



MAINSTREAMING CLIMATE CHANGE ADAPTATION INTO SECTORAL PLANNING: LEARNING FROM BENIN'S ENVIRONMENTAL CELLS

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ACTION AREA: ———— Adaptation

FOCUS AREA: ———— Engaging

COUNTRY: ———— Benin

SECTORS

INVOLVED: ———— Cross-sectoral

TIMEFRAME: ———— 2016 – present

CASE SUMMARY: ———— While sub-Saharan least developed countries (LDCs) are highly exposed to climate change, they often lack the know-how that is necessary to adequately address climate risks. One reason for this is that most climate-related information for these countries is fragmented or only available in English. To address this knowledge gap and establish a scientific basis for the National Adaptation Plan (NAP), Benin (with financial support from the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) as part of the International Climate Initiative (IKI)) has launched the Support Project for Science-based National Adaptation Planning (PAS-PNA, for its French acronym). The PAS-PNA project supports government and scientific actors in the formulation, implementation, monitoring and evaluation of the NAP, and collaborates with actors from civil society and the private sector to that end.

The cross-sectoral implementation of a scientific and participatory approach to national adaptation planning in Benin relies to an important degree on so-called environmental cells (EC). Established in Benin in 2001, the cells play an important role in the participatory process of NAP preparation in Benin. They have been established as focal points for environmental issues including issues relating to climate change in Benin's different ministries (such as the Ministry of Agriculture, Livestock and Fisheries or the Ministry of Health) and allow for institutionalised horizontal coordination and discussion of relevant issues. As such, they help to integrate environmental and climate change adaptation dimensions into strategic and planning documents as well as projects and programmes of different sectors.

As part of the PAS-PNA project, the environmental cells inter alia provide support in the development of vulnerability studies, conduct environmental assessments, facilitate capacity building of key sectoral actors and strengthen sector planning instruments.

The environmental cells constitute a good practice as they foster strong inter-sectoral coordination, adopt an innovative and science-based approach, and engage various stakeholders in the context of the PAS-PNA project.





BACKGROUND: ————— The Republic of Benin in the Gulf of Guinea, West Africa, has a population of about 10.9 million people. The country is heavily reliant on agricultural production, accounting for about 50% of its GDP (UNDP et al., 2018). Benin displays one of the highest levels of poverty worldwide, ranking 163 out of 189 countries on the Human Development Index (UNDP, 2018).

Benin is a Sahelian coastal country and among West Africa's 'climate hot spots' (UNEP, 2011). In recent decades it has been severely affected by a number of extreme weather events (such as floods, droughts, and heat waves), more erratic rainfall during the rainy season, and climate-related environmental degradation. Strong erosion on the coastline (Ozer et al., 2017) has contributed to the gradual disappearance of beaches with negative impacts on marine ecosystems and the population's well-being. Forest resource degradation and desertification continue to grow and threaten food security in West Africa (Helix, 2015). Sea-level rise poses threats to only a small portion of the Beninese society, but is likely to have serious socio-economic impacts through coastal flooding and saline intrusion. Rainfall is projected to decrease in the north of the country, which will lead to a decrease in the yields of crops and the productivity of fish stocks. The sectors most vulnerable to climate change include agriculture, fisheries, human health, forestry, water resources and energy (UNDP et al., 2018, p. 1). Climate change also has significant implications for the health sector resulting from the prevalence and expansion of diseases such as diarrhoea, malaria and meningitis, and the increasing magnitude and frequency of extreme weather events (République du Benin et al., 2008).

Responding to Benin's need to address the aforementioned risks arising from climate change, the country developed its National Adaptation Program of Action (NAPA) in 2008 (see République de Benin et al., 2008). In 2013, Benin also became one of the first francophone sub-Saharan African countries to start receiving support from development partners for the process of preparing its NAP. The process of enabling LDCs to develop NAPs has been initiated under the United Nations Framework Convention on Climate Change (UNFCCC) to support these countries in identifying their long-term adaptation needs and developing strategies to address these needs (United Nations, 2011). Article 7.9 of the Paris Agreement sets out the NAP processes as a means for countries to comply with their commitments towards the Convention (see United Nations, 2015). The specific purpose of the NAP is to (LDC Expert Group, 2012):

- i) reduce countries' vulnerability to the effects of climate change through building adaptive capacity and resilience
- ii) mainstream climate change adaptation in relevant new and existing policies, programmes, strategies, and development planning in all relevant sectors and at different scales

As part of preparing for the NAP process, Benin has harnessed the existing institutional structures to integrate environmental issues into development sectors in a highly innovative manner. Decree No. 2001-095 of 2001 created environmental units housed within the Programming and Prospective Departments (DPP) responsible for planning the activities of the individual ministries (Netherlands Commission for Environmental Assessment, 2015). Placed under the technical and financial supervision of the Benin Environment Agency (ABE), the environmental units or cells help to conduct situational analyses at the sectoral level, identify specific needs and, above all else, contribute to the mobilisation of resources not only for capacity building but also for the implementation of adaptation measures identified during the thematic vulnerability studies these units participated in. Overall, the cells have been created to act as an 'environmental watch' within the line ministries, designated to integrate climate change adaptation and environmental issues into the work carried at the line ministry level (Climate Analytics, 2018). Thereby, they present one of the essential steps to fulfil one of the core purposes of the NAP – the mainstreaming of climate change adaptation in sectoral planning.

The further institutionalisation of the environmental cells has gained momentum in the context of the PAS-PNA project, which is being implemented from March 2017 to August 2019. Among the most engaged and dynamic environmental cells are those of the Ministries of Agriculture, Livestock and Fisheries, the Ministry of Labor and Public Service and the Ministry of Health.

ACTIVITIES:

The PAS-PNA project aims to create impact through the following four components:

1. strengthen the governance framework and integrate adaptation into development planning processes;
2. provide scientific support to the process of formulating national adaptation plans;
3. increase access to international financing for NAP priority areas; and
4. facilitate regional exchanges on NAPs for Francophone LDCs in sub-Saharan Africa (GIZ, 2017, p.2)

In the context of these four components, the environmental cells have participated in the implementation of the following climate change and adaptation-related activities to support the preparation of the NAP:

- **ESTABLISHING FOCAL POINTS AND BUILDING CAPACITIES OF KEY SECTORAL ACTORS:** To set the scene for further work, the cells contributed to an identification of capacity gaps and capacity building needs within their respective sector. Each cell is led by a 'head', who is the focal point at the sectoral level. Cell heads benefit from capacity building in different areas, for example in monitoring and evaluation, and will ultimately become specialists for the issue areas in their ministries.
- **MAINSTREAMING OF CLIMATE CHANGE AND ENVIRONMENTAL CONSIDERATIONS INTO SECTORAL POLICIES AND STRATEGIES:** At the Ministry of Agriculture, Livestock and Fisheries, for example, the elaboration of an Environmental Action Plan for the agricultural sector is noted as an achievement of environmental monitoring and the integration of environmental considerations into projects and programmes. Similarly, at the Ministry of Labor and Public Service, the existence of an environmental unit has made it possible to systematically integrate environmental aspects into the terms of reference for studies and tender documents. Furthermore, environmental considerations were included into the evaluation of tenders for studies and works. Lastly, the cells have also enabled the accounting of costs of mitigation measures.
- **CARRYING OUT VULNERABILITY STUDIES:** The environmental cells have aided in conducting in-depth scientific vulnerability and impact studies in three priority sectors (agriculture, water resources and health). This has led to the development of impact chains, the identification of adaptation options and an assessment of future vulnerability.
- **CONDUCTING ENVIRONMENTAL ASSESSMENTS:** Through conducting environmental and social impact assessments, monitoring environmental and social management plans, and carrying out audits and feasibility studies, the units have ensured that environmental standards are maintained in sectoral policies, programmes and projects. In addition, they are also providing guidance for project/programme managers on the environmental assessment procedure for their projects.
- **DEFINING TECHNICAL AND OPERATIONAL TOOLS:** The environmental cells have also contributed to tool identification and the development of an improved management of risks. As a result of the PAS-PNA project, Beninese ministries have developed and are actively utilising descriptive tables of major environmental problems and dashboards with indicators for monitoring and tracking environmental performance in each thematic sector.



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INSTITUTIONS

- INVOLVED:** ————
- **GOVERNMENT AGENCIES:** Ministry of the Living Environment and Sustainable Development, Centre for Partnership and Sustainable Development Expertise, Ministry of Agriculture, Livestock and Fisheries, Ministry of Health, Ministry of Decentralisation, Ministry of Water, Ministry of Energy, Ministry of Planning, Beninese Commission on the NAP (CBPNA), National Committee on Climate Change, Benin Environment Agency (ABE), National Association of Municipalities of Benin, Meteo Benin.
 - **IMPLEMENTING PARTNERS:** Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and Climate Analytics gGmbH.
 - **INTERNATIONAL PARTNERS:** World Bank and FIDA, Belgian Cooperation, United Nations Development Programme (UNDP), United Nations Environment Program (UNEP), World Resources Institute (WRI).
 - **NATIONAL FINANCIAL INSTITUTION:** National Fund for Environment and Climate (FNEC).

COOPERATION WITH: ———— German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU), German Federal Ministry for Economic Cooperation and Development (BMZ), research institutions, meteorological institutes, high-level national authorities, scientific experts from francophone sub-Saharan countries, private sector, civil society.

FINANCE: ———— An exact amount of the finance required for the establishment and institutionalisation of the environmental cells is currently not available. However, the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) has funded the PAS-PNA project, which significantly contributed to the successful functioning of the cells.

IMPACT OF ACTIVITIES: ———— The main impacts of activities undertaken so far include:

- **ENHANCED SCIENTIFIC EXPERTISE OF SECTORAL ACTORS:** At the beginning of the NAP process, it was essential to review current capacities related to adaptation planning and to set medium-term goals. Thus, at the level of the environmental cells, a number of experts have been trained to better account for environmental issues and climate change and identify a number of challenges (mainstreaming, monitoring and evaluation, etc.). Similarly, tools and guides are available and used by sectoral actors.
- **STRENGTHENED SECTOR PLANNING DOCUMENTS:** As a result of the efforts of environmental cells, the sectors (agriculture and health in particular) are more sensitive to environmental and climate issues. For example, the climate commitments at the national level are well accounted for in the Strategic Plan for Agricultural Development, which is the 2025 planning document for the agricultural sector. At the Ministry of Health, the environmental unit contributed to the integration of climate change into the 2018-2022 National Health Development Plan (PNDS) (GIZ, 2018). This allowed the Ministry to identify key indicators and improve the country's health policies. Further, all other sectoral programmes resulting from this plan are now required to integrate climate change aspects.
- **PROVIDING OPPORTUNITIES FOR KNOWLEDGE EXCHANGE:** Spaces for exchange such as national forums have been established to facilitate dialogue between researchers and government actors, which enabled the identification of a wide range of competencies and inter-sectoral synergies.

WHY IS IT

GOOD PRACTICE: — Four critical elements from the project led to effective outcomes for mainstreaming climate change adaptation and environmental issues into sectoral planning in Benin and better prepare the country for the National Adaptation Plan process:

- **INTER-SECTORAL COORDINATION:** The environmental cells have enabled each ministry to have a focal point in the national climate change committee. In addition, the Ministries of Agriculture, Livestock and Fisheries, Health as well as Planning and Development have collaborated and in turn requested the Ministry of the Living Environment and Sustainable Development to develop strategic documents integrating environmental and climate issues. These processes are a testament to the strong inter-sectoral coordination that the aforementioned activities have created.
- **SCIENCE-BASED POLICY MAKING:** Climate information from vulnerability studies (data, indicators, etc.) is now effectively relayed and disseminated by environmental units and taken into account in sectoral policies planning. This ensures well-informed decision-making with climate change and specifically adaptation relevance within the Beninese sectors.
- **STAKEHOLDER ENGAGEMENT:** The PAS-PNA project involves stakeholders from various sectors and fields (including ministries, the private sector, universities and civil society), and allows environmental cells to contribute to the identification and prioritisation of adaptation options. Thus, the cells benefit from multiple viewpoints and inputs, enabling them to have a holistic picture of adaptation needs.
- **INNOVATION:** The innovative support targeted to build a science-based national adaptation planning process has enabled Benin to implement this original approach to identify its adaptation needs, define strategies and policies in response to these needs and ensure the effective integration of climate and environmental considerations into sectoral policies. Through the environmental cells, the mainstreaming of climate change as a cross-cutting issue into the sectors is being ensured, which presents a forward-looking way to integrate such considerations into national planning.

SUCCESS FACTORS: — To institutionalise structures that embed climate change and environmental issues at the sectoral level in Benin, the following factors were key:

- **THE EMBEDDING OF CLIMATE CHANGE ADAPTATION AND ENVIRONMENTAL ISSUES IN EXISTING INSTITUTIONS:** The environmental cells have been created by decree in 2001, placing them within the Programming and Prospective Department of each ministry. This ensures that they can operate at the centre of the institutions that they are trying to sensitise for climate change adaptation and environmental considerations, while keeping the big picture of the ongoing work in the respective sector. Similarly, the framework of the cells is designed to be broad and flexible, extending from the national to the local level – particularly in the agricultural sector.
- **PROFOUND EXPERTISE AND TECHNICAL PROFILE OF THE FOCAL POINTS DESIGNATED TO LEAD THE CELLS:** The environmental cells have developed significant competence and experience in incorporating climate change considerations and impacts into sectoral work, which has been critical to success. Targeted training and scientific capacity building has enabled sectoral actors to take ownership of climate information while also helping to bridge the gap between research and political governance. Notably, the improved understanding of the expectations of the political actors involved has been one of the key strengths of the capacity building efforts.



OVERCOMING BARRIERS / CHALLENGES:

WHAT WERE THE MAIN BARRIERS / CHALLENGES TO DELIVERY?

FINANCIAL:

Insufficient financial resources had an adverse impact on the functioning of the environmental cells. The lack of administrative and IT equipment still persists today, particularly for monitoring the activities of the units.

CAPACITY:

As a result of oftentimes insufficient capacities and skills, Beninese ministries are struggling to cope with the amount and density of the work arising from the environmental cells. This shortfall is exacerbated by ministerial changes that in turn lead to changes in the teams that constitute the cells.

SOCIO-CULTURAL:

At the outset of the project, the key stakeholders were hesitant to accept and adopt new practices, leading them to change their established work routines and behaviour.

HOW WERE THESE BARRIERS / CHALLENGES OVERCOME?

The advent of the PAS-PNA project in 2016 brought about new momentum and an environment conducive to the NAP process but also new financial resources. The environmental cells were thus able to benefit from the support of the PAS-PNA. Additional resources are expected to come from the Global Support Programme for the Advancement of National Plans (NAP-GSP), to which Benin already submitted a request for funding. In addition, Benin relies on financial allowances resulting from the Green Climate Fund 'Readiness Program'. To some extent, the cells were also able to adapt to the lack of materials over time.

Trainings and scientific capacity building have been essential to prepare sectoral actors to understand the impacts of climate change on their area of work. Nevertheless, capacity building remains an ongoing process and a significant focus of programme efforts.

A great deal of awareness-raising and advocacy work has been conducted to change habits and attitudes. Information workshops and exchange visits were organised to raise awareness of the legal merits of the cells. Injunction messages have also been prepared to involve the highest-level bodies.

LESSONS LEARNED: — Several lessons learned can be drawn from the process of establishing and implementing the environmental cells:

- **CREATE NEW OR USE EXISTING STRUCTURES FOR INTEGRATING CLIMATE CHANGE ADAPTATION AND ENVIRONMENTAL ISSUES AT THE SECTORAL LEVEL TO SUPPORT THE NAP PROCESS:** Through institutional structures such as the environmental cells, the NAP process can be advanced at the sectoral level. This step ensures that suitable adaptation options for individual sectors can be more easily identified. Furthermore, the integration of these adaptation options into the processes that are taking place at the sector level can be facilitated with greater ease.

• CREATE SYNERGIES BETWEEN SECTORS TO FOSTER AN IMPROVED GOVERNANCE OF CLIMATE POLICIES AT THE COUNTRY LEVEL:

The example of successful inter-ministerial coordination in Benin is largely based on the existence and effectiveness of support structures such as environmental cells created within each ministry. The strengthening of inter-sectoral cooperation has led to a better integration of climate change into policies. The updating of national and sectoral policy strategy papers is one of the major benefits. For example, the Ministries of Agriculture, Livestock and Fisheries, Health as well as Planning and Development have requested the Ministry of the Living Environment and Sustainable Development to mainstream climate change considerations into sectoral documents such as the Environmental Action Plan for the Agricultural Sector (PAESA), the National Health Development Plan (PNDS) and the Environmental Management Plan (PGES). The inter-sectoral synergies have furthermore facilitated an enhanced dialogue between scientists and policy actors, demonstrating the complementarity between the two and the need for collaboration.

HOW TO REPLICATE

THIS PRACTICE:

————— In order to replicate this good practice, the following factors are important to consider:

• PLACE INSTITUTIONAL STRUCTURES THAT MAINSTREAM CLIMATE CHANGE ADAPTATION AT A HIGH HIERARCHICAL LEVEL WITHIN LINE MINISTRIES:

When establishing bodies for horizontal coordination such as the environmental cells, it is crucial to place them at a level structurally involved in or in charge of planning at the national level. This can ensure that such a structure is able to influence all projects and programmes at the sectoral level and also engaged in monitoring and evaluation.

• EMPHASISE THE ESTABLISHMENT OF A COMPETENT TECHNICAL TEAM TO ENSURE THE INTEGRATION OF CLIMATE CHANGE ISSUES INTO SECTORAL PLANNING:

Knowledgeable team members can significantly contribute to the success of structures such as the environmental cells. In this context, it is important not to always use 'pure climate' specialists. Instead, experts from the sector (such as agronomists or health specialists) should be involved. By building their capacity and knowledge base on climate change issues, they will be able to refine their sectoral focus and analyses by incorporating climate change considerations into their work in the future.

• COORDINATE AT THE LEVEL OF MINISTERIAL PLANNING:

All activities associated with mainstreaming climate change adaptation into sectoral work should be coordinated with the planning department of the respective ministry. Furthermore, all of these activities should be monitored, e.g. through the elaboration of progress monitoring documents.

• SECURE FINANCING:

Search for opportunities to finance the institutionalisation of bodies that integrate adaptation and environmental considerations into sectoral planning, particularly in the beginning as they work to establish themselves. In the case of Benin, it was recommended that credit lines should be set up for the operation of environmental cells. When creating structures such as the cells, provisions must be made for their funding – from either national or other sources – to ensure sustainability.



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FURTHER KEY

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WEBSITE:

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- BMU IKI website with project updates: https://www.international-climate-initiative.com/en/nc/details/project/sciencebased-support-for-national-adaptation-plan-nap-processes-in-francophone-least-developed-countries-ldcs-of-sub-saharan-africa-16_II_135-488/
 - Climate Analytics on the PAS-PNA project: <https://climateanalytics.org/projects/pas-pna-science-based-national-adaptation-planning-in-sub-saharan-africa/>
 - GIZ on the PAS-PNA project: <https://www.giz.de/en/worldwide/61303.html>

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