Case study on adaptation planning processes

1. **Name of NWP Partner**
   Sahara and Sahel Observatory (OSS)

2. **Background**
   (1-2 para; to highlight the need for adaptation in the specific context, the expected results of the adaptation activities)

   Monitoring and evaluation of community-based adaptation is a new field, and development of tools and approaches are underway. It is against this background that the Climate Change Adaptation in Africa (CCAA) program was conceptualised, aimed at improving the capacity of African people and organizations to adapt to climate change in ways that benefit the most vulnerable.

   The program has supported the MECCA-Africa project as an indispensable accompaniment instrument of adaptation projects and programs in climate change in Africa. Four regional institutions including the Economic Commission for Africa (UNECA), the Sahara and Sahel Observatory (OSS), AGRHYMET Centre and The International Union for Conservation of Nature (IUCN) are involved in the implementation of this project. Its overall objective is to help organizations and institutions active in the field of climate change adaptation to incorporate monitoring and evaluation in adaptation initiatives. This was done through the development and testing of a toolkit of monitoring and evaluation approaches and tools. The package contains 11 tools:

   Tool 1 : Analysis of Vulnerability and Adaptive Capacity (AVAC)
   Tool 2 : CRISTAL for the analysis of resources vulnerability and strategies
   Tool 3 : Participatory analysis of risk factors and different components of risk (hazards)
   Tool 4 : Vision-Action-partnership with communities
   Tool 5 : Definition of effects referred by partners
   Tool 6 : Defining graduated progress markers
   Tool 7 : The results chain
   Tool 8 : Table of information and M&E
   Tool 9 : M&E Protocol products, outcomes / impacts
   Tool 10 : Feedbacks about the most significant changes
   Tool 11 : Journal impact

   The tools were selected and tested on six national project (Burkina Faso, Ghana, Kenya, Mali, Niger and Senegal) as well as a network of knowledge sharing in Kenya. The following table synthesize these case studies:

<table>
<thead>
<tr>
<th>Institution</th>
<th>Project</th>
<th>Study field</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSE (Senegal)</td>
<td>InfoClim</td>
<td>Integration of climatic information</td>
</tr>
</tbody>
</table>
The IUCN-led intervention in the Volta basin namely the Project for Improving Water Governance in the Volta Basin (with the French acronym «PAGEV») aims to address some of the water resources management challenges of the basin. The project is part of the worldwide Water and Nature Initiative (WANI) of IUCN that seeks to demonstrate how to mainstream the ecosystem approach into river basin planning and management. The project is supported financially by the Swedish International Development Cooperation Agency (Sida) and The Netherlands Directorate General for International Development Cooperation (DGIS) through WANI as well as by Togo, Burkina Faso and Ghana, three Volta basin countries.

Tools 1 to 6 were applied in four communities (two each) in Burkina Faso and Ghana, linking their adaptive capacity to climate change also with the view to inform the next phase project document development process. The data gathered was validated at national workshops that were attended by eighty (80) stakeholders, thus scaling up the information to reflect the regional perspective.

### 3. Title of the case study

**MECCA-AFRICA:** Experimenting a capacity development approach and a toolkit for monitoring and evaluation within climate change adaptation initiatives,

**Case study in BURKINA FASO AND GHANA (PAGEV):** Improving water governance in Volta basin

### 4. Scope of the case study (select as appropriate)

- ☒ Tools and methods that are available and implemented for adaptation planning processes addressing the issue of:
  - ☐ Ecosystems
  - ☐ Human settlements
  - ☐ Water resources
  - ☐ Health

- ☒ Good practices and lessons learned in relation to adaptation planning processes, including monitoring and evaluation, addressing the issue of:
  - ☐ Ecosystems
  - ☐ Human settlements
  - ☒ Water resources
  - ☐ Health

- ☒ Good practices and lessons learned related to processes and structures for linking national and local adaptation planning.

### 5. Brief description of the activities

*Including what was done, stakeholders involved, process followed, communication and outreach, if applicable*

PAGEV was working in the selected communities for two years and has built confidence with the local people in the process. Hence adhesion to the new orientation was in no way a problem to them. They acknowledged that it was designed to help them learn from each other and grow further in capacity. Field trips were organized in the two countries with the teams at a weekly interval for which the lessons learned in Ghana were utilized to facilitate work in Burkina Faso. This approach was found to be very helpful. The technical partners were involved to support clarification of strategies to be identified by communities.

The activities defined in the project document were delivered as per the output and highlighted below:

**A.1 Output 1:- Innovative approaches to monitor and evaluate climate change adaptation from local to regional levels tested and validated**
### A1.1: Analyze the strengths and weaknesses of the existing national and supranational M&E frameworks in integrating climate change adaptation indicators.

A1.2: Identify climate change adaptation indicators from the local community perspectives

A1.3 Develop an appropriate M&E plan integrating climate change adaptation indicators

**A2. Output 2:- Lessons on specific climate adaptation M&E issues captured within community-based adaptation and fed back to national and regional organisations addressing climate change adaptation**

A2.1: Organise training sessions on the use of the climate adaptation M&E methods

A2.2: Evaluate the feasibility of implementing the developed M&E plan

A2.3: Publish lessons learned from implementing the adaptation M&E toolkit

### 6. Partners

(please provide information on lead and collaborators/partners/stakeholders involved in the activities, and their specific roles)

- **OSS**: coordination of the MECCA-AFRICA activities and case studies
- **AGRHYMET**: development of the toolkit
- **IUCN**: leading of the PAGEV project
- **National project team**: implementation of activities at local level (trainings, workshops, field data collection…)

### 7. Geophysical characteristics of activity location(s) (e.g., coastal, mountainous, terrestrial, drylands, etc.)

The project is implemented in a delineated trans-boundary zone of the White Volta sub-basin approximately 2700 Km² in area that spans from downstream of the Bagre dam in Burkina Faso to the Gambaga Scarp in the Northern Region of Ghana. The project is implemented in two departments in Burkina Faso (seven communities) namely Bittou and Zabre and three districts in Ghana (eight communities) notably Bawku West, Bawku Municipal and Garu-Tempane.

The project demonstrations fields are located in the Sudan-savannah zone which experiences a uni-modal rainfall pattern usually from May/June to September/October with annual rainfall ranging from 800 mm to 1100 mm. Temperatures range from 18°C during the harmattan periods to 40°C in the heat of the dry season. The zone is characterized by occasional floods and pockets of drought. Other related issues of concern include water scarcity; soil and land degradation leading to silting of river channels; increasing growth of aquatic weeds especially in the lower reaches of the basin; and the strengthening of formal legal and institutional arrangements for the coordination and management of its water and other natural resources.

### 8. Key climate impacts

- ☒ Drought/aridity
- ☐ Extreme cold
- ☐ Extreme heat
- ☒ Floods
- ☐ Glacial retreat
- ☐ Ocean acidification
- ☐ Sea level rise
- ☐ Shift of seasons
- ☐ Storms/tropical cyclones
- ☒ Change in precipitation patterns

### 9. Status of implementation (if applicable)

- ☐ Ongoing  ☑ Completed

Please provide any relevant information on the status of implementation:

### 10. Outcome(s)

(this could include outcomes associated with benefits, including environmental and livelihood benefits-for example)
This financial and technical support by OSS through the IDRC/DFID funded project has enabled IUCN-PAGEV to strengthen its capacities on planning, monitoring and evaluating climate change adaptive capacities.

The planning tools 1 – 6 have been applied to the PAGEV communities in the experimental approach to toolkit development initiative. This process has sought to assess the capacity of these communities to adapt to climate change. In order to scale up the data and information gathered in the communities to reflect a regional character, national learning workshops were held for stakeholders identified during the assessment of the existing and M&E practices. These helped participants to learn new approaches towards interpretation of local knowledge with science on adaptation capacities of communities to climate change.

Indeed, the fundamental livelihood resources of rural communities, mainly agricultural lands, water and its availability and agricultural inputs of farmers have not changed significantly over these years. Rather, the quality of lands has deteriorated in soil fertility and limited technological farming practices. Although this may be known to stakeholders, it is necessary to foster linkages between the livelihood resources, impacts of climate hazards and strategies identified for effective planning to inform prudent choices for the future towards a sustained and significant contribution to national development, and attainment of community vision.

Interestingly, the communities vision were consistent with the district assembly vision, that also feed into regional and then to the national vision. When this chain of vision is harmonized, then each level’s contribution could be strengthened towards the attainment of the desired changes.

In overall, the project helped communities and their stakeholders understand better the changes ongoing in their environment and capable of taking decisions on climate hazards and impacts towards improvement of their livelihood conditions;

11. Good practices
(including, but not limited to, information on the following aspects of the activities)

- Processes and structure that are particularly conducive for stakeholder engagement (such as for engagement of local communities, and the most vulnerable, and consideration of traditional, indigenous and local knowledge in adaptation planning and processes):
  cf Table in the index

The tools 1, 2 and 3 of the toolkits have been applied to the PAGEV communities leading to the participatory analysis of risk factors notably exposure and sensitivity relative to the impacts of climate hazard. As per the impact, though a proportion of community members may be exposed, even at the same rate, they may have varying degree of sensitivity. Hence sensitivity rates are often times lower than exposure. To this end, attention should focus on strengthening sensitive populations’ adaptive capacities to the impacts, while keeping the non-sensitive ones stable with respect to the hazard. From the point of view of communities, they are more exposed and sensitive to pockets of drought, flood, desertification and to wind storms. It should be noted that drought and flood impact to a large extent, on the very natural resources they depend on for their livelihood and therefore with greater consequences.

Furthermore, the use of tools 5 and 6 in identifications of the outcome challenges for various partners and subsequently, the graduated progress markers are elements needed to develop indicators for monitoring towards behavioural change.

The approach used by national institutions to conduct the case study is in itself a strategy that requires putting together a project team that plays the role of facilitator / moderator, the actors concerned in the project area and local communities. The approach is an act of commitment of several partners who use the same tools and methods that are suitable to achieve the same goal.

The concern of the national team was to find an implementation route that would ensure quality and keep good communication between stakeholders, from local to regional; The project team is the interface between the different levels. The following points has been identified in this matter:

- The necessity of a multidisciplinary team
- The interest of organizing information and awareness mission
- The need to build capacity through training
The importance of preparing the expanded team to collect data and information
The importance to establish relationships between actors and an almost permanent communication strategy
The good management of meetings and encourage actors to participate

It is clear that community involvement in climate change adaptation initiative at the early stage can contribute to better design the initiative; and ensure high quality of implementation because all partners would have agreed on a vision, the behavioral changes they could like to put in place, the adaptive activities to be implemented and their respective roles.

Finally, supporting a “bottom– up” approach for developing climate related interventions, makes possible feedbacks into climate change related development policies.

**Monitoring and evaluation** (including how monitoring and evaluation methods and tools have been used to inform iterative adaptation planning processes):

An analysis of the 6 applied tools, including the strengths and weaknesses of each, is given in the following table:

<table>
<thead>
<tr>
<th>Tools categories</th>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tool 1: Analysis of Vulnerability and Adaptive Capacity (AVAC)</td>
<td>Improves thinking skills, knowledge of local resources and raises awareness about the risks related to hazards</td>
<td>Lengthy discussions, quotations not suitable for the villagers context, The application procedure involves a problem of sequential order, corrected by an improvised brainstorming.</td>
</tr>
<tr>
<td>Tool 2: CRiSTAL for the analysis of resources vulnerability and strategies</td>
<td>Provides the ability to identify the limits of current strategies and discuss sustainable alternative strategies</td>
<td>Shows a confusion between the strategies of communities and their daily activities; the boundary between the two areas is not noticeable.</td>
</tr>
<tr>
<td>Tool 3: Participatory analysis of risk factors and different components of risk (climatic hazards)</td>
<td>Increases the capacity of organization to address the risks and identify of the most sensitive social groups.</td>
<td>Difficulties to understand the concept of ‘percentage’ to determine the degree of exposure and sensitivity.</td>
</tr>
<tr>
<td>Tool 4: Vision-Action-partnership with communities</td>
<td>Enlightens populations on the directions to follow and support the boundary partners to integrate the vision of rural communities</td>
<td>Populations put themselves in a waiting position of promises and new projects</td>
</tr>
<tr>
<td>Tool 5: Definition of effects referred by partners</td>
<td>Gives the boundary partners a new way to contribute to the vision and the develop communities.</td>
<td>Takes too much time to bring a variety of partners to align their vision.</td>
</tr>
<tr>
<td>Tool 6: Defining graduated progress markers</td>
<td>Helps to bring together the various</td>
<td>Needs a lot of effort and time from the...</td>
</tr>
</tbody>
</table>
12. **Key lessons learned** *(including success factors, and challenges and how they are overcome)*

The project implementation has helped uncover several key lessons:

- Implementation of the toolkit is time consuming, requires more time and effort to train stakeholders and have them execute the M&E plan, but is worth;
- Communities are well placed to support and appropriate the contribution of projects to their vision and outcome challenges;
- The toolkit produces links strongly climate change adaptation and IWRM;
- Application of the toolkit should lead the inception phase (if not at the project identification phase) of any climate change adaptation project in order to develop/revise concrete actions to be undertaken with stakeholder participation;
- Understanding the development patterns of the grassroots communities, and the changes that have taken place in communities over time, linking science with local knowledge;
- There are some difficulty associated to the translation of some of the key terms and concepts to be translated into local dialects.

13. **Resources provided** *(including technical expertise, capacity building, sources and amounts of funding)*

*In terms of training,* Two PAGEV staff participated in a training session on the application of the toolkit, undertaking field experiment in the process. The meeting was organized by AGHYRME in Niamey in November 2010. Following, the two trained staffs trained two other IUCN/PAGEV staffs and the two interns. These internal trainings allowed expansion of the number of persons acquainted with the toolkit and aimed at ensuring effective delivery in the field.

*In terms of logistics,* OSS project management unit supported the PAGEV team with the following equipments:

- 1 Toshiba laptop computer;
- 1 Printer and
- 1 GPS Garmin 60.

The rest of items needed for the field work were purchased with funds made available in the budget to take care of miscellaneous office supplies.

14. **Link(s) to other relevant informational sources** *(including peer reviewed publications, videos, graphics, brochures, reports)*

Documents published in OSS website are in French:

- **TROUSSE À OUTILS PLANIFICATION ET SUIVI-ÉVALUATION DES CAPACITÉS D’ADAPTATION AU CHANGEMENT CLIMATIQUE (TOP-SECAC):** [http://www.oss-online.org/sites/default/files/projet/tousse_outils.pdf](http://www.oss-online.org/sites/default/files/projet/tousse_outils.pdf)
- **RAPPORT DE SYNTHÈSE DES ÉTUDES DE CAS:** [http://www.oss-online.org/sites/default/files/projet/synthese-des-etudes-de-cas.pdf](http://www.oss-online.org/sites/default/files/projet/synthese-des-etudes-de-cas.pdf)
- **LEÇONS TIRÉES DES ÉTUDES DE CAS:** [http://www.oss-online.org/sites/default/files/projet/lecons-tirees-des-etudes-de-cas.pdf](http://www.oss-online.org/sites/default/files/projet/lecons-tirees-des-etudes-de-cas.pdf)

15. **Contact details for further information**
Adaptation Committee

Burkina Faso (IUCN/PACO)
Mme Onadja Alice Paule
M. Boateng-Gyimah

OSS
BEN KHATRA Nabil: nabil.benkhatra@oss.org.tn
BELLO Abina AbdoulKarim: bello.abdoulkarim@oss.org.tn
BRIKI Mourad: mourad.briki@oss.org.tn

16. **Keywords**
Africa, Monitoring and Evaluation, Adaptive capacity, Climate Change, vulnerability, Participatory Approach, Toolkit, Building Resilience, Livelihoods environmental indicators, natural resources

17. **Picture/graphic(s) if available** *(please send high resolution pictures/graphics as separate attachments)*

Note: By providing image(s) you agree that they could be used in the publication.

*Pre-test workshop at Tenkodogo (BF)*