tools by these actors. The capacity building sessions organized by the Ministry in charge of the project for the benefit of all M & E Officers and those planned and implemented by UNDP as well for the benefit of all project teams and programmes of the Environment Unit have made it possible to notice and correct these weaknesses identified during this phase. Other capacity building on precise and specific themes, of the officer in charge of this component in the project, will also be necessary and appropriate.

#### **4.4.4. Recommendations**

Compared to the organization and management of NAPA1, the mission recommends the establishment as soon as possible of a system of systematic monitoring and evaluation of all processes in the project in the direction of documentation their results, outcomes and impacts.

## 5. Project review

### 5.1. Basic criteria

#### 5.1.1. Relevance and coherence

Relevance examines the suitability between the project objectives and specificities of the situation in which it proposes to act (the context elements of the action). It extends to the consistency with the elements of the context. Given the current national context, the relevance of the actions developed with regard to grassroots target groups, the partial results achieved by the project is satisfactory.

From this point of view, the mid-term review mission was an opportunity to look at these aspects described below.

##### 5.1.1.1. Relevance regarding the needs of the grassroots target groups

Diagnostic studies conducted as part of the formulation of NAPA1 and the inception of project revealed that climate risks, rationale of the project are important concerns. The populations of the intervention areas of the project suffer from the impacts of climate risks and it is imperative to provide them with means to adapt and gain resilient capacity to face these more and more recurrent phenomena. This was clearly confirmed during field visits of the mid-term review. In the village of Houêdo-Wo for example, the exceptional floods towards the end of the 2012 agricultural season did not permit to harvest maize, the population's staple product. Moreover in this village, high winds took off houses roofs which remained roofless when the assessment mission visited their homes. In all the villages visited, indices of the adverse effects of climate risks are visible. The self adaptation actions identified by communities and enclosed in their annual adaptation plans (PAC 2011, PAC 2012 and PAC 2013), to which the project provides a further financial and technical support by the public partner organizations responsible for the implementation of the project at the local level, given the partial results it can be concluded that the relevance of their actions in relation to the adaptation of these communities to climate risks is well established. However, close monitoring is necessary to ensure the effective implementation and sustainability of these actions.

##### 5.1.1.2. Relevance of NAPA1: consistency with national policies and strategies

The project document, also called the ProDoc of PANA1 is consistent with the policy documents and national strategies underway at the time of its preparation. This consistency has been checked and found to be satisfactory during the mid-term review. However, it is important that future policy documents be more explicit about how they take into account the risks related to climate change because apart from the reference document in Benin on Adaptation to Climate Change - NAPA - developed in 2008, other policy documents and national strategy (PSRSA, CPRS 2 and 3) do not show a clear strategic orientations to cope with climate change risks.

However, the achievement of the result 1 of the project through capacity improvement for planning and responding to climate change can really enable the institutions responsible for these policies to be in control of the process of including climate change related issues. After this period, the project has already developed the process of integrating climate change considerations into planning at the local level and simplified integration guide is being edited.

That would be well perceived by the project in the sense that it envisaged the development of a strategy to integrate the Climate Change Adaptation (CCA) in policy documents at national level. It is for this purpose that the PTA 2014 of the NAPA1 plans to "develop and implement, the strategy to improve adaptation tools for the PDC, by developing the budget for wide application at national level."

### **5.1.1.3. Relevance of NAPA1: consistency with the policies and strategies of financial partners (UNDP, GEF)**

NAPA1 coherence with policies and strategy of the Global Environment Fund (GEF) is obvious because the concerns targeted by the NAPA1 are the very “raison d’être” of the global funding mechanism that is the GEF. For the second financial partner, UNDP, the framework document signed between the UN agency and the Government of Benin (CPAP) provides the development and implementation of adaptation strategies and mitigation of climate change in the most vulnerable areas.

Thus, the implementation of NAPA1 and information on related indicators will help to inform the indicators of the expected product; Product 5.1. CPAP: Local communities formulate strategies and implement techniques to adapt to the impacts of climate change on water resources in arid and humid regions.

It appears that the NAPA1 is consistent with the policies and strategy of financial partners who have also taken care to ensure the consistency before funding.

### **5.1.1.4. Relevance of monitoring - evaluation indicators of NAPA1 to account for the effectiveness of implemented measures**

Monitoring and evaluation indicators defined in the NAPA1 source document are generally relevant. As part of the implementation of the project, they have been re-translated to make them more operational.

### **5.1.1.5. Relevance to the current national context**

Given the evolution of the national context, the context of the mid-term evaluation, highlighted the relevance of NAPA1 through several factual examples.

During the period of this mid-term review: visible signs of manifestation of the government’s concerns about the extent of climate change risks were noted. One example is the creation of a Ministry of the Environment in charge of Managing Climate Change, Reforestation and the Protection of Natural and Forest Resources (MEGCCRPRNF). In fact, since the floods of 2009 and 2010 when the entire country has suffered the adverse effects of climate risks, the Government of Benin since then multiplies adaptation and mitigation actions to climate change to promote vulnerable communities resilience to the adverse effects of climate change. The creation of the Ministry of in charge of the management of climate change, Reforestation and the Protection of Natural and Forest Resources has the mission to develop and ensure the implementation as well as monitoring and evaluation of the policy and strategies of the State in environmental, climate change management, reforestation, protection of natural and forest resources and ecosystem conservation.

The NAPA1 project represents the first project implemented in the context of adaptation to the adverse effects of climate change. It can build on the achievements of the project and claim to bring technical and financial partners to join in its fight for more resilience to climate change and development for sustained food security.

### **5.1.1.6. Efficiency**

The efficiency of an action measures the relationship between allocated resources and the results obtained. This is an indicator of management quality.

It is interested in optimizing resources mobilized by the project, and therefore in general, cost / efficiency (infrastructure and services) reports and to compare the results with the resources used (financial, human and material).

The NAPA approach through the implementation of the Project by responsible parties is an advantage for the efficiency. Studies are assigned to public structure to implement the project through the achievements of thematic studies which should lead to adaptation actions and capacity building themes.

Regarding the relevance of the results obtained to the financial resources deployed, the efficiency of the project is satisfactory.

From this point of view, the mid-term review mission was an opportunity to look at these aspects of efficiency below.

#### **5.1.1.7. Search for efficiency by selecting the lowest bidder**

The search for efficiency is in effect through the almost systematic application of the lowest bidder principle in the selection of service providers or goods and equipments suppliers both at the municipalities' level as well as the coordination level. At the same time, the quality of goods and services acquired is considered good and is guaranteed.

Another efficiency principle in force at the project level is the collective movement of participants to workshops by bus. This makes it possible to significantly reduce the cost of organizing these activities and reduce the carbon footprint of these trips.

#### **5.1.2. Efficiency in project coordination**

Regarding the project management, the team was mainly made up of a coordinator, a monitoring and evaluation officer, an administrative and financial manager and a regional financial assistant helped by a support staff (driver and secretary). It also reduces the fixed costs for the implementation of the project. Indeed, the expenses related to the management / midterm project total ratio expenditure is 19%. That ratio which is less than 30% constitutes a relevant factor of efficiency of the project implementation.

However, it should be noted that the project needs more skilled human resources and rolling stock to ensure regular monitoring of the field activities without blocking the current functioning of the coordination (the only vehicle used for coordination is insufficient for field needs travels).

#### **5.1.3. Effectiveness**

##### **5.1.3.1. Evaluation of effectiveness through PTA reading**

The effectiveness of an action is the relationship between the objectives and achieved results. Most of the planned activities are operationalized and being implemented. The Annual Work Plans (AWP) of years 2011, 2012 and 2013 integrated well the needs of beneficiary communities defined in their annual self-identified adaptive action plans. The character of "demonstration" of the project in the first beneficiary villages enabled that the support provided covers all essential steps to achieve results to convince the recipients on their effectiveness.

The project received to his credit enough significant and tangible results, due to the working method used and the schedule adopted. However, one might think that the project, after a long period of preparation and ownership by responsible parties is now in a position to undertake a more active phase. Even if there has been a shift in the schedule compared to the initial programme, the project seems to be able to achieve planned results with the remaining timeframe.

Considering the partial results falling within the objectives of the project, the project's effectiveness is satisfactory.

From this point of view, the mid-term review mission was an opportunity to look at these aspects described below.

##### **5.1.3.2. Initial delays of certain activities being made up**

There was a delay in the launch of some activities in regards of the most appropriate time to achieve them. Sometimes this results in difficult challenges especially at the level of some villages (eg for reforestation planting in Kadolassi in the Municipality of Ouaké where beneficiaries are severely tested by plants protection against transhumant's animals and the severity of the dry season, which leaves

very little chance of survival to planted seedlings). Notice that some delays are not only due to the EGP or the municipalities, but to particular circumstances of project implementation.

### 5.1.3.3. Evaluation of effectiveness in mobilizing resources

The efficiency analysis also covers the issue of resources (human, material and financial) mobilization on due time. It appears that worthy efforts were made by the PTF (UNDP and GEF), whose contribution rate will amount to about 40% in June 2013 as shown in the table below (amounts are expressed in USD).

**Table 3: Budgets planned and mobilized**

GEF budget	5 year budget	Total expenditure in 2010	Total expenditure in 2011	Revised 2012 budget	Total exp. Cumulative	Consumption in June 2013	Total cumulative exp. 30 June 2013	Balance at June 30, 2013	Consumed %
Prod1 / Act 2	500,650	794.01	66 784.28	70800	138 378.29	145,112	283,490	217,160	57%
Prod 2 / Act 3	2288050	-	182 604.67	322,250	460 827.67	323,655	784,483	1503567	34%
Prod 3 / Act 4	330,650	-	9 438.88	27600	37 038.88	6503	43542	287,108	13%
Project mgr / Act	290,650	1157.82	73 495.34	161,501	238 154.16	25125	263,279	27371	91%
<b>Grand total</b>	<b>3410000</b>	<b>1951.83</b>	<b>332 323.17</b>	<b>584,151</b>	<b>874,399</b>	<b>500,395</b>	<b>1374794</b>	<b>2035206</b>	<b>40.32%</b>
<b>UNDP BUDGET</b>	<b>500,000</b>	<b>NA</b>	<b>36797</b>	<b>100,000</b>	<b>136,797</b>	<b>58554</b>	<b>195,351</b>	<b>304,649</b>	<b>39.07%</b>

Therefore, at the financial level, the achievements rates were 10% at end 2011 and 25% at the end of 2012. In June 2013, the financial achievement rate was 40.32%. This shows a good progress in relation to the initial delay.

The contribution of Benin Government gradually increases from year to year but nevertheless remains far below the commitment. Indeed, out of an annual commitment of 85 million FCFA per year (425 million FCFA over 5 years), the released and consumed fund from the Government's contribution are as follows (amounts in FCFA).

**Table 4: Contribution and funds released at national level**

Total 5-year budget		2011	2012	June 2013	Grand total	%
425 000 000	Released funds	1900000	10 million	50 million	61900000	14.56%
	Funds used	1300000	7 million	25 million	33300000	7.83%

Thus this leads to two levels of problems in relation to the contribution of the Benin Government (i) the release of funds from the national budget to the structure of implementation of the project was only 14.56% compared to the contribution of the Government, and (ii) disbursement for funds expenditure put at the project disposal is 53.80% of the funds released. The expenditure of the contribution is therefore only 7.83% of the financial commitment of the Government. Expenditure difficulties of the Government contributions are mainly related to administrative procedures for disbursement of funds.

The synergy of efforts of the EGP, the DPP and the DGB has improved the release to the project, of subsequent financial resources on the one hand and facilitate its use. The synergy of these actors should be continued and maintained for the benefit of the project.

### 5.1.3.4. The innovative and outstanding co-financing by Municipal Councils on track to succeed

The financial contribution of municipal councils in the implementation of NAPA1 is an innovation and a challenge. This design is effective, although in some cases, commitments appear very ambitious and should be discussed again. Considerable and exemplary efforts are made by Municipal Councils: 7 of 9 released a financial contribution.

Commitments vary widely from one municipality to another. So for example Ava is committed to 2,500,000 FCFA while Aplahoué is committed to a contribution of 75 million FCFA (30 times the engagement of So Ava). Apart from this municipality and that of Adjohoun (50 million FCFA), the commitments of the other municipalities amounted to a maximum of 12,500,000 FCFA. The evolution of the payment of financial commitments by municipal councils revealed the difficulties that result from the strategies used for payment. When some municipalities employ their own capital to honour their commitments, others resort to the Municipal Development Fund (FADEC).

The midterm finding is that the Municipality of Malanville completely released its commitment of 3,000,000 FCFA since the start of the project in 2011. Adjohoun paid FCFA 3,000,000 in 2012 (remaining 47 million CFA francs), and some of the other municipalities have partially released their engagement in 2013. It remains 2 municipalities (So Ava and Aplahoué) that have not yet been able to release any part of their financial commitment to the project. Among the two municipalities is found curiously the one that is committed to the highest amount (75 million FCFA) and the one that promised the lowest amount (FCFA 2,500. 000). This raises the problem of harmonization or future arbitration regarding the levels of contribution and strategies to meet them.

Reminders were made and follow-up or congratulation letters were sent to each of the Mayor of project intervention municipalities. This process should be continued and even strengthened by sending off sensitization field missions to Mayors and the local council about this issue.

#### **5.1.3.5. A major effort of the beneficiaries, source of increased effectiveness**

The mid-term review showed a significant effort of beneficiaries around the NAPA1, for example by conveying, to the final destination, the goods provided by the project, or the proper use of project support. As part of their contribution to the project, the beneficiaries take delivery of materials and equipment provided by the project and organize for their use under sometimes very difficult conditions, as is the case of Houêdo-Wo (Adjohoun) where the beneficiaries have mobilized to carry, on more than 3 km walk, seedlings for reforestation. They have planted and maintained trees, and these have now become their village forest. In terms of appropriate use of mobilized resources to achieve the desired objectives, overall contributions of the parties involved in the implementation of NAPA1 are used for the achievements for which they were intended.

It should however be noted the exception for contributions of municipalities originally intended to support achievements at the community level. Given the delayed mobilization observed, which might negatively affect expected results, the project instances of orientation and management have decided to allocate some of the other resources used in the setting up of support, even restore this fund as and when payment commitments by the municipalities occur. It is expected that a situation be done before the end of the project and a decision be made on the final use of the funds. The review mission appreciates the decision considered relevant.

#### **5.1.3.6. Relevance and effectiveness of the developed partnership strategy**

The partnership strategy developed by NAPA1 is to be performed by public bodies in charge of the various sub-sectors of agriculture including activities within their expertise. Framework contracts are signed with each technical partner for this purpose.

This strategy is relevant because the structures put in relation with NAPA1 are better able to play their role in achieving the expected results. Interviews with several technical departments have confirmed the effectiveness of this procedure.

Partnership strategies developed under the NAPA1 are part of the logic of ownership by national institutions of knowledge and expertise to deal with climate change risks. Although these risks are not

new, their skills for effective and sustainable management remains a national challenge. That is why accountability of national structures and their direct involvement in the definition of strategies for building capacity to adapt to climate change risks is a relevant approach.

However, public institutions sometimes show administrative slowness or even deficiencies that impede the expected smooth running of projects. The delay of completion of certain tasks assigned to partner institutions is part of organizational learning and the impact is one of the recurring costs to this strategy. The NAPA1 has experienced this during its implementation, but was able to find alternative solutions to overcome its administrative bottlenecks. But the main cause of this situation is ultimately uneven capacity of government partners on the methodological, equipment and human resource levels.

Given the progress of the project, it can be concluded that the partnership approach based on the enrolment of public bodies in charge of the sub-sectors, concerned by the risks of climate change in relation to agriculture and food security is effective. But it requires accompanying measures (support of resource persons for example) for the acceleration of processes.

**5.1.3.7. Adequacy and effectiveness of management structures in place**

The different management institutions of NAPA1 in place are the Steering Committee chaired by the Secretary General of the Ministry of the Environment, the Technical Committee chaired by the Director General of Agriculture, the National Project Coordination and Municipal Technical Coordination Committees (CCCT) chaired by Mayors.

Analysis of the composition and operation of these structures leads to the conclusion that they are, overall, relevant and effective. The Steering Committee reflects well, in fact, the institutional anchoring expected for a good ownership by national public institutions of management strategies of the adverse effects of climate change in Benin. It is the same fo the Technical Committee. In support to the project coordination, effectiveness of the Technical Committee is mainly observed through the significance of the achievements regarding intellectual production. Institutions like the Department of Innovations, the Agricultural and Operational Training Council, the Department of Livestock, the Directorate of Fisheries, the Department of Forests and Natural Resources, the National Institute of Agricultural Research of Benin, etc. played their roles as Responsible Parties. In this way as already identified in the project document, theses structures and many others have contributed towards the specific studies related to their areas of expertise. All these studies have led to the elaboration of training materials (modules for learners and trainers’ module) for framers, breeders and fishermen. In total, during the term of the project, we must emphasis that, 64 training materials were developed and climate change considerations were integrated all these training materials. Better, a training session for trainers has been organized and the process of integrating climate change considerations were taught. The most important of these intellectual achievements are presented in the table below.

**Table 5: Mid-term achievements of technical partner institutions of NAPA1**

<b>Mid-term achievements of technical partners institutions of NAPA1</b>
11 strategic studies undertaken by public partner organizations and independent consultants
4 Further studies are planned, including the Terms of Reference and methodologies to follow have been validated by the Technical Committee of the project
64 training materials (trainers’ modules and learners’ modules) were developed by the public partner organizations involved in the implementation of the project and approved by the technical committee of the project
A bulletin of agro-meteorological information "NAPA1 AGROMET INFO" is published. Two issues were already published in June 2013 (No. 001) and July 2013 (No. 002).The 3rd is being edited.



### 5.1.3.8. Effective performance of the national coordination of the project but a system of monitoring and evaluation to be improved

The relevance of a Project National Coordination is warranted in view of the significant challenges that require accountability of a team committed daily to ensure the implementation of the project independently and overcome any administrative slowness. This is why the assessment mission appreciates the recruitment of a national coordinator at the head of the executive team of the project.

The effectiveness of the coordination team is perceptible as (i) the ratio of management cost / total expenditure is 19% (less than 30% accepted) and (ii) the completion rate of 37% (less than normal 50%, mid-term). The mid-term completion rate less 50% is justified by the relatively long time to reach ownership of the approach to implementation of the project as well as the themes by the public parties organization in charge of accompanying the management team. The involvement of resource persons to support the responsible parties in the thematic studies by the method of learning by doing (apprentissage par la pratique) have permitted substantial progress. Thus, efforts to achieve the expected performance despite the difficulties associated with the approach of implementation of the project by the accountability of public organizations. However, the mission noted the difficulties in maintaining a global dashboard providing information on project progress against the original objectives. These difficulties are partly related to the observed delays for the clear definition of the expected results of each project component and appropriate mechanisms for the collection and analysis of related data. Table 6 below shows the progress made over the period of implementation of the project.

**Table 6: Mid-term rates of physical implementation of NAPA1**

Year of implementation of the project	Comp1	Comp2	Comp3	Comp4	Annual rate of achievement
2011 (9 months)	17	68.4	24.5	79.62	48.9
2012 (Over 12 months)	66.84	79.93	60	78.34	76.75
2013 (About 6 months)	37.46	53.65	40.46	58.12	48.59
Total overall physical performance	<b>23.46</b>	<b>45.09</b>	<b>40.50</b>	<b>57.88</b>	<b>37.03</b>

Source: NAPA1, 2013

It appears that the midterm physical implementation of NAPA1 rate is 37.03%. This rate seems fair but may be explained mainly by the difficulties, of starting physical achievements, faced by many projects that have a strong institutional root as is the case of NAPA1. The difficulties inherent to the project are (i) the dispersion of intervention municipalities in all the country territory and the difficult access to demonstration villages; (ii) the reduced personnel compared to the coverage of the beneficiaries villages of the project actions; (iii) failure to assess the financial management capabilities of responsible parties and beneficiaries municipalities forcing the team project management to ensure the financial implementation of the project at national and local levels; (iv) the complexity of the project through the implementation of adaptation measures through responses to climate risks that communities face; and (v) failure to master the integration of climate change considerations into thematic studies, training and implementation of adaptation actions.

The mid-term completion rate of less than 50% is justified by the relatively long time to reach the ownership of the approach of project implementation as well as themes by public party organizations in charge of accompanying the management team. The involvement of resource persons to support the responsible parties in the thematic studies by the method of learning by doing (l'apprentissage par la pratique) have permitted considerable progress.

Moreover, the mission noted difficulties in the collection and maintenance of data for monitoring and evaluation in particular due to the absence of a guide of monitoring and evaluation to enhance data collection and processing, and analysis for the purpose of efficient capitalization of experiences of NAPA1. Indeed, the monitoring and evaluation tools and documentation of current processes are too



limited and do not adequately cover the different levels of the results chain of NAPA1. This could lead to a significant loss of useful information for the analysis and the capitalization of project experience.

But EGP becoming aware of this shortcoming has already taken some measures whose implementation, at present, allow an improvement of the situation. Indeed, the design of tools for collecting field data, reporting tools and capacity building sessions of the project partner organizations and members of the municipal technical committee of coordination; implementing body of the project at the local level are the measures taken by the PMT which have improved this deficiency. Also, it must be emphasized, workshops for capacity building of responsible monitoring and evaluation officers by the ministry and project teams, by UNDP had improving effects.

#### **5.1.3.9. The need to enhance the effectiveness of CCCT**

At the municipalities' level, the relevance of Municipal Technical Coordination Committees is warranted, but their effectiveness is not yet complete. Due to the weaknesses of project monitoring and evaluation, appropriate documentation and reporting tools that have not been implemented, the reports produced by the CCTC project are not explicit about the process, results, effects and project impacts at the beneficiary level.

This body of project implementation at the local level has the task, among others, of projects supervision undertaken with local communities and the involvement of all stakeholders at the municipal level to ensure the proper achievement of the project.

The CCCT supported the NAPA1 in achieving the following performance in the beneficiary villages. To that end it (i) supervises the implementation of the project at local level; (ii) approves the strategic orientation of the project in the context of risk reduction and results optimization; (iii) ensure the involvement of all stakeholders at the municipal level to ensure the proper achievement of the project; (iv) provides relevant information to the team project; (v) actively participates in the agro-meteorological information and warning activities. And with the core group of the RDR, the RSCEPN and Municipality Focal Point, close monitoring of the project implementation is assured. The physical achievements in progress are:

- Capacity building regarding infrastructure of communities:
  - o 9 rainfall stations installed to strengthen the meteorological park in the country;
  - o In the villages of fisheries zones, 8 sets of four floating cages installed and four fish pens installed.
- Building capacity in short-cycle seeds in material and farm equipment with communities:
  - o The supply of short-cycle seeds and agro-foresters seedlings i) 21225 kg of seeds (maize, rice, soybeans, mucuna) and vegetable crops (peppers, okra, etc.) from 1008 farmers including 370 women, to achieve 1279 acres of organic farming, ii) 108,380 plants (acacia, Khaya, Glyricidia, Gmelina, iroko, improved palm oil, etc.) from 1069 farmers including 210 women, to plant 160 hectares of agroforestry plots.
  - o The supply of food for short cycle animal husbandry such as rabbits.
  - o The availability of material and farm equipment adapted don't 160 watering cans, 160 shovels, 160 wheelbarrows, 175 pairs of gloves, 175 pairs of boots and 160 rakes, 04 motorized boats, 23 motor pumps with accessories, two rice husking machines equipped with winnowing, sorter equipped with a motor.

#### **5.1.4. Durability**

Sustainability focuses on long-term effects of the project, and the sustainability of its results and its effects. The sustainability analysis is to assess the ability of the actions to continue autonomously.

Sustainability criteria help to determine if the positive results of the programme and the flow of benefits are likely to continue after the end of external funding or non-financial interventions (policy dialogue, coordination). The project is working very closely with government partners. The main uncertainty concerns the ability of partners to continue their support, which implies in particular their ability to provide adequate resources after the current funding.

At this stage, given the partial results achieved by the project and the live testimonies of beneficiaries, the evaluation team noted that the conditions for the sustainability of the project is satisfactory. The project approach involving the responsible parties in the implementation is also an element of sustainability of the project, however, the mechanism of sustainability of the project must be strengthened by now with the involvement of all these stakeholders extended to parliamentarians .

From this point of view, the mid-term review mission was an opportunity to look at the aspects described below.

#### **5.1.4.1. Significant ownership by the beneficiaries**

Arrangements are made for anchoring of project achievements at local and central level for their continuation beyond the project duration by the country. The benefits result from a development action of adaptive measures to climate change after the end of the intervention.

The diffusion mechanism of the effects of the project plan that the first beneficiaries of short cycle seeds hand over to two other members of the community part of their harvest to allow them to also test the benefits of these crops. The test is carried out on two agricultural campaigns at the risk of loss of seed genetic faculties. Thus, gradually, the other producers of beneficiary villages will experience short-cycle seeds for a first production and can purchase with certified seed producers whose technical and technological capacity building is planned for the second term of the project.

It is very likely that at the end of the project, the producers continue to use varieties of short-cycle crops introduced by the NAPA1 and agricultural centers in view of the testimonies in some demonstration research villages

It is expected in the second term of the project, through the implementation of the Memorandum of Understanding (MoU) signed between the project and the Faculty of Agronomic Sciences of Abomey-Calavi, on the "Test of adaptation of four sorghum varieties capacity building of farmers for the production of certified maize varieties seeds resilient to climate change in the villages involved in the project ". Thus, producers of certified maize will be available in all villages to produce and sell seeds for the benefit of their communities. Basic seeds are provided by the project and the monitoring is done by the DPQC (To be defined). Thus they will make up a network of seed producers of certified short-cycle seeds.

#### **5.1.4.2. The importance of institutional anchoring**

The sustainability of NAPA1 is related to the institutional anchoring of the project. Indeed, the implementation of the project is ensured by state bodies in charge of the sectors concerned by the risks associated with climate change. This approach facilitates capacity building of these organizations for the sustainability of adaptation measures by supporting populations of other localities exposed as well to the risks of climate change.

#### **5.1.4.3. The importance of sustaining the national and local funding**

Sustainability is linked to continue funding beyond the five-year project. The commitment of municipalities in funding this pilot project and promises to take into account in their PAI (Annual Investment Plans) is a sign of good prospects for sustainability. The communication effort that permitted to most municipalities to partially or fully honour their commitment of financial contributions should be supported to prepare for the post project.

The integration activity during adaptation to climate change in the nine municipalities of intervention will enable the latter to have the resources to be allocated to capacity building for communities to become resilient.

Furthermore the trainings organized for NGOs and consultant firms that have developed the PDC on the method of integration of the ACC in the PDC and for local decision makers (mayors, SG, land affairs officer, and responsible for the budget of the municipality) are an asset in terms of preparation for a large extension of the ACC, for its inclusion in the policy documents in order to receive adequate resources for the sustainability of the project.

Furthermore, production of training materials (learners' and trainers' modules) incorporating climate change adaptation (agriculture, livestock, fisheries) and the training of agricultural beneficiaries (agents, seed producers, farmers, etc.) also constitute an attainment to ensure the sustainability of the impact of NAPA1.

The proposed solutions and approaches implemented at the community level are generally based on endogenous adaptation practices developed over the years by the beneficiaries. The mission found that they are generally well understood by them. However actions of capacity building for wider adoption are planned and are being implemented.

## **5.1.5. Impact**

### **5.1.5.1. The focus put on impacts for beneficiaries**

The impact is on the relationship between the overall goal and specific objectives of the project. For the review, it is to examine to what extent specific programme objectives were achieved.

Given the effects that are anticipated through the testimony of beneficiaries, progress towards the achievement of specific objectives is satisfactory and conducive to the attainment of the overall objective.

From this point of view, the mid-term review mission was an opportunity to look at these aspects described below.

In demonstration villages, the supports of NAPA1 consisted in the establishment of seed of short cycle crops (maize, rice, millet, sorghum, peppers, etc.), support for livestock (rabbits, chickens, etc.), fish farming, reforestation plantations, in donations of equipment to facilitate activities (boats, canoes, pumps, small gardening equipments) and for agro-meteorological monitoring (rain gauges).

The testimonies of beneficiaries on the effects of these support concerns mainly short-cycle crops. In all villages visited during the mid-term review mission, beneficiaries brought stories about the benefits they gained from short-cycle seeds and accompaniments (equipment and advice) provided by the project which allowed them to generate significant income from these supports.

These income have enabled beneficiaries some attainments such as the purchase of motorcycles, housing construction with solid materials, improving nutrition and child care, etc.

### **5.1.5.2. Indirect impacts on non-target groups**

Non-target groups receive the echoes of the benefits of the support of NAPA1, and some are already making requests to be considered by other phases of the project. At Toumboutou (Malanville municipality) for example, outside the group initially selected to conduct the demonstration test of short-cycle crops, a second group was made up by itself, who also managed to undertake demonstration tests on IR 841 rice variety during the second year of experimentation.

This reflects the general enthusiasm which is observed in some beneficiaries villages and beyond.

In conclusion, the situation of the midterm logical framework indicators is presented in the table below.

**Table 7: Mid-term status of indicators of the logical framework**

Retranslated indicators	Reference value	Target	Value at EMP	Comments
Vulnerability rate (farmers, breeders and fishermen) to climate risks in agriculture	Study of vulnerability in 2006, DCN Report	35% mid-term and 70% at the end of the project	Need for vulnerability study	All activity cycles to enable a reduction of vulnerability are not yet completed.
IR1 - Number of policies, plans and development programme related to agriculture, livestock and fisheries integrating climate change risks in their objectives	PDC 2012 (0) PSRSA 2011 (1), PSRSA 2011-2015 (1)	PDC (9) PSRSA (1)	PDC 2012 (0) PDC 2017 (?)	The process is carried out at 50% in terms of planned activities, and may change to 75% with the training of Municipalities on the strategy but will not be completed but at the time of the development of new PDC in 2017.
IR21 - Number of producers (farmers, breeders and fishermen) engaged in adaptation activities to reduce risks associated with climate change	ND	150 farmers trained and accompanied at midterm 450 farmers trained and supported to the end of the project	1008 producers reached including 350 women	At this point (mid-term) many producers of demonstration villages are engaged in adaptation activities. public partner organizations provide specific training on the implementation of adaptation measures in progress.
IR22 - Percentage of producers who have developed the capacity to adapt to climate risks in demonstration villages	0	70% of the population in demonstration villages at project completion	Training pending (modules developed and trainers trained)	The organization of training sessions based on developed modules and taking into account considerations related to Climate Change with the required accompaniments is essential for achieving the result.
IR3: Lessons learned and good practices capitalized and disseminated	0	At least ten lessons learned / best practices capitalized	0	It is desirable to conduct a study funded in demonstration villages after mid-term and in the expansion villages at the end of the project and to establish a methodology for evaluating the successful adaptation practices.

## 5.2. Cross-cutting themes

### 5.2.1. Gender Equality

Analysis of gender consideration in NAPA1 indicates that the number of women beneficiaries of NAPA1 would be 370 out of 1008 total current beneficiaries (37%).

This is a relatively high percentage when we know that in general women's involvement in such projects is a challenge. Beyond this quantitative indicator, one may wish that women actually own the measures developed by the NAPA1.

Given the rate of women's involvement in the implementation of adaptation measures, the inclusion of gender in the project is satisfactory.

### **5.2.2. Environment and climate change adaptation**

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

Indeed, reforestation, development of fish farming and others contribute to reducing the degradation of natural resources and the environment.

### **5.2.3. Social Economy**

Other cross-cutting issues are indirectly addressed by the project, including the strengthening of the social economy, since the beneficiaries are farmers, fishermen and breeder who are most vulnerable.

Extension of crops, animal strains or short cycle fry is a strategy to strengthen their livelihoods in case of disasters related to climate change.

The midterm review mission therefore found that the cross-cutting themes are dealt in a appropriate manner by project.

## **5.3. Criteria-HARMO**

### **5.3.1. Harmonization**

Harmonization is defined as transparent and coordinated action among donors, collective measures for better harmonization of procedures, agreements with other donors, existence of contradictions / synergies between projects / donors and explicit promotion of harmonization.

The NAPA1 was executed following the definition of priority interventions responding to a process framed by United Nations Framework Convention on Climate Change (UNFCCC). The international design of interventions in the area of adaptation is known and harmonious.

All project stakeholders (government, UNDP, the pilot municipalities and beneficiary communities) participate in periodic reviews of projects and programmes of the Environment Component supported by UNDP / GEF in order to assess performance and progress and synergies between these projects and programmes. Experimental solutions are proposed against various difficulties encountered by the project teams.

Considering the general framework of project intervention of the UNFCCC and instances of periodic consultation with stakeholders, the level of harmonization is satisfactory.

### **5.3.2. Alignment**

The NAPA1 is clearly aligned with the national policies and strategies. The project is in fact designed and implemented following the development by Benin in 2008 its National Adaptation Programme of Actions for Climate Change (NAPA), which set as No. 1 priority the establishment of a forecasting system of climate risk and an early warning systems for food security in four agro-ecological zones.

In the same way as NAPA, the Government of Benin has identified agriculture as the main priority in its second Growth and Poverty Reduction Strategy paper (GPRS 2) and the fifth orientation of GPRS 3 planned the balanced and sustainable development of the national space.

It appears that apart from the NAPA, management strategies of adverse effects of climate change do not appear clearly in key policy documents at both the Ministry of Agriculture and the Ministry of Environment. The project is so well perceived that it is planned the development of a strategy for integrating the ACC into policy documents at national level. It is for this purpose that the PTA 2013 of

NAPA1 plans to "develop and implement the strategy for the inclusion of climate change considerations into plans for local and national development, sectorial strategies (Municipal Development Plans PRSP / PSRSA, Agricultural Strategy) by developing the budget for a broad national application. " The framework document between UNDP and the Government of Benin (CPAP) planned the development and implementation of adaptation strategies and mitigation measures to climate change in the most vulnerable areas.

### **5.3.3. Development results-oriented management**

The daily monitoring and evaluation system of the project, although based on the results, does not yet show verifiable indicators to assess the effects and impacts of the project on the beneficiaries.

But EGP becoming aware of this shortcoming has already taken some measures whose implementation currently allows an improvement of the situation. Indeed, the design of tools for collecting field data, reporting tools and capacity building sessions for partner organizations of the project and members of the Municipal Technical Coordination Committee, implementing body of the project at the local level are some measures taken by the EGP and have improved this deficiency. Also, it must be emphasized, workshops for capacity building of monitoring and evaluation officers by the Ministry and project teams by UNDP have had improving effects.

Nevertheless, it helps to inform the database of the Ministry of the Environment in charge of the management of climate change on the establishment of seedlings for reforestation in *particular*.

### **5.3.4. Mutual responsibility**

A clear commitment of all stakeholders of NAPA1 is observed at both national organizations level and municipalities and villages levels.

### **5.3.5. Appropriation**

National ownership is the basis of the institutional design of NAPA1. All the actors met during the mid-term review have demonstrated a good understanding of their role in the implementation of NAPA1. Evidence of willingness and capacity have also been demonstrated at various levels such as in the context of achievement of some very technical and quite specialized studies. There is also the involvement of technical partners in the Technical Committee of the project which also provides a degree of ownership of the project

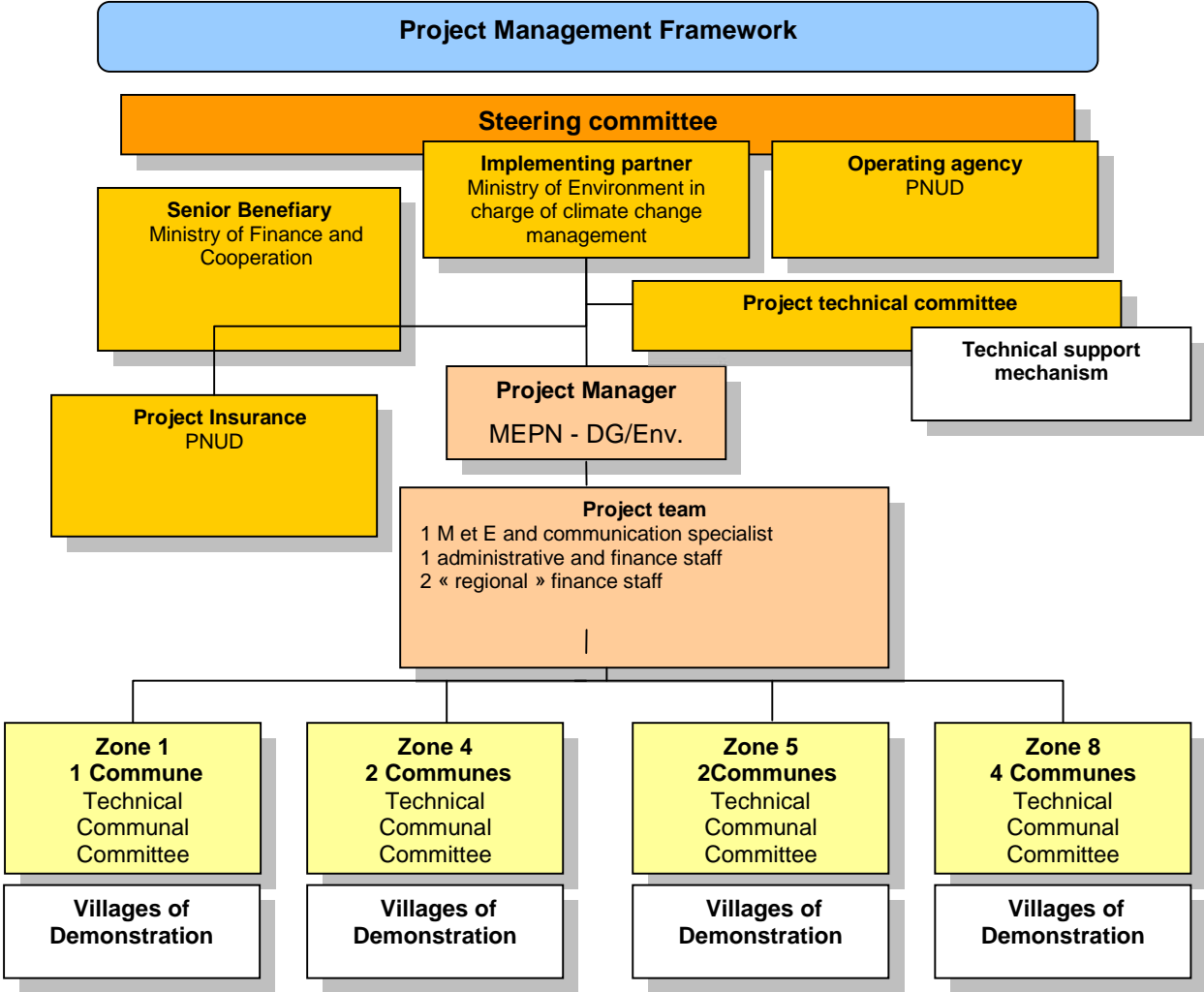
However there is a need for further capacity building of national institutions so that the latter, in appropriate time, can take the leadership of the project when it is completed.

## 6. Organization, Management and Stakeholders

### 6.1. Framework, Management Bodies & Personnel of the intervention

The project structure is appropriate and functional. It is in agreement with the institutional arrangement planned during the formulation of NAPA1 and it is advisable to leave it unchanged in its outline.

Figure 2: Project organization (source: ProDoc)



To 31st August 2013, the project coordination was done by the project management team made of the technical staff below:

- Daniel Loconon, National Project Coordinator (NPC)
- Mme. Honorine Dah-Megbegnanto, Monitoring and Evaluation Officer (MEO)
- Mr. Djélilou Fassassi, Administrative and Financial Manager (AFM)
- Hounsinou Rolande, Regional Financial Assistant
- Dadaglo Carollem Secretary
- Mr. Francis Hounkpatin, Driver

### 6.2. Management of resources (financial, personnel & equipment)

The project is implemented by UNDP under the National Execution modality (NEX) and harmonized approach to cash transfers, and the implementing agency of Benin is MEHU. It is implemented as



planned in close collaboration with the Ministry of Agriculture and selected pilot municipalities, responsible for project interventions at local level.

The NEX modality is used when the national authorities have adequate capacity to perform the functions and activities of the project. The implementation requires that the national institution, acting as the implementing partner, has the technical and administrative capacity to assume responsibility for raising and effective use of necessary contributions to reach the expected results, which is the case for NAPA1.

Moreover, applying NEX contribute to the development of national capacity for the sustainability of such activities.

### 6.3. Institutional Partners

Institutional partners are:

- *Within the former MEHU:* the Directorate of Pollution Prevention and Management of Environmental Risks (DPPGRE), the General Directorate of Environment (DGE), the Directorate General of Water (DGEau), the National Centre for Remote Sensing (CENATEL), the Centre for Study, Research and Training in Forestry (CERF) and the Directorate General of Forestry and Natural Resources (DGFRN)
- *Within the Ministry of Agriculture, Livestock and Fisheries:* DPP, the Directorate of Fisheries (DP), the Livestock Directorate (DE), the Directorate of Agricultural Advisory and Training (DICAF ), the Department of Agriculture (DAGRI), ONASA, and the ONS.
- The Ministry of Economy and Finance: The Directorate General of Budget (DGB)
- The National Institute of Agricultural Research of Benin (INRAB) with PAPA and LSSEE
- Within the Department in charge of Transport: the National Directorate of Meteorology (DNM) and ASECNA.
- Within the Ministry for Public Security: DPPC
- Universities
- Involved communes

Each of the partners as mentioned above plays their role perfectly as planned in the project document. The agreement of the theme developed in the project by responsible parties will be internalized into the regular activities of these structures.

### 6.4. Beneficiaries

#### 6.4.1. Demonstration villages

In the different project areas, the demonstration villages of beneficiaries are:

- Zone 1 : Far North (Pilot commune: Malanville) : village of Toumboutou
- Zone 4 : North West Atacora, North Donga (Pilot communes: Materi and Ouake): villages of Kankini-Seri and Kadolassi
- Zone 5 : Central Cotton Zone (Pilot communes: Savalou and Aplahoué): villages of Damè, and Lagbavè
- Zone 8 : Fisheries Zone (Pilot communes: Bopa, So- Ava, Adjohoun and Ouinhi): villages of Sèhomi, Ahomè-Ounmè, Houédo-Wo and Damè.

#### 6.4.2. Extension villages

In the same areas, extension villages that should benefit from the project in the coming months are:

- Zone 1 : Far North (Pilot commune: Malanville): village of Monla
- Zone 4 : North West Atacora, Donga (Pilot communes: Materi and Ouaké): village of Alitokoum
- Zone 5 : Central Cotton Zone (Pilot communes: Savalou and Aplahoué): village of Ahouignankanme



Zone 8 : Fisheries (Pilot communes: Bopa, So-Ava, Adjohoun and Ouinhi): villages of Agbodji, Lokpo, Dekanmey, Dolivi and Houedja

### **6.4.3. The local authorities**

They are Mayors, Responsibles of Rural Development (RDR), focal points, and village leaders.

## **7. Conclusions and recommendations**

### **7.1. Main findings**

This section presents the key findings of the midterm assessment mission from basic criteria as defined in the methodology.

#### **7.1.1. Relevance**

##### **7.1.1.1. An issue more topical than ever**

The mission was able to notice that the challenges related to climate change are urgent, because for example during the mission, the country faced a serious water shortage, endangering crops (especially cotton) and this led to the creation a Ministry in charge for the management of climate change.

##### **7.1.1.2. An ever increasing demand for support from vulnerable populations**

Beyond these circumstances on the ground, the rural beneficiaries confirmed that NAPA1 not only meets their expectations, but especially meets their needs to be less vulnerable to climatic phenomena to which they are exposed.

Non-beneficiaries of surrounding populations of the project, or populations of expansion villages regularly express interest to be supported by the project.

#### **7.1.2. Efficiency**

##### **7.1.2.1. An efficient choice in the selection of service providers to be continued**

The almost systematic application of the lowest bidder principle in the selection of service providers or goods and equipments suppliers at both the municipalities and the project coordination levels make it to conclude that this criterion is met. At no occasion has it been mentioned that the selection of service providers following this criterion was done at the expense of the service quality.

Moreover, another principle of efficiency in effect at the project level is the collective travel of participants in workshops. This reduces significantly the organizing cost of these activities.

##### **7.1.2.2. A small but efficient team**

Compared with the project management, the coordination team is a very small team comprised essentially of a coordinator, a responsible for monitoring and evaluation, an administrative and financial manager helped by a support staff, reducing also fixed charges for the implementation of the project. Note, however, a need to strengthen the team whose overload (mainly the coordinator) is obvious.

#### **7.1.3. Effectiveness**

##### **7.1.3.1. Proven effectiveness with appropriate consideration of needs**

The mid-term review mission of found that most of the planned activities are being operationalized and being implemented.

The annual work plan integrates well the needs of beneficiary communities enclosed in their annual self-identified adaptive action plans.

### **7.1.3.2. The need for an extension of the project implementation time**

However, the late start of some activity cycles associated mainly with weaknesses in institutional capacity calls for the consideration of an extension of the deadline for project implementation beyond the initial one to permit the completion of the pilot activity cycles initiated both in demonstration and extension villages.

### **7.1.3.3. From demonstration to extension**

The "demonstration" nature of the project support in the first beneficiary villages enabled that the support provided covered all the essential steps to achieving results in order to convince the beneficiaries on their efficiency.

### **7.1.3.4. The difficulty of establishing a quantitative database for in-depth assessment of the of the project effectiveness**

There is a lack of statistical data that can enable in-depth economic analyzes on all beneficiaries per village at this stage.

It is planned in the second term of the project the implementation of statistical data collection tools regarding all the activities undertaken by the project.

## **7.1.4. Durability**

### **7.1.4.1. The reliability of the project framework for its durability**

We must emphasize the appropriateness of measures taken by the project to ensure the taking root of project achievements at local and central level for the continuation, by Benin, of the benefits resulting from a development action of adaptive measures against climate change after the end of the intervention.

The sustainability of NAPA1 is related to the institutional arrangements of the project. Indeed the implementation of the project is led by the state structures in charge of sectors affected by climate change risks. This approach facilitates capacity building of these structures for the sustainability of adaptation measures. Indeed, the capacities acquired by the project partner institutions could be further used to support the populations of other localities being also at risk of climate change to strengthen them to adapt as well.

### **7.1.4.2. The continuity of funding**

Sustainability is also linked to continue funding, among others. The commitment of municipalities in the co-funding of the project and agreements of consideration in their Annual Investment Plans (AIP) is a sign of good prospects for the sustainability of NAPA1 beyond the five years of the intervention.

### **7.1.4.3. Sustainability and capacity building**

Durability is ensured because the capacity of project stakeholders in the field of ACC were strengthened. NGOs and consulting firms have developed the PDC and were consequently trained on the process of integration of the ACC into the PDC. Local decision makers were also trained on the integration of ACC into PDC approach.

## **7.1.5. Impact**

The mission of mid-term evaluation, through the testimony of the beneficiaries regarding the short-cycle crops, found that the NAPA1 had a positive impact on the resilience of rural population to climate hazards. However, we must put into perspective this finding. The assessment of impacts requires time and a longer range of actions, and evaluation at project completion will certainly be more instructive.

## **7.1.6. Other evaluation criteria (HARMO)**

The consultants were asked to complete the analysis of the midterm results of the NAPA1 with harmonization; alignment; result oriented management; mutual responsibility; and ownership criteria. The section below shows the provisional findings of this complementary analysis.

### **7.1.6.1. Achieving harmonization**

The NAPA1 was executed following the definition of priority interventions responding to a process framed by United Nations Framework Convention on Climate Change (UNFCCC). The international design of interventions in the area of adaptation is known and harmonious. Moreover as part of the formulation of PAIA-VO-GEF project in the Ouémé Valley with the Ministry in charge of agriculture, actions are identified to be supported in Houêdo-Wo, a demonstration village in the municipality of Adjohoun, a pilot municipality of NAPA1.

### **7.1.6.2. More than alignment, an emerging integration**

The NAPA1 is clearly aligned with the national policies and strategies. The project is in fact designed and implemented following the development by Benin in 2008 its National Adaptation Programme of Actions for Climate Change (NAPA), which set as No. 1 priority the establishment of a forecasting system of climate risk and an early warning systems for food security in four agro-ecological zones. In the same way as NAPA, the Government of Benin has identified agriculture as the main priority in its second Growth and Poverty Reduction Strategy paper (GPRS 2) and the fifth orientation of GPRS 3 planned the balanced and sustainable development of the national space.

It appears that apart from the NAPA, management strategies of adverse effects of climate change do not appear clearly in key policy documents at both the Ministry of Agriculture and the Ministry of Environment. The project is so well perceived that it is planned the development of a strategy for integrating the ACC into policy documents at national level. It is for this purpose that the PTA 2013 of NAPA1 plans to "develop and implement the strategy to improve ACC tools for PDC by developing the budget for a broad national application." The framework document between UNDP and the Government of Benin (CPAP) planned the development and implementation of adaptation strategies and mitigation measures to climate change in the most vulnerable areas.

### **7.1.6.3. Result oriented management... on the basis of qualitative data**

The daily monitoring and evaluation system of the project, although based on the results, does not yet show verifiable indicators to assess the effects and impacts of the project on the beneficiaries.

### **7.1.6.4. Mutual responsibility respected**

In the case of complex institutional arrangements, this criterion of mutual responsibility evaluates the good operation of the overall project management, at all levels.

The obvious commitment of all stakeholders shows that the criterion of mutual responsibility is met.

### **7.1.6.5. A delicate exercise of ownership**

Willingness is palpable but it is important to continue to strengthen the capacity of national institutions so that the latter, at the appropriate time, can take leadership of the project.

Achieving some very technical and quite specialized studies, but also the involvement of these technical partners in the project's technical committee also gives a measure of the project ownership.

### **7.1.7. Cross-cutting themes**

With regard to cross-cutting themes, the subject of the project itself - adapting to climate change - deals with one of them. Other cross-cutting issues are indirectly addressed by the project, including the strengthening of the social economy, since the beneficiaries are farmers, fishermen and animal breeders are most vulnerable.

Extension of crops, animal strains or short cycle fry is a strategy to strengthen their livelihoods in case of disasters related to climate change. Finally, field visits showed a strong involvement of women as well as men beneficiaries of NAPA1.

The mid-term, assessment mission, therefore, found that the cross-cutting themes are dealt with properly by the project.

## **7.2. Recommendations**

The following recommendations derived from this assessment mission:

### **7.2.1. To the project management team**

#### **7.2.1.1. On the continuation of the intervention**

The observation was made that the need for adaptation and expectations of rural population is enormous, and is increasing . It is therefore recommended to carry on the efforts for the implementation of field activities. Therefore, the project can benefit from the experience of the first half of the project and improve the rest of the implementation to achieve the results taking into account the constraints of time and resources.

#### **7.2.1.2. The importance to respect the five year period planned for the project**

While it is important that the project can be implemented effectively for five years, considering starting date as the beginning date of operations, it is strongly recommended to prepare by now a sustainability strategy and geographical extension of activities.

#### **7.2.1.3. The urgency of strengthening the monitoring and evaluation system**

Considering that the result-oriented monitoring and evaluation system does not yet provide indicators to quantify achievements, it is advisable to strengthen the system of monitoring and evaluation by implementing a results based and computerized system (systematic documentation of processes, outcomes and impacts), but also by strengthening local stakeholders on this issue.

#### **7.2.1.4. The need to better anticipate cash flow from co-funding**

Budgeted resources in the project document are released little by little. It is essential to work with local and national funding partners for an enhanced visibility of the allocation of these resources and the sustainability of funding. Moreover it is recommended to organize field visits with members of parliament, particularly those from the municipalities involved in the project.

### **7.2.2. To the Ministry in charge of managing climate change**

#### **7.2.2.1. Benefit from the creation of the Directorate General on Climate Change**

The team of the midterm evaluation wish to consider the possible implications of the cabinet reshuffle on August 12, 2013 which led to the creation of a Ministry for the management of climate change.

On the one hand, it is recommended to take this political will at the highest level to mobilize more financial resources for vulnerable communities.

On the other hand, even if it is not the responsibility of the mission to advise the Ministry on the new chart that should follow the reshuffle, it seems appropriate that a Directory General to manage climate change be created and will be the implementing partner of the project.

#### **7.2.2.2. Capitalize the first successes of the project and build capacity**

The project's success led to the need to mobilize additional expertise at the project coordination level. It is therefore advisable to provide the project management with of all other expertise planned in the project document, the communication officer in this case.

### **7.2.3. To the Steering Committee**

#### **7.2.3.1. Validate the mid-term successes of the project**

The project's success is remarkable and should continue to meet the expectations of the population of the demonstration villages and continue on expansion villages.

It is therefore recommended that the Steering Committee approves the continuation of the project during this mid-term review.

#### **7.2.3.2. Initiate the development of a sustainability strategy**

Adaptation needs are felt beyond the 18 identified villages, especially as climate risks are increasing. It is therefore recommended to begin developing a strategy to continue the project beyond its deadline and to continue the process of adaptation needs identification at the village level within priority agro-ecological zones.

### **7.2.4. To the UNDP**

#### **7.2.4.1. Set the deadline of the project to March 2016**

The mid-term review enabled to understand the reasons, mainly administrative, forcing the project to start later than planned in April 2011 instead of January 2010. Moreover, the approach of implementing by the state structures some important activities of the project has led, due to cumbersome bureaucracy, to significant delays that have hindered the achievement of results and adoption by the beneficiaries.

It is therefore strongly recommended to take into account these time lag, adjusting the project schedule and setting the end date of the project to March 2016 to allow for proper completion of planned activities under the demonstration phase and a good extension in villages expecting the project support.

#### **7.2.4.2. Capitalize on the experience of NAPA1**

The structure and implementation of NAPA1 in Benin are appropriate, and the role of UNDP is significant as the guarantor of this appropriateness. It is advisable to capitalize the experience of NAPA1 by sharing it at the sub-regional, regional and international levels.

## 8. Agreements & expectations

### 8.1. Agreements between the parties

This final report highlights a number of findings and recommendations that become a reference for the various components of the project management including the steering committee.

Specifically, some aspects of these agreements are as follows:

- The postponement of the completion date of the project to March 2016 instead of December 2014.
- Review of financial commitment documents of municipalities to permit alignment with a lower limit of 6 million FCFA and a maximum of 12.5 million FCFA to be released at a mandatory deadline based on mutually agreement.

Consultations between the mayors involved in the project must be initiated to harmonize the strategies for mobilizing financial compensation (financial commitments).

## 9. Annexes

### 9.1. Terms of Reference

These Terms of Reference (TOR) describe the ins and outs of the midterm evaluation mission of NAPA1.

#### *Purpose of the mid-term*

The goal is to:

- assess the rate of implementation at the global level and by product;
- analyze the strengths and weaknesses of the project;
- assess the quality (effectiveness and efficiency) of the project;
- assess the current configuration of the Project Management Unit (PMU) and its action with respect to the implementation of the project;
- assess the level of progress in the development of national capacities for implementation;
- evaluate the results of the project and its visibility;
- check whether the indicators for monitoring and evaluation are appropriate to link these products effect or is there a need to improve them?;
- appreciate the synergy between indicators of the Project logical framework to those of MEHU and CPAP;
- submit recommendations for a potential similar project.

Thus the results of this evaluation will be incorporated as recommendations for improving the implementation of the project during the second half of the term. The evaluation will therefore be based specifically on the following criteria.

#### *Criteria to consider*

The evaluation of the following criteria will be expanded during the current mission

#### Basic criteria

**Relevance.** It will assess the extent to which the activities within each project outputs meet the expectations and priorities of the main actors involved in the project, particularly the grassroots communities in demonstration villages of pilote communes and other project stakeholders. Is the project design consistent with national policies and strategies (GPRS and UNDAF, Development Plans, National Sectorial Strategies, The Strategic Plan to Revive the Agricultural Sector (PSRSA), Gender Equality Policy, Environment, Economy Social, Children's Rights, MDGs, etc.)? Is the project consistent with the policies and strategies of the main donor; Global Environment Fund (GEF)? Are the indicators for monitoring and evaluation of the project appropriate to account for the effectiveness of the action? Did the activities meet the priorities for achieving results on time and with the quality required?

**Efficiency.** The Mid-Term Evaluation (MTE) will have to give an opinion on the efficiency of the operation of the project and assure that the activities and results will be obtained within the proposed timeframe and in line with the planned resources. The MTE-team will analyze all delays, constraints or problems that the project faced and draw useful lessons for other similar project.

**Effectiveness.** The evaluation team will have to give an opinion on the followings:

What is the current status of the project products? What are the main factors (positive or negative), internal or external to the implementation design, which affected the implementation of the project? How these factors limit or facilitate progress towards achieving the objectives of the project?

Have the different resources (human, material and financial) required from UNDP, GEF, Government and beneficiary communes been anticipated and mobilized in the appropriate timeframe?

Were he various resources (human, material and financial) made available appropriately used to achieve the desired objectives? Has the developed partnership strategy been appropriate and



effective? How did the financial partners bring added value to the project and were they responsible and harmonized enough in their assistance?

Were management structures in place and working methods developed by UNDP as well as by implementing partners, appropriate and effective?

Did the project work with the adequate number of staff, and skills following a good distribution of task? Have adequate monitoring mechanisms been put in place vis-à-vis the expected results?

Sustainability. The major concern is the continuation, by Benin, of benefits from an action of development of adaptive measures to climate change after the end of the intervention. The team of the mid-term evaluation will assess the measures taken by the project to ensure the rooting of project achievements at local and central levels. The mission will specifically analyze the process of capacity building promoted by the project. It will also analyze the extent to which the proposed solutions and the accepted approaches are mastered by the beneficiaries. It will provide ways forward for consolidation of results.

Impact. The mission will analyze here what effects / impacts the beneficiaries, the partner institutions and non-targeted groups feel from the project? Are these changes sustainable? What is the nature of these changes, positive, negative, direct, indirect, intentional, unintentional? Is there a causal relationship between changes and the presence of the project? The team of the mid-term evaluation is expected to provide information on potential effects / impacts that may arise after the project.

Criteria - HARMO to enhance efficiency

Harmonization. The mission will analyze the initiatives and mechanisms established by the project to harmonize this intervention with that of other donors in the area and in the sector. This criterion will focus initially on the operational aspects of the development intervention.

Alignment. Is the project aligned with national systems and procedures for public financial management, accounting, procurement, auditing, reporting, monitoring and evaluation? If not, is the project building management capacities on monitoring & evaluation, reporting, procurement, accounting, human resources, finance, business development?

Result oriented management. The "results oriented" framework is a key element in this criterion. In assessing the criterion of results oriented management, the following points should be considered: are the programming, monitoring and evaluation aligned with the results? Are the *result-based tools* being used to show how investments and inputs contribute to the outcome of the country? Are they used to indicate how management processes support the achievement of results? Is the system of monitoring and evaluation of the project based on national *baselines*, based on national policy indicators, *result oriented frameworks* of the partner country, the monitoring frame of the partner country? Is the reporting system of the project based on country results oriented reporting, joint formats for periodic reporting? Are the monitoring results being used to draw lessons, to make decisions? Page 8 of 12 Do the different project stakeholders focus on results during all phases of project: planning, implementation, monitoring, evaluation and reporting? Is dialogue focused on achieving results in all phases of the project?

Mutual responsibility. Does the project give timely transparent and comprehensive information on financial expenses, accounting, revenues, expenses and the progress of the project in respect of the activities, results, objectives, assessment reports, the status of procurement of goods and services records, auditing reports? Does the partner institution report the achievements of the project to national authorities, local authorities and beneficiaries? Do the management bodies of the project work properly: regular meetings, respect for the views of the partner institution, joint evaluation of project progress, compliance with commitments, monitoring of the project following the new trends?

Ownership. Does the partner institution exercise leadership in the implementation of the project? Does the project strengthen the leadership capacities of the partner institution on these coordination tasks? Has there been an analysis of the capabilities of the partner institution (management capability, technical, administrative and financial capacity)? Does the partner institution coordinates support

projects? If so, is this done in dialogue with the various donors? Do the civil society and the private sector take part in this coordination effort?

#### Cross-cutting themes

Gender Equality. Since gender is a cross-cutting concept, the team at the Mid-Term Evaluation

will certify that all data are differentiated in relation to gender (collecting data on men and women, meetings and interviews with men and women, differentiated statistics for men and women ...). The MTE team will have to focus on the political aspects of "gender" in the study area. The team should be able to give an overview of the empowerment among women. The MTE team will determine to what extent the project changes what women "own" what they "can", what they "want" and that women "know", compared to the situation before project.

Environment and climate change adaptation. Aspects of sustainable respect for the ecosystem and natural habitat, conservation and rational use of resources, potential environmental risks, and adapting technologies in the context of adaptation to Climate change is at the depth of this project. The MTE team will investigate in particular how the project has faced specific problems related to the environment and adaptation to climate change, etc. The MTE team should be able to point the critical issues negatively affecting the environment. If possible, the MTE team should be able to propose measures to improve the respect for the environment.

Social Economy. Social economy refers to economic and social dimension of the purpose of a service and results delivered by the project. The social economy also measure if the project involves interacts with civil society. The criterion "social economy" raises the question of whether the activity and the results are socially oriented or are exclusively economic profit oriented. The social economy focuses on the collective benefits and avoids isolated beneficiaries. The social economy prioritizes and rewards work rather than capital. The MTR team will focus on the obstacles in order to propose measures to improve the participation of civil society and strengthen the criteria for social economy.

#### *Methodology*

Working closely with project stakeholders (the Country office of the UNDP, the Management Unit of the Project, the Management Authorities of the project, the Ministry for the Environment and the pilot municipalities), the mission will conduct the review using their professional judgment. While taking account of these TORs, the international consultant (who is also the team leader) will propose a methodology and assessment tools. These should enable analysis, measurement and making recommendations as to the basic criteria of performance for the specific issues related to different project stakeholders.

The MTE will be responsible for the following activities:

- Briefing at the UNDP (with the DGE, the partner institutes, the various organs of project management: technical committee, steering committee, project management team and some Resources People of the Project, the mid term review evaluation team);
- Exchange of views on the subject of the mission, programme and methodology;
- Study / analysis of available documents;
- Field visits to the project intervention zone;
- Data collection from the beneficiaries, from the project staff, from the management team of the project, from the authorities and from the partner structures and institutions;
- Feedback workshop with stakeholders, after field visits;
- Debriefing with UNDP and delivery of the memo;
- Interim report writing on the mission and submission to UNDP-Benin within 8 calendar days after return from the mission;
- From that moment the sponsors (UNDP DGE) have 10 days to submit their comments;
- During this period a debriefing is held at UNDP Benin based on the interim report;
- Incorporation of sponsors comments in the report; - Final report writing and submission to UNDP within 8 calendar days after receipt of comments.

The Project Management Unit and the UNDP country office and all other stakeholders as appropriate, will provide the reviewers with all the information they need to perform their mission.

#### *Profiles of consultants and responsibilities*

The mid-term review team will consist of:

- One international consultant (Leader);
- One national consultant.

#### *Arrangements for implementing the mission*

#### Planning

<b>Activité</b>	<b>Délai</b>	<b>Lieu</b>	<b>Partie responsable</b>
Formulation de l'évaluation, sa méthodologie et le plan détaillé	3 jours ouvrables	En ligne	Bureau du PNUD et Consultant international
Revue documentaire	4 jours. Le consultant international doit pouvoir descendre sur Cotonou	En ligne et dès l'arrivée au Bénin	Consultants international et national
Visites de terrain, interviews, consultations	10 jours ouvrables	Au Bénin	Consultants international et national, groupe de référence, responsable suivi-évaluation du PNUD
Préparation projet de rapport d'évaluation pour le débriefing	3 jours ouvrables	Cotonou-Bénin	Consultants international et national
Débriefing avec l'équipe de projet PANA1	1 jour ouvrable	Cotonou-Bénin	Consultants international et national
Débriefing avec le PNUD et les partenaires	1 jour ouvrable	Cotonou-Bénin	Consultants international et national
Finalisation du rapport d'évaluation	3 jours ouvrables	En ligne	Consultants international et national

The draft planning (working days) of the MTE will be allocated as follows:

#### **Coordination**

The focus point of this assessment is the Programme Monitoring and Evaluation Officer at UNDP. A reference group made of the Deputy Resident Representative of UNDP, staff of the Department of Policy and Strategy of UNDP, Environment Team Leader, a representative of the Management and Coordination Unit of the UNDAF and Programme Monitoring and Evaluation Officer of UNDP will be set up to facilitate the evaluation process. This group will help connect the evaluation team with key stakeholders and ensure a participatory process of evaluation and comments on the report.

Environment Team Leader, supporting the Programme Monitoring and Evaluation Officer of UNDP and all other members of the reference group will assist the evaluation team to develop a detailed plan for implementation of the evaluation, conduct field visits and organize meetings.

The Project Team will provide all logistical support required for the assessment mission.

#### Financing

Funding for the mission will be supported by the budget of NA1PA project.

## 9.2. Mission schedule

Dates	Tasks	Comments	
Monday, August 12, 2013	<ul style="list-style-type: none"> <li>- Working session with UNDP and consultants</li> <li>- Working session with the DGE, the DGAE and consultants</li> <li>- Working session with the EGP and consultants</li> </ul>	<ul style="list-style-type: none"> <li>- Assigning an office to consultants</li> <li>- Provision of project documents</li> </ul>	Cotonou
Tuesday, August 13, 2013	<ul style="list-style-type: none"> <li>- Preparation of the field mission</li> </ul>	Provision of material and field equipment	Cotonou
Wednesday, August 14, 2013	<ul style="list-style-type: none"> <li>- Stopover at the Hotel OLIVIERS, Porto Novo</li> <li>- Field trip to Houèdo-Wo (Adjohoun)</li> </ul>	<ul style="list-style-type: none"> <li>- Introduction with members of the GTPA and resource persons to get informed on the validation of NAPA1-AGROMET INFO bulletin</li> <li>- Meeting With Adjohoun Mayor</li> <li>- Working session with beneficiaries of the demonstration village Houèdo-Wo</li> <li>- Visit of the physical achievements</li> </ul>	Adjohoun
Thursday, August 15, 2013	Capitalizing reports and other project documents	Cotonou	Cotonou
Friday, August 16, 2013	<ul style="list-style-type: none"> <li>- Field visit to Sèhomi (BOPA)</li> </ul>	<ul style="list-style-type: none"> <li>- Meeting With Mayor of BOPA</li> <li>- Working session with beneficiaries of the demonstration village of Sèhomi</li> <li>- Visit of the physical achievements</li> </ul>	BOPA
Saturday, August 17, 2013	Capitalizing reports and other project documents	Cotonou	Cotonou
Sunday, August 18, 2013	Travel to Savalou (Mr BORDE)	Night at Savalou	Savalou
	Travel to Djougou (Mr. TOKANNOU)	Night at Djougou	Djougou
Monday, August 19, 2013	Field visit to Damé (Savalou) (Mr BORDE)	<ul style="list-style-type: none"> <li>- Meeting with Mayor of Savalou</li> <li>- Working session with the beneficiaries of demonstration village of Damé</li> <li>- Visit of the physical achievements</li> </ul>	Night at Savalou
	Field visit to Kadolassi (Ouaké) (Mr. TOKANNOU)	<ul style="list-style-type: none"> <li>- Meeting with Mayor of Ouaké</li> <li>- Working session with beneficiaries of the demonstration village of Kadolassi</li> <li>- Visit of the physical achievements</li> </ul>	Night at Djougou

Tuesday, August 20, 2013	Trip to Cotonou (Mr BORDE)	Night in Cotonou	Cotonou
	Travel to Malanville (Mr. TOKANNOU)	Night at Malanville	Malanville
Wednesday, August 21, 2013	Working session with members of the CTP, CPP, Resource People and PTF (Mr BORDE)	Cotonou	Cotonou
	Field visit to Toumboutou (Malanville) (Mr. TOKANNOU)	<ul style="list-style-type: none"> <li>- Meeting with Mayor of Malanville</li> <li>- Working session with beneficiaries of the demonstration village of Toumboutou</li> <li>- Visit of the physical achievements</li> </ul>	Night at Parakou
Thursday, August 22, 2013	Working session with members of the CTP, CPP, People Resources and TFP (Mr BORDE)	Cotonou	Cotonou
	Trip Cotonou (Mr. TOKANNOU)	Night in Cotonou	Cotonou
Friday, August 23, 2013	<ul style="list-style-type: none"> <li>- Appointment with the MEHU and MINEFI</li> <li>- Synopsis ( field visits)</li> <li>- Writing memo</li> </ul>	Cotonou	Cotonou
Saturday, August 24, 2013	-Writing memo	Cotonou	Cotonou
Sunday, August 25, 2013	-Writing memo	Cotonou	Cotonou
Monday, August 26, 2013	<ul style="list-style-type: none"> <li>- Writing memo</li> <li>- Debriefing with NAPA1 project Team</li> </ul>	Cotonou	Cotonou
Tuesday, August 27, 2013	<ul style="list-style-type: none"> <li>- Debriefing with NAPA1 project Team, UNDP and Partners</li> </ul>	Cotonou	Cotonou
Wednesday, August 28, 2013	Departure of consultants		

### 9.3. List of people interviewed

Interview with the management team NAPA1 project: 12/08/2013

No	Full Name	Functions	Structure	Contacts
1.	LOCONON Daniel Z.	National Coordinator	NAPA1	97 02 74 22 <a href="mailto:loconon.daniel@yahoo.fr">loconon.daniel@yahoo.fr</a>
2	Fassassi Djèlilou	Administrative and Financial Manager	NAPA1	97.88.52.05 <a href="mailto:djafass@yahoo.fr">djafass@yahoo.fr</a>
3	DAH-MEGBEGNANTO Yèyinou Honorine	Monitoring and evaluation officer	NAPA1	97695162 <a href="mailto:dhonorinya@yahoo.fr">dhonorinya@yahoo.fr</a>
4	Hounsinou Rolande	Regional Financial Assistant	NAPA1	66.03.53.70 <a href="mailto:gbedognidehr@yahoo.fr">gbedognidehr@yahoo.fr</a>
5	Carole TCHIAKPE	Administrative Secretary	NAPA1	97.18.78.81 <a href="mailto:carollemma@yahoo.fr">carollemma@yahoo.fr</a>

Interview with the Team Leader of the UNDP Environment Unit, System Advisor of the United Nations on Climate Change: 08/12/2013

No	Full Name	Position	Structure	Contacts
1.	Agbokou Isidore	Team Leader	UNDP	97 64 91 32 <a href="mailto:isidore.agbokou@undp.org">isidore.agbokou@undp.org</a>
2	Constant HOUNDENOU	System Advisor for the United Nations on Climate Change	UNDP	96 86 86 70 <a href="mailto:constant.houndenou@undp.org">constant.houndenou@undp.org</a>
3	Viviane Posset	Assistant Environment Programme	UNDP	97.58.50.88 <a href="mailto:viviane.posset@undp.org">viviane.posset@undp.org</a>
4	Annick POGNON	Procurement Associate	UNDP	97.17.78.07 <a href="mailto:annick.pognon@undp.org">annick.pognon@undp.org</a>

Interview with the Director General of the Environment and his Deputy: 12/08/2013

No	Full Name	Position	Structure	Contacts
1.	GNANGLE Césaire	Director	DGE	95.28.21.99 <a href="mailto:gnampaces@yahoo.fr">gnampaces@yahoo.fr</a>
2 +++	OURO DJERI Imorou	Deputy Director General	DGE	97.06.63.72 <a href="mailto:djerbeth@yahoo.fr">djerbeth@yahoo.fr</a>

Interview with the Head of Rural Development Adjohoun and <sup>1</sup> Deputy Mayor Adjohoun: 08/14/2013

No	Full Name	Position	Structure	Contacts
1.	ADANGO Etienne	RDR	CARDER / Adjohoun	97.57.88.76 <a href="mailto:adangoeti@yahoo.fr">adangoeti@yahoo.fr</a>
2 +++	AZONHOUMON Célestin	Deputy Mayor	Municipality of Adjohoun	97 47 98 63

Interview with the Mayor of BOPA and Head of Rural Development BOPA: 08/16/2013

No	Full Name	Position	Structure	Contacts
1.	Paul HOUNKPE	Mayor	Mayor of BOPA	97 23 28 26
2	KPANOU K. Anicet	RDR	CARDER / BOPA	95 28 47 89/96 49 94 46

Interview with the Mayor of Savalou and the Head of Rural Development Savalou: 19/08/2013

No	Full Name	Position	Structure	Contacts
1.	AGBALA T. Kossi	Mayor	Mayor Savalou	96 42 25 85
2	AKPOVO RANCK	RDR	CARDER / Savalou	97114084
3	DOUSSOH André A.	RDR representative	CARDER / Savalou	97 19 55 11 <a href="mailto:adoussoh@yahoo.fr">adoussoh@yahoo.fr</a>

Interview with the National Climate Change Focal Point: 21/08/2013

No	Full Name	Position	Structure	Contacts
1.	DJIBRIL Ibila	Technical Advisor for the Environment	Ministry for Climate Change	97.98.94.38 <a href="mailto:jdjibril@yahoo.fr">jdjibril@yahoo.fr</a>

Interview with the Director of Agriculture and colleagues: 08/22/2013

No	Full Name	Position	Structure	Contacts
1.	CHABI GANI Sare	Director	DAGRI / Porto Novo	97 27 71 19 <a href="mailto:cqsare@yahoo.fr">cqsare@yahoo.fr</a>
2	AWOUNOU Justin	-	DAGRI / Porto Novo	95.56.87.85
3	BALLE Joslyn	-	DAGRI / Porto Novo	95320454

Interview with the Director of Climatology ASECNA: 22/08/2013

No	Full Name	Position	Structure	Contacts
1.	AHLONSOU Epiphanes	Head Division	ASECNA	97.92.05.91 <a href="mailto:Ahlonsdepi@yahoo.com">Ahlonsdepi@yahoo.com</a>

Interview with Professor Nestor AHO: 22/08/2013

No	Full Name	Position	Structure	Contacts
1.	AHO Nestor	Professor	FSA / UAC	97.32.89.31 <a href="mailto:ahonestor@yahoo.fr">ahonestor@yahoo.fr</a>

Discussion at the Directorate of Fisheries: 08/22/2013

No	Full Name	Position	Structure	Contacts
1.	DESSOUASSI Eugene		D / Fisheries	97.58.03.52 <a href="mailto:dessouassieugene@yahoo.fr">dessouassieugene@yahoo.fr</a>
2	AIZO Marc	-	D / Fisheries	97.08.57.03 <a href="mailto:aizomarc@gmail.com">aizomarc@gmail.com</a>

Interview with the Deputy Director General of the Budget (DGAB): 22/08/2013

No	Full Name	Position	Structure	Contacts
1.	da-CRUZ I. H. Théophile	DGAB	Ministry of Economy and Finance	97.69.65.58 <a href="mailto:tdacruz2@yahoo.fr">tdacruz2@yahoo.fr</a>

## 9.4.NAPA1: Journal of risks (From the PTA 2013)

Project Title: <i>Integrated adaptation programme to the fight the adverse effects of climate change on agricultural production and food security in Benin</i>		Award ID: 00051279	Date: December 2012	
Type	Date Identification	Description	Comments or Management Response	Current status of risk (reduction, status quo, increasing)
<i>Environmental</i>	<i>June 2011</i>	<i>Early or late flood in Adjohoun, BOPA and Sô-Ava</i>	<p><i>Yields of season crops (sweet potato, maize, etc.) affected and late planting of seedlings for reforestation impossible or growth of planted seedlings in early floods.</i></p> <p><i>Yields off-season crop (peppers, tomatoes, etc.) affected by late floods.</i></p> <ul style="list-style-type: none"> <li>- <i>Focus on short-cycle seeds</i></li> <li>- <i>plant the annual crop the same time with the reforestation seedlings.</i></li> </ul>	<i>Resolved</i>
<i>Financial</i>	<i>September 2009</i>	<i>Non release of national and municipal contribution</i>	<p><i>Partial impediment of results of certain activities.</i></p> <ul style="list-style-type: none"> <li>✓ <i>An advocacy was sent to the MEF for the release of the contribution of the Government based on the recommendation of the first quarterly review 2012;</i></li> <li>✓ <i>Meetings were held between the management team of the project (DNP, CNP, GAF) with the DGAB on 14 and 21 September 2012. These meetings helped to inform the DGAB on cost sharing agreement signed by the Government and UNDP for the implementation of NAPA 1. The DGAB suggested a refocusing of the budget involving members of the Cabinet, the DPP and the DGB to facilitate the planning and provision of resources.</i></li> </ul> <p><i>Except the municipality Malanville, which paid its full contribution (6000 USD) in 2011, and that Quinhi which</i></p>	<p><i>Decreasing</i></p> <ul style="list-style-type: none"> <li>✓ <i>Session to refocus the budget involving members of the Cabinet, the DPP and the DGB to facilitate programming and provision of the ongoing resource.</i></li> <li>✓ <i>Estimates are included in municipal budgets, fiscal year 2012: Adjohoun 19200 USD Quinhi: 3000 USD Savalou: 3000 USD and Matéri: 12000 USD.</i></li> <li>✓ <i>Letters were sent to mayors so that they</i></li> </ul>



			<p>paid a part of its (3000 USD) contribution which amount to 15000 USD, all other signatory municipality of cost sharing agreement have not yet released their contribution.</p> <ul style="list-style-type: none"> <li>✓ A reminder letter of release of municipal contribution was sent to the mayors based on the recommendation of the first quarterly review 2011;</li> <li>✓ During 2012, the cost-sharing agreements have been transmitted to each mayor. In addition, meetings were held with tax-collectors on the release of the communal contribution. Following these meetings, it became clear that certain documents (decision of the municipal Council that authorized the expenditure for the benefit of NAPA 1, the approval of the supervisory authority, the original participation agreement of the municipality, service provision certificate signed by the authorizing officer, the bylaw of the Mayor in agreement with the decision of the local council which established the Project) were missing from the file sent by the municipalities.</li> </ul>	<p>complement the files transmitted to tax-collectors;</p> <ul style="list-style-type: none"> <li>○ ✓ A session of capacity building of C/SAF was organized within nine (9) pilot municipalities on the importance of the release of municipal contribution for the implementation of action plans at the demonstration village level</li> </ul>
Organizational	PIF (August 2008)	Cultural and social resistance	Engage more the key actors in the implementation of the project taking into account cultural and social factors for the development of the project (eg rainmakers)	Decreasing Traditional leaders and rainmakers are integrated into village committees for implementation of project activities.
		Ownership of adaptive technologies by communities	<p>Support communities in the selection and implementation of endogenous adaptive technologies.</p> <ul style="list-style-type: none"> <li>✓ The choice of these adaptive technologies has been the subject of a study by INRAB for the NAPA1. The draft of the interim study report is available</li> <li>✓ A platform of adaptive technology innovations to climate change is one of the proposed study by the DICAF "Development and</li> </ul>	<p>Decreasing</p> <ul style="list-style-type: none"> <li>✓ The observations made by the resource persons and the management team of the project on the draft of the interim report have been incorporated by</li> </ul>

			<p>implementation of a strategy to training farmers, animal breeders and fishermen regarding technologies adapted to climate change and the use of agro-meteorological information.</p> <p>"</p> <p>✓ 35 training topics were identified based on the needs expressed by the grassroots communities.</p>	<p>INRAB;</p> <p>✓ The interim report is approved and the final report expected</p> <p>✓ Training modules are being developed by the state partner structures (DICAF, DAGRI, D / Breeding, D / Fisheries</p>
	August 2011	Non compliance with the deadline for submission of study reports carried out by the public partner organizations	<p>A reminder letter was sent to partner organizations and study firms in the 3rd quarter of 2012 to submit their study reports on the recommendation of the first statutory meeting of the Technical Committee and reiterated at the 2nd session of CTP.</p> <p>To date out of the 12 reports assigned to public partners structures only two (DNM and DPP / APRM) have not complied with the deadline of submission despite reminder letters</p>	<p>Decreasing</p> <p>✓ Seven (7) of these reports have been validated and available out of which six (6) public partner organizations (DICAF, DAGRI, D / Livestock) and one (1) study firm;</p> <p>✓ Four (4) reports (DGFRN (1) INRAB (1) and 2 study firms) approved and final reports expected</p> <p>✓ Two (2) Reports (INRAB (1) CERF (1)) and the proposed methodology of the DNM evaluated and rejected</p>
Policy	N/A			
Operational	Novembre 2011	Weakness in the monitoring and evaluation of adaptive actions implemented in pilot villages	<ul style="list-style-type: none"> <li>- Low degree of ownership of the project by the stakeholders at the local level</li> <li>- Poor monitoring of the implementation of adaptation action plans of demonstration village by the CCTC and the small team of CCTC responsible for the follow-up.</li> <li>- Slowness of information flow</li> </ul>	<p>Decreasing</p> <p>✓ The reporting model of implemented activities made available for COCT is better and better controlled.</p> <p>✓ Members of</p>

			<p>to the Project Coordination</p> <ul style="list-style-type: none"> <li>- Low visibility of adaptive actions implemented in pilot villages</li> </ul> <p>During the year 2012:</p> <ul style="list-style-type: none"> <li>✓ the roles and responsibilities of members of CCTC members were clarified for the implementation and monitoring of adaptation actions in the villages of demonstration;</li> <li>✓ D / DEPN and D / CeRPA have been involved in the monitoring;</li> <li>✓ the capacity of COCT : the RCPA, RSCEPN, PF / CC and C / SAF were strengthened on the appropriation of tools for monitoring and evaluation and financial management action plans at beneficiary municipal level.</li> </ul>	<p>COCT mainly the RCPA, RSCEPN, PF / CC and C / FAS have developed skills in tools for monitoring and evaluation and financial management of action plans at beneficiary municipal level.</p> <ul style="list-style-type: none"> <li>✓ The last activity reports submitted to the coordination of the project reflects increasing ownership of the tools made available to them.</li> </ul>
December 2011	Inadequate consideration of adaptation to climate change in different studies commissioned	<p>The occurrence of such a risk will affect the relevance of the results of the studies and in consequently threatens the proper implementation of activities related to these studies. All public partner organizations and bidder study firms have a rather limited capacity regarding the approach of consideration adaptation to climate change in the different studies.</p> <p>Validation of methodologies, regular monitoring of studies, the review(feedback) workshop of the study organization to ensure compliance with the methodology and the validation of the results by a panel of experts (in the relevant fields), is the approach taken by the management team of the project. Capacity building of staff of the organization involved in the studies is also part of this approach. During the 3<sup>rd</sup> quarter of 2012, Reviewers were identified to assess the methodologies proposed by the DPP / APRM and the DNM and 09 interim reports submitted by public partners organization involved and study contractors. Proposals and appropriate suggestions were made</p>	<p>Decreasing</p> <p>The observations / suggestions made by the Reviewers on the drafts of these interim reports were integrated by the public partner structures and study contractors.</p> <p>These interim reports were reviewed and 05 were validated (including 02 public partner institutions and 03 of study contractors).</p>	

			<i>and forwarded to the involved structures considered and improved methodologies and interim reports study.</i>	
<i>Regulation</i>	<i>N/A</i>			
<i>Strategic</i>	<i>N/A</i>			
<i>Others</i>	<i>N/A</i>			

## 9.5. Table of agreements and financial contributions of municipalities

Active Cost sharing Agreements	Currency	Outstanding amounts	RECEIVED IN 2011		RECEIVED IN 2012		RECEIVED IN 2013		Outstanding amount
			CFA	USD	CFA	USD	CFA	USD	
Municipality of Malanville / UNDP (NAPA)	USD	6 000.00		6 542.88					-542.88
Municipality of Aplahoué / UNDP (NAPA)	USD	150 000.00							150 000.00
Municipality of Savalou / UNDP (NAPA)	USD	20 000.00					1400 000.00	2 761.04	17 238.96
Municipality of BOPA / UNDP (NAPA)	USD	25 000.00					5000 000.00	10 000.00	15 000.00
Municipality of Matéri / UNDP (NAPA)	USD	15 000.00					7300 000.00	14 759.64	240.36
Municipality of Ouaké / UNDP (NAPA)	USD	10 000.00					1000 000.00	2 021.87	7 978.13
Municipality of Ouinhi / UNDP (NAPA)	USD	15 000.00			1500 000.00		1500 000.00		
Municipality of Adjohoun / UNDP (NAPA)	USD	100 000.00			3000 000.00	6 065.61			93 934.39
Municipality of So-Ava / UNDP (NAPA)	USD	5 000.00							5 000.00
<b>Grand total</b>	<b>USD</b>	<b>340 000.00</b>	<b>0.00</b>	<b>6 542.88</b>	<b>4500 000.00</b>	<b>6 065.61</b>	<b>16200 000.00</b>	<b>29 542.55</b>	<b>289 391.84</b>
<b>TOTAL RECEIVED</b>						<b>42 151.04</b>			

## 9.6. Ministries and departments involved in the project and their specific roles

<b>Ministry / Department / Organization</b>	<b>Role in the Project.</b>
The Ministry of Environment in charge of climate change management	<p>Chair the Project Technical Committee (CTP) through the Directorate General for the Environment (see below) act as the Governmental Cooperation Agency.</p> <p>Represent Validly the Government in the project.</p> <p>Has served as a resource institution during the PPG for activities related to the environment.</p> <p>the departmental staff (Department of Environment and Forestry) will be hired locally for the implementation of specific interventions on the environment.</p>
Directorate General of Environment (DGE)	<p>Will serve as operation ing department and consequently be responsible for project implementation</p> <p>Served as a resource institution during the PPG for the technical aspects of environmental management.</p> <p>Will delegate the operation responsibilities to the Regional Directorates of the Environment or to the municipalities.</p>
The Ministry of Agriculture, Livestock and Fisheries (MAEP)	<p>Co-Chair of CTP</p> <p>Served as a resource institution during the PPG for the technical aspects of crop production, livestock and fisheries.</p> <p>appoint a representative for the project that will play the role and functions of the Executive or Senior Beneficiary on the project board.</p> <p>Will be a member of CTP.</p>
The Department of Policy and Planning	<p>Will facilitate the sharing of experiences at national level as resources permit.</p> <p>Responsible for monitoring and evaluation</p> <p>served as a resource institution during the PPG for matters relating to policy</p> <p>will be a member of CTP.</p>

<p>The National Institute of Agricultural Research of Benin (INRAB)</p>	<p>Will be a member of CTP.  will research the short cycle varieties resistant to drought, on appropriate farming practices, agroforestry to diversify income sources and other relevant technical issues.  conduct research at the farm level of agricultural activities on adaptation and crop diversification options  will be responsible for demonstrations of appropriate technologies</p>
<p>The National Department of Agriculture Information</p>	<p>disseminate information on climate change.  Will act as a link for information extension on improved resistance to adverse effects of climate change practices (through radio and television programs).  Will be a member of CTP.  will be a member of the Agro-meteorological Technical Group (ATG) and member of the Zonal Agro-meteorological technical group (GTZA) and will potentially serve as a network for the dissemination of weather data of Benin for local farmers.  Will be a member of CTP</p>
<p>The Ministry of Energy and Water (the Water Department)</p>	<p>Will attend meetings on the review of water policies and ensure that policies will now address the issues of climate change.  Responsible for the collection of hydrological data at the pilot sites as agreed.  Provide technical assistance for water-related activities including construction of dams.  acted as resource institution during the PPG for activities related to water resources.</p>
<p>The Ministry of Communication</p>	<p>Will be a member of CTP.  will act as resource institution during the PPG for activities related to meteorology, information and extension.</p>

The Ministry of Transport (Meteorological Service of Benin)	<p>will be a member of CTP.</p> <p>will be a member of the Agro-meteorological Technical Group (ATG) and the Zonal Technical Group of the Agro-meteorological zone (GTZA).</p> <p>contribute to activities related to the production of information and the weather extension.</p> <p>acted as resource institution during the PPG for activities related to meteorology.</p> <p>Supervise and provide technical assistance on climate modeling and the production of climate information</p>
The Ministry of Public Security (the Department of Disaster Management)	<p>Will be a member of CTP.</p> <p>will be a member of the Agro-meteorological Technical Group (ATG) and member of the Zonal Agro-meteorological Technical Group (GTZA).</p> <p>acted as resource institution during the PPG for activities related to the impacts of climate risks</p>
The United Nations Development Programme (UNDP) Country Office	<p>provide technical assistance to the project manager during the workshops, site selection and preparation phase of the project.</p> <p>will be responsible for reporting on the evolution of the project to the GEF.</p> <p>will monitor (technically and financially) the use of project funds.</p> <p>facilitate the international dissemination of knowledge and experience of the project</p> <p>is a recipient of the information and data from projects to incorporate climate change forecasts into plans, policies and programs for management of extreme events.</p> <p>played the technical advisory role for the PIF and PPG processes.</p> <p>provide support to the National Project Coordinator and the PS on the implementation of project components.</p> <p>participate in the CTP.</p> <p>mobilize and coordinate the support of international partners across a global network</p>
Communes/Municipalities	<p>they participated in the process of joint pilot and site selection.</p> <p>they will be key beneficiaries and participate in the planning and implementation of project interventions at the commune level.</p> <p>Municipalities have been present during the process of PPG.</p> <p>they are members of mission teams for fields visiting.</p>
Universities and research institutions	<p>Will act as resource institutions for PPG, especially on the on-going ACC related initiatives.</p>



NGOs	will be key partners in the planning and implementation of project interventions at the community level that is to say, as a member of the Technical Assistance Mechanism. Will act as resource institutions for PPG, especially on the on-going ACC on the initiatives
Local Communities	had participated in the selection of pilot sites. will be key beneficiaries and participate in the planning and implementation of project interventions at the level of communities. will be key partners in the planning and implementation of project interventions at the community level that is to say as a member of the Technical Support Facility. · Were consulted during the process PPG. will be members of mission teams for fields visiting

### 9.7. Matrix of midterm activities and achievements of NAPA1

PLANNED	ACHIEVEMENTS	JUSTIFICATION GAPS and Difficulties	WAY FORWARD
Component 1 : Upgrading of capacities of forecasting and response to climate change in agriculture			
<b>Output 1.1: Plans for local and national development, sectorial strategies (that is to say, the Municipal Development Plans, PRSP (PSRSA), the Agricultural Policy) are resilient and address the risks related to climate change</b>			
<b>Activity 1.1.1:</b> Undertake evaluation of plans / strategies and identify appropriate existing strategy by which it can be shown that these instruments provide evidence of climate change (that is to say	- <u>Study</u> : Evaluation of the integration of climate change adaptation in local planning of communes in the area covered by the project and development of appropriate monitoring and appropriate evaluation tools.	- ToR developed and already validated by the technical committee to "develop a strategy for the inclusion of adaptation to climate change into plans / strategies at national level in agricultural production and food security  - Study withdrawn at the DPP / MAEP	- Study: Evaluation of the inclusion of climate change adaptation into national planning (SCRIP, PRSA, etc.).  - Elaboration of a strategy for the inclusion of climate change adaptation into national planning.

Reduction Strategy of National Poverty, the second production Municipal Development Plans (DPC), the Strategic Plan for Agricultural Recovery)	- Developing a strategy for the inclusion of climate change adaptation in local planning.	that could not provide an appropriate methodology to be submitted for validation by the technical committee after two years.	- Starting up with PAPA / INRAB
<b>Activity 1.1.2:</b> Develop policy for inclusion of CCA (based on existing international experience)	- ToR on the development of simplified guide already developed and person identified	Service provision contract drafted and awaiting signature	Development of a simplified guide on the process to include CCA into local planning after signature of the contract
<b>Activity 1.1.3:</b> Training policy makers and technical staff at the regional, municipal and national level on the application of methods of inclusion and adaptive planning of CCA.	- Establishment of a team of training of trainers; - Training test to benefit 88 people, including the Team Project Management, Public Partners Institutions, Non Governmental Organizations and Consultant Firms developed the PDCs and resource persons on the application of inclusion methods and adaptive planning to climate change; - Training of 15 NGOs on the inclusion of ACC into PDCs; - Training for the attention of the technical staff at the municipal level and the decentralized	Lack of a strategy for the inclusion of climate change adaptation into national planning because of the delay in the implementation of the evaluation study of the inclusion of adaptation to climate change into planning into national planning (SCRIP, PRSA, etc.). and strategy for the inclusion of climate change adaptation into national planning.	Training of policy makers and technical staff at regional and national levels on the implementation of the methods of inclusion of CCA into local planning  Training policy makers and technical staff at regional and national level on the implementation of the inclusion of CCA into national planning methods

	<p>departments concerned on the implementation of inclusion and adaptive planning methods to climate change</p> <ul style="list-style-type: none"> <li>- Training of 65 policy makers at the local level on the implementation of CCA methods.</li> </ul>		
<b>Activity 1.1.4:</b> Develop and implement the M & E tool adapted to ACC	-	Content of activity being under operationalization	Develop TORs and hire a consultant for the development and implementation of suitable M & E tool for CCA
<b>Activity 1.1.5:</b> Develop and implement the strategy to improve the tools of the ACC for the PDC by developing the budget for a broad national implementation	-	Content of activity being under operationalization	Develop TORs and hire a consultant for the activity
<b>Output 1.2: the Commune and the budgets of the national and decentralized agricultural sector incorporate grants for the prevention and management of risks and impacts of climate change and variability</b>			
<b>Activity 1.2.1:</b> Develop methodology for assessing financial needs of the CCA and the method of inclusion of CCA expenses in the budget at the municipal level, at national and decentralized levels as	ToR developed and validated	Difficulty to identify a public technical structure that can help develop the methodology for assessing financial needs for adaptation to climate change and adaptation in national budgets and decentralized costs.	Establish a team of national experts to perform the activity with the assistance of an international expert with strong experience in this area

well as the private sector and cooperation of donors			
<b>Activity 1.2.2:</b> train local experts on the CCA in relation to the financial analysis and budget estimates	(Depends on the activity of financial needs assessment defined in 1.2.1 not yet implemented)	Lack of a methodology for assessing financial needs for adaptation to climate change and adaptation in national and decentralized budgets: Staff Training in assessment of adaptation costs	Management training on the assessment of adaptation costs
<b>Activity 1.2.3:</b> Develop specific outreach strategy of stakeholders on budgetary and financial needs of the CCA	(Depends on the activity of financial needs assessment defined in 1.2.1 not yet implemented)	Awaiting the development of the assessment strategy costs	Sensitization of stakeholders on budgetary and financial requirements of the CCA after the financial needs assessment activity defined in 1.2.1
<b>Activity 1.2.4:</b> Try the methodology in selected pilot municipalities (the same in Output 1.1)	(Depends on the activity of financial needs assessment defined in 1.2.1 not yet implemented)	Idem	Idem
<b>Activity 1.2.5:</b> Develop budgets of the agricultural sector considered as a pilot in the inclusion of climate change and expand to other sectors (eg fisheries)	(Depends on the activity of financial needs assessment defined in 1.2.1 not yet implemented)	Lack of a methodology for assessing financial needs for adaptation to climate change and adaptation in national and decentralized budgets: Staff Training in assessment of adaptation costs	Development of budgets of the agricultural sector considered as pilot in the inclusion of climate change and expand to other areas sector after the financial needs assessment activity defined in 1.2.1

<b>Output 1.3: The national strategy for delivering effective agro-meteorological services to local farmers is implemented</b>			
<b>Activity 1.3.1:</b> Assess the agro-meteorological information needs and current capabilities (local and national)	-	- Study withdrawn from the DNM after two years' incapacity to propose an appropriate methodology to be submitted for validation by the technical committee	- Study: Developing a national strategy for the provision of effective and efficient agro-meteorological services for the benefit of actors in the agricultural sector given to the DICAF
<b>Activity 1.3.2:</b> Develop the concept for the national strategy in consultation with stakeholders at service providers and customers levels. (Incl. Research and data entry, analysis, data processing for useful information for the end user, the communication strategy, the dissemination plan, expenses, items of M & E (See Annexe 6 for the concept project)	-	Inadequate monitoring and evaluation	Develop TORs and hire a consultant for the development and implementation of an effective monitoring and evaluation system adapted to ACC <i>See activity 114</i>
<b>Activity 1.3.3:</b> Assess the elements of national strategy in the pilot project areas		Inadequate monitoring and evaluation	Establish a team Evaluation of elements of national strategy in the pilot project areas

(communities get involved in data collection, development of numerical models, etc.)			
<b>Activity 1.3.4:</b> Improve agro-meteorological stations network in pilot project areas	<ul style="list-style-type: none"> <li>- Identification of rainfall sites;</li> <li>- Evaluation of sites for rain gauges;</li> <li>- Acquisition and receipt of nine direct reading rain gauges "association" of type SPIEA type;</li> <li>- Installation of nine (09) rainfall stations.</li> <li>- Training of 18 observers on rainfall - rain gauge maintenance - observation techniques and reading the amount of water collected in a day - transcription of data in the notebook or logbook designed for this purpose.</li> </ul>	-	- Strengthening the capacity of observers: (i) maintenance of the rain gauge; (ii) the techniques of observation and reading the amount of water collected in a day; (lii) the transcript data in the notebook or logbook designed for this purpose.
<b>Activity 1.3.5:</b> Develop and implement the strategy of capacity building for service providers at national and local levels, as well as end-users of information	-	-Study withdrawn from the DNM after two years' incapacity to propose an appropriate methodology to be submitted for validation by the technical committee	- <u>Study:</u> Developing a national strategy for the provision of effective and efficient agro-meteorological services for the benefit of stakeholders in the agricultural sector <i>through DICAF</i>

in the pilot project areas			
<b>Activity 1.3.6:</b> Based on the pilot experiences, develop a national long-term strategy on EWS; plan funds for this purpose	-	Content of the activity being operationalized at the NAPA 1 coordination level	National long-term strategy on EWS and setting planning funds for this purpose to be implemented during the extension phase of NAPA1
<b>Activity 1.3.7:</b> Establish a permanent multidisciplinary working team on Agro meteorology, led by the MAEP with local and national representatives	<ul style="list-style-type: none"> <li>- Development of the draft decree on the establishment and AOF of GTPA and organization of the workshop to prepare the implementation of the GTPA;</li> <li>- Taking an interministerial order to operationalize the GTPA;</li> <li>- Identification of 27 plots of crops for phrenology tracking of the 3 main crops in 9 villages demonstration NAPA 1;</li> <li>- Organization of the workshop on operationalization of the GTPA and training of observer of crop phenological monitoring;</li> <li>- Organization of the first</li> </ul>	<ul style="list-style-type: none"> <li>- Low technical skills for development of agro-meteorological bulletin by the GTA;</li> <li>- Low capacity in collecting rainfall and phenological data by observers.</li> </ul>	<ul style="list-style-type: none"> <li>- Continuous strengthening of the Agrometeorological Working Group GTPA for the processing, analysis of rainfall and phenological data and the development of agro-meteorological bulletin;</li> <li>- Preparation of monthly bulletins "PANA1 AGROMET-INFO";</li> <li>- Collection of rainfall and phenological data;</li> <li>- Capacity building of rainfall and phenological observers.</li> </ul>

	<p>session of the multidisciplinary AgroMeteorological assistance group.</p> <ul style="list-style-type: none"> <li>- Development of agro-meteorological information "PANA1 AGROMET INFO" No. 001 of June 2013, "No. 002 of July 2013, No. 003 of August 2013 bulleting already published and No. 004 of September 2013 edition;</li> <li>- Capacity Building of Agrometeorological Working Group GTPA for the processing, analysis of rainfall and phenological data and the development of agro-meteorological bulletin</li> </ul>		
<p><b>Product 1.4: Training programs for technical services (national, departmental, municipal and local levels, by DICAF) take into account the risks of climate change and the components of weather forecasting.</b></p>			
<p><b>Activity 1.4.1:</b> Assess the training needs of the CCA key stakeholders at various levels (for technical personnel of ministries, technical departments, extension services and local</p>	<ul style="list-style-type: none"> <li>- Development of a strategy for training of farmers, breeders and fishers on climate change-smat technologies and use of agro-meteorological information;</li> <li>- Organized a test training of trainers.</li> </ul>	-	



farmers, breeders, fishermen on the design and implementation of appropriate management measures to manage climate risks)			
<b>Activity 1.4.2:</b> Develop and implement a training strategy; focus on the integration of components into existing CCA trainings as well as in new trainings; Include into Agricultural training guides, advisory for breeders and fishing	Training materials (modules of the trainer and the learner module) that include the ACC in public project partners developed structures;	-	<ul style="list-style-type: none"> <li>- Edition of training materials (trainer modules and learner module)</li> <li>- Training of various stakeholders: technical, agricultural producers farmers, breeders and fishermen</li> <li>- Implementation of the strategy for training of farmers, breeders and fishers on climate change-smart technologies and use of agro-meteorological information;</li> </ul>
<b>Activity 1.4.3:</b> Making The DICAF as competent authority for training	- <u>Study:</u> Capacity Building Branch of the Agricultural Council and (APRM DICAF /) Operational training for the dissemination to farmers, agricultural technological innovations related to adaptation to climate change in public intervention PANA1	Mission misunderstood by the independent consultant in charge of the study at the beginning and reorientation by the Technical Committee	- Development of training materials (modules of the trainer and the learner module) for strengthening DICAF;
<b>Activity 1.4.4:</b> Develop a framework for monitoring and evaluation that	(Depends on the activity of financial needs assessment defined in 1.4.2 not yet		

reports impacts on people trained (the change in the level of knowledge, the application of new knowledge, changing attitudes etc)	implemented)		
<b>Output 1.5: The map of climate change vulnerability and risk maps for agriculture (crop and livestock) are developed for four agro-ecological zones</b>			
<b>Activity 1.5.1:</b> Develop maps on the risk and vulnerability to climate change in agriculture in the four agro-ecological zones	Not planned for the demonstration phase		Scheduled for the extension phase
<b>Activity 1.5.2:</b> Develop information on the risk of climate / ongoing season and develop seasonal schedules on climate trends (incl recommendation on what to plant and when to plant.).	Not planned for the demonstration phase		Scheduled for the extension phase
<b>Activity 1.5.3:</b> Develop maps and guides on the agronomic potential of the	Not planned for the demonstration phase		Scheduled for the extension phase

four agro-ecological zones			
<b>Activity 1.5.4:</b> Train breeders, farmers and fishermen on the implementation and use of maps and guides	Not planned for the demonstration phase		Scheduled for the extension phase
<b>Activity 1.5.5:</b> Develop information and dissemination activities; linking production 1.4 and production 2.4	Not planned for the demonstration phase E		Scheduled for the extension phase
<p>Component 2 : Reducing the impact of climate risk on agricultural production at the community level</p> <p><b>Output 2.1: New pilot municipalities (representing four agro-ecological zones) have annual adaptation plans and capabilities to support CCA</b></p>			
<b>Activity 2.1.1:</b> Establish municipal technical committees of multiple stakeholders.	<ul style="list-style-type: none"> <li>- Installation of nine (09) municipal committees Technical Coordination (CCCT)</li> <li>- Taking of nine municipal orders (09) on responsibilities, organization and functioning of these committees;</li> <li>- Organisation of nine (09) communal workshops on setting methodological framework;</li> <li>- Organize a national workshop of the</li> </ul>	<ul style="list-style-type: none"> <li>- Fair ownership of roles and responsibilities of members of CCTC;</li> <li>- Fair ownership of management and reporting tools.</li> </ul>	<ul style="list-style-type: none"> <li>- Capacity building of technical coordination on implementation of municipal committees regarding monitoring of the nine (9) beneficiary communes action plans and the model elaboration of quarterly reports for the CCTC and monthly for monitoring team.</li> </ul>

	<p>methodological framework of NAPA1 project;</p> <ul style="list-style-type: none"> <li>- Organisation of nine (09) of capacity building sessions for CCCT on the roles and functions of members of CCTC;</li> <li>- Organisation of nine (09) sessions for capacity building of CCCT on the implementation and monitoring of the nine (9) beneficiary communes action plans and the model elaboration of quarterly reports for the CCTC and monthly for monitoring team.</li> </ul>		
<p><b>Activity 2.1.2:</b> Develop and implement annual plans of adaptation across the pilot municipalities, including the demonstration villages</p>	<ul style="list-style-type: none"> <li>- Eighteen (18) municipal plans of self-identified adaptation actions developed and implemented, including nine in 2011, nine in 2012 and nine in 2013;</li> <li>- Twelve (12) municipal plans of self-identified adaptation actions performed and self-assessed nine in 2011 and nine in 2012;</li> </ul>	<ul style="list-style-type: none"> <li>- Fair ownership of technical development of self-identified communal adaptive action plans;</li> </ul>	<ul style="list-style-type: none"> <li>- Support to the development of adaptive action plans of the extension phase of the project</li> </ul>
<p><b>Activity 2.1.3:</b> Organize support to multiple stakeholders based on CCA plans</p>	<p>Not planned for the demonstration phase</p>		<p>Scheduled for the extension phase</p>
<p><b>Activity 2.1.4:</b> Assess the capacity of existing CCA extension services</p>	<p>- <u>Study:</u> Capacity Building for the Directorate of Agricultural Advisory and Operational training f(APRM DICAFA /)</p>	<ul style="list-style-type: none"> <li>- Mission misunderstood by the independent consultant in charge of the study at the beginning and</li> </ul>	<ul style="list-style-type: none"> <li>- Development of training materials (modules of trainers and modules for learners) for strengthening DICAFA;</li> </ul>

(Municipal and decentralized governmental) (SWOT analysis) in 9 pilot municipalities	for dissemination to producers of agricultural technological innovations related to climate change adaptation	reorientation by the Technical Committee	- Organization of DICAFA Capacity building.
<b>Activity 2.1.5:</b> Develop capacity building plans (training on participatory methods, the measures for CC risk analysis of and CCA measures, on institutional support, incl. the support budgets, conflict solving.)	<ul style="list-style-type: none"> <li>- <u>Study:</u> Capacity Building for gardeners of Municipalities of Adjohoun, BOPA, Aplahoué, Ouaké, Malanville, Sô-Ava on plant protection for adaptation to climate change;</li> <li>- <u>Study:</u> Capacity Building for gardeners of Municipalities of Adjohoun, BOPA, Aplahoué, Ouaké, Malanville, Sô-Ava on the production and use of biopesticides and on the integrated soil fertility management for adapting to change climate;</li> <li>- <u>Study:</u> Capacity Building for gardeners of Municipalities of Adjohoun, Bopa and Ouaké on techniques to improve production and reducing the impact of climate risk on the cultivation of pepper;</li> <li>- <u>Study:</u> Strengthening the mechanisms for management of transhumance in Agonlin area: the case of the municipality of Ouinhi;</li> </ul>	<ul style="list-style-type: none"> <li>- Insufficient capacity of public partner organizations to conduct the studies;</li> <li>- - insufficient appropriation of financial management tools of the project by the public partners.</li> </ul>	<ul style="list-style-type: none"> <li>- Involvement of resource persons in conducting the studies;</li> <li>- <u>Study:</u> Current rate of adoption of technological adaptive innovations to CC in demonstration villages NAPA1;</li> <li>- <u>Study:</u> Technical execution studies of inland valley management of and construction work for water mobilization in the municipalities of Aplahoué, Savalou, Ouaké and Matéri, Malanville and Sô- Ava;</li> <li>- <u>Study:</u> Evaluation of the rate of loss of potential harvests due to climate hazards in the areas of intervention of the project NAPA1</li> <li>- Capacity building of public partner structures on financial management tools of the project and the detailed financial implementation modalities of the project</li> <li>- <i>Recommendation of the Mission:</i> Ensure that all studies be accompanied by capacity</li> </ul>

	<ul style="list-style-type: none"> <li>- <u>Study:</u> Capacity building of key stakeholders on the management of transhumance and on the implementation of mechanisms for pastoral corridors management and areas for animal grazing in the municipality of Ouinhi and in the Agonlin area</li>   <li>- <u>Study:</u> Choice of agricultural technologies for adaptation to climate change in municipalities of intervention of napa1;</li>   <li>- <u>Study:</u> Training of farmers of municipalities of Ouinhi, Bopa, Aplahoué, Malanville Matéri, Ouake, Sô-Ava, and Adjohoun Savalou on integrated management of soil fertility;</li>   <li>- <u>Study:</u> Development and implementation of a strategy for capacity building on management of wildfires to better adapt to climate change;</li>   <li>- <u>Study:</u> Support to the sustainable management of cultivated lands in project beneficiary municipalities;</li> </ul>		<p>building plans which are the goals of the activity 2.1.5</p>
--	---	--	---

	<ul style="list-style-type: none"> <li>- Organize a meeting capacity building of public partner structures of the project on financial management tools, the feasibility of specific actions such as research- action, experiments of ? cycle seeds, supplying food for rabbit breeding, aquaculture and poultry , acquisition of sire cocks from Ghana, supply of species.</li> </ul>		
<b>Output 2.2: Nine demonstration villages have strengthened capacity of adaptations</b>			
<b>Activity 2.2.1:</b> Develop the CCA approach method pour the project (incl.Strengthening of institutions, capacity building, technical assistance, etc.) based on initial consultations during the PPG phase (see Appendix 4)	Not planned for the demonstration phase		Scheduled for the extension phase
<b>Activity 2.2.2:</b> Each demonstration village develops its plan of CCA incl. training components (see Appendix 5) (eg in the Integrated Plans Management of Rural	<ul style="list-style-type: none"> <li>- Support for the implementation of eighteen (18) municipal plans of self-identified adaptation actions including nine in 2011, nine in 2012 and nine in 2013;</li> </ul>	<ul style="list-style-type: none"> <li>- Low use of the financial management tools of the project by the CCTC and public partner organizations;</li> <li>- - Late installation of forestry and agroforestry seedlings in</li> </ul>	<ul style="list-style-type: none"> <li>- Support to the implementation of adaptive action plans of the extension phase of the project;</li> <li>- - Capacity building of CCCT and public partner organizations on financial management tools project.</li> </ul>

Lands (of Rural Land Plans (PFR))		agricultural fields and plantations;	
<p><b>Activity 2.2.3:</b> Implementation of CCA plansto to support villages (incl. Institutional strengthening, capacity building, technical assistance, etc.)</p>	<ul style="list-style-type: none"> <li>- Acquisition and official presentation of farm materials and equipments: 160 gardeners equipment (gloves, boots, ...); 23 + pumps+ accessories; 02 rice husking machines; 04 motorized boats, etc., to beneficiary demonstration villages project;</li> <li>- Maize: 12005 kg of short cycle seed offered to 514 beneficiaries (165 women and 349 men) for cultivating 590 hectares in the municipalities of Ouaké, Matéri, Savalou Adjohoun and Bopa;</li> <li>- Rice: 4380 kg of seed of the IR841 variety offered to 265 beneficiaries (154 women and 111 men) for cultivating 514 hectares in the municipalities of Ouaké, Matéri and Savalou;</li> <li>- Soybeans: 2700 kg of seed of the IR841variety offered to 19 beneficiaries (7 women and 12 men) for the cultivating of 55 hectares in the municipalities of Aplahoué and</li> </ul>	-	<ul style="list-style-type: none"> <li>- - Capacity building of CCCT and communities through 64 training materials (modules of the learner and the trainer modules) already approved by the technical committee and bein edited</li> </ul>



	<p>Savalou;</p> <ul style="list-style-type: none"> <li>- Vegetable crops (peppers, okra, etc.): 140 kg of vegetable seeds offered to 110 recipients (29 women and 81 men) for cultivating 100 hectares in the municipalities of Sô-Ava and Adjohoun;</li> <li>- Mucuna: 2000 kg of seeds offered to 100 recipients (15 women and 85 men) for the cultivation of 20 hectares in the commune Savalou;</li> <li>- Acacia: 92850 plants offered to 525 beneficiaries (102 women and 423 men) for cultivating of 72 hectares of agroforestry plots in municipalities of Ouaké, Matéri, Savalou, Bopa and Sô-Ava;</li> <li>- Gmelina: 7250 plants offered to 440 recipients (84 women and 356 men) for cultivating of 54.69 ha of agroforestry plots in the municipalities of Ouaké, Matéri and Malanville;</li> <li>- Khaya: 500 plants offered to 11 recipients (01 women and 10 men) for cultivating 1.69 ha of agroforestry plots</li> </ul>		
--	--	--	--

	<p>in the municipality of Ouaké;</p> <ul style="list-style-type: none"> <li>- Glyricidia 2200 plants offered to 477 recipients (94 women and 383 men) for planting 1.69 ha of agroforestry plots in the municipality of Ouaké;</li> <li>- 60 plants of Caïlcedra and five Iroko plants offered to 2 beneficiaries (02 men) to set the limits of their agricultural plots.</li> <li>- Improved palm oil: 5515 plants offered to 82 recipients (22 women and 60 men) for planting 30 hectares in the municipality of Adjohoun and Aplahoué;</li> <li>- 10650 plants Gmelina, Ceiba, and Iroko offered to beneficiaries for planting of 3.64 ha of community plantation in the municipality of Ouaké;</li> <li>- 25000 Acacia and Khaya seedlings offered to beneficiaries for the planting of 2 ha of community plantation in the municipality of Adjohoun;</li> <li>- 855 seedlings of Anacardier, Khaya, Eucalyptus, Gmelina and Green Sahel</li> </ul>		
--	---	--	--

	<p>offered to beneficiaries for planting of 02 ha of community plantation in the municipality of Malanville;</p> <ul style="list-style-type: none"> <li>- 80 seedlings of Baobab, 80 of Iroko, and 80 of Khaya offered to the beneficiaries of the municipalities of Savalou to enrich the Adjakatan forest;</li> <li>- 40 seedlings of Baobab, 60 of Iroko and 60 of khaya offered to the beneficiaries of the municipality of Savalou to enrich the Wlowlou forest;</li> <li>- 60 seedlings of Iroko and 60 of khaya offered to the beneficiaries of the municipality of Savalou to enrich Molote forest.</li> <li>- Four (04) trains of four (04) cages and four (04) floating fish pen;</li> <li>- Eleven thousand four hundred (11,400) fry including 3000 <i>Oréochromis niloticus</i>, 2800 of <i>Clarias</i> and 5600 of <i>Tilapia</i>;</li> <li>- Sixty 60 hutches for males, 240 hutches for breeding females, 300 hutches for fattening ,88 boots suitable</li> </ul>		
--	---	--	--

	<p>for rabbit breeding, 80 weigh, 80 wheelbarrows, 3 isothermal coolers, 3 thermometers for rabbit breeding, 6 surgical kits, 15 Hydrophilic cotton, 6 100 boxes of disposable syringe of 10 CC and 5 gloves to the communes of BOPA, of Ouinhi , Adjohoun and Ouaké</p> <p>- Sixty (60) and two hundred forty two (240) rabbits breeding females</p>		
<b>Activity 2.2.4:</b> Develop breeding plan for the municipality	Not planned for the demonstration phase		Scheduled for the extension phase
<b>Product 2.3: Methods adapted and resilience to climate change (vegetable, livestock production, and fisheries) are tested in nine demonstration villages and are reproduced.</b>			
<b>Activity 2.3.1:</b> Develop and implement the programme of Action Research for farmers / fishermen in the demonstration village (based on PPG phase and Annex 4) (incl soil improvement and good water management.,	- Four (04) ToR of action research methodologies and implementation partners proposed by public bodies such as the Faculty of Agronomic Sciences, University of Abomey Calavi (FSA / UAC), the Department of Livestock (D / Breeding) and the Directorate of	- Fair ownership of project financial management tools by the public partners.	- Capacity building of public partner structures on financial management tools of the project and the terms and conditions of financial implementation of the project

proper crop rotation and cropping schedules, the drought-tolerant fodder, intensive production and storage capacity, the project of animal migration incl. Planning transhumance, sustainable fishing methods)	Fisheries (D / Fisheries) are validated by the steering committee of the project; - Four (04) partnership agreements are signed and implemented by FSA / UAC, the D/ Livestock and D / Fisheries		
<b>Activity 2.3.2:</b> Establish the learning mechanism in the pilot communities and among other interested communities (regarding the outcome 3)	Not planned for the demonstration phase	-	Scheduled for the extension phase
<b>Output 2.4: Networks for the production and dissemination of climate resistant and short cycle varieties are set up and functional in four agro-ecological zones.</b>			
<b>Activity 2.4.1:</b> Establish a system at the local / municipal level for the production of improved short cycle plant material, use of reproductive material of improved certified, establish seed banks for key crop varieties in each agro-	Not planned for the demonstration phase	-	Scheduled for the extension phase

ecological zone, and a mechanism for efficient distribution			
<p><b>Activity 2.4.2:</b> Promote the use of short-cycle crop varieties by creating for instance the interest in short cycle varieties suitable and providing training on their use;</p>	<ul style="list-style-type: none"> <li>- <u>Action research proposal implemented by FSA / UAC:</u> Test of adaptation of four sorghum varieties and three maize varieties resilient to climate change in nine demonstration villages of PANA1;</li> <li>- <u>Action research proposal carried out by D / Breeding:</u> Development of rabbit production in the municipalities of Adjohoun, Bopa and Ouinhi;</li> <li>- <u>Action research proposal carried out by D / Breeding:</u> Introduction of sire cock in the municipality of Ouaké;</li> <li>- <u>Action research proposal carried out by D / Fishiries:</u> Adaptation Test and production of fry of catfish <i>Clarias gariepinus</i> in the areas of fisheries of NAPA 1.</li> </ul>	<ul style="list-style-type: none"> <li>* Acquisition and receipt of provender for breeders of the municipalities of Bopa, Ouinhi, Adjohoun and Ouaké within the framework of rabbit raising</li> <li>* Setting up floating cages in the municipalities of Bopa, and Ouinhi, Sô-Ava – Setting up fish pens in the municipality of Bopa</li> <li>* Stocking fry in floating cages in the municipality of Bopa</li> </ul>	<ul style="list-style-type: none"> <li>- Carry on implementation of action research proposals already signed;</li> </ul>

<b>Activity 2.4.3:</b> Support the implementation of storage systems and harvest infrastructures	Not planned for the demonstration phase		Scheduled for the extension phase
<b>Activity 2.4.4:</b> Conduct a study to identify opportunities for improving access to food market of cycle short produced by local farmers, breeders and fishermen.	ToRs and methodology approved by the technical committee of the project;		- <u>Study:</u> Identification of opportunities to improve access to food market of short-cycle crops and improved livestock products <i>to be started with INRAB</i>
Component 3 : Capitalization and dissemination of experiences and best practices			
<b><i>Output 3.1: A Strategy for Communication and Sensitization (SCS) is developed and implemented</i></b>			
<b>Activity 3.1.1:</b> Evaluate the information and communication needs of target groups (also related to the production 1.3) (incl for pilot sites nationwide, local level, national level, of farmers, fishermen, nomads, policy makers, senior managers, communities, businessmen, the population)	- Need for information and communication of focus groups evaluated	-	-
<b>Activity 3.1.2:</b> Design of	- Communication strategy to	- <i>Communication officer not yet recruited</i>	- Implement the communication strategy to

the Communication Strategy and Implementation	build capacity to adapt to climate change for agricultural production and food security in Benin developed		build capacity to adapt to climate change for agricultural production and food security in Benin after recruitment of communication officer
<b>Activity 3.1.3:</b> Achieve the monitoring and evaluation of SCS	<ul style="list-style-type: none"> <li>- Two field trips organized for journalists / photo journalists for the visibility of project activities;</li> <li>- Visit the achievements of the project in the village of Sèhomi (municipality of Bopa) by the RR / UNDP;</li> </ul>		- Develop and implement the monitoring and evaluation system of the communication strategy and sensitization to build capacity to adapt to climate change for agricultural production and food security in Benin
<b><i>Output 3.2: A project web site is developed and regularly updated</i></b>			
<b>Activity 3.2.1:</b> Assess existing information and websites (SWOT) opportunities to identify the most appropriate portal options (built on one or the design of new existing portals); institutional ministries (that is to say. MEPN in conjunction with the MAEP)	Not planned for the demonstration phase		Scheduled for the extension phase
<b>Activity 3.2.2:</b> Build on the evaluation of information needs (see	Not planned for the demonstration phase		Scheduled for the extension phase



output 3.3.) Develop the concept of web portal			
<b>Activity 3.2.3:</b> Strengthen the expert population for the portal development; consider international offers	Not planned for the demonstration phase		Scheduled for the extension phase
<b>Activity 3.2.4:</b> Train online the staff of institutions (eg. The MAEP or MEPN) on information management and web maintenance	Not planned for the demonstration phase		Scheduled for the extension phase
<b>Output 3.3: Experiences are documented and disseminated</b>			
<b>Activity 3.3.1:</b> Develop guidelines for documentation and capitalization of experiences, best practices and unsuccessful experiences	Not planned for the demonstration phase		Scheduled for the extension phase
<b>Activity 3.3.2:</b> identify lessons learned and experiences from documents of special studies by the ME	Not planned for the demonstration phase		Scheduled for the extension phase

component			
<b>Activity 3.3.3:</b> Publish a paper on best / worst practices (in French and English and translate into local languages)	Not planned for the demonstration phase		Scheduled for the extension phase
<b>Activity 3.3.4:</b> Develop and implement a dissemination strategy for all products	Not planned for the demonstration phase		Scheduled for the extension phase
<b>Activity 3.3.5:</b> Organize a series of seminars on the results of the Project	Not planned for the demonstration phase		Scheduled for the extension phase
<b>Activity 3.3.6:</b> Share la knowledge with the international community, for example through the mechanism of adaptation and learning of the UNDP (ALM), for example	Not planned for the demonstration phase		Scheduled for the extension phase
<b>Component 4 - Organization and Project Management</b>			
<b>Activity Result 4.1: Project management is guaranteed</b>	<ul style="list-style-type: none"> <li>- Planning Project activities (PTA_2011, PTA_2012 and PTA_2013)</li> <li>- Implementation of project activities in accordance with the signed annual work plans;</li> </ul>	<ul style="list-style-type: none"> <li>- -staff not enough for the implementation of the project;</li> </ul>	<ul style="list-style-type: none"> <li>- Carry on implementation of the project in accordance with signed annual work plans;</li> </ul>

	<ul style="list-style-type: none"> <li>- Regular monitoring of the implementation of project materialized by various reports of field mission;</li> <li>- Capacity building of project management team on financial management tools and reporting, inclusion of climate change into development plans, etc.;</li> <li>- Smooth operation of the management structures of the project (technical committee, steering committee and multidisciplinary Working Group for Agrometeorological assistance (GTPA), municipal technical coordination committees (CCCT));</li> <li>- Support for the operation of the CCTC;</li> <li>- - Acquisition of office equipment.</li> </ul>		
<b>Result of Activity 4: Monitoring and</b>	-Organization of reformulation workshop of indicators of the logical framework;	- Lack of personnel and rolling stock for the implementation and monitoring of field activities;	- Strengthen staff in number and quality (qualified people for <u>monitoring</u> and <u>capitalization</u> of processes on the ground);

<p><b>evaluation of the project is assured</b></p>	<ul style="list-style-type: none"> <li>- Regular Organization of sessions of the management structures of the project (technical committee, steering committee and multidisciplinary Working Group for Agrometeorological assistance (GTPA), municipal technical coordination committees (CCCT));</li> <li>- Regular attendance to the quarterly reviews of projects and programs of the Environment Unit;</li> <li>- Participation in the review of Annual Work Plans of the Ministry in charge of the project;</li> <li>- Design and evaluation of the mid-term review;</li> </ul>	<ul style="list-style-type: none"> <li>- Weakness of the mechanism of monitoring and evaluation at the project level</li> </ul>	<p>Carry on the steady implementation of project activities in accordance with the signed annual work plans</p> <p>Develop a system for monitoring and evaluation covering systematically processes, outputs, outcomes and impact of the project;</p>
--	--	---	---

## 9.8. Photos of the fieldwork



Visiting a rain gauge, Damè, Municipality of Savalou, August 19, 2013



Pens for fish farming, Sehomi, Municipality of Bopa, August 16, 2013



Making a maize silo, Houédo-Wo, Municipality of Adjohoun, August 14, 2013



Field survey with the beneficiaries, Damè, Municipality of Savalou, August 19, 2013





Acacia plantation, Sehomi, Municipality of Bopa, August 16, 2013



Women beneficiaries of the development of inland valley for rice cultivation, Damè, Municipality of Savalou, August 19, 2013

---

[1] Prodoc PANA1

[2] MEPN - PPG 4, 2009

[3] The mission did not record any complaints about financial management.