



Actions to Strengthen Community Resilience to Climate Change in the Agricultural Sector



MINISTÈRE DE L'AGRICULTURE,
DE L'ÉLEVAGE ET DE LA PÊCHE
RÉPUBLIQUE DU BÉNIN

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Beninese Delegation
Sem AKOWANOU
ZINSE Cosme*

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1. National context

Benin's Vulnerability to Climate Change

- More frequent and prolonged droughts, with dry spells even during the rainy season
- Irregular rainfall (frequency, spatial and temporal distribution)
- Disrupted agricultural seasons
- Destructive floods, early rises and strong winds

Agriculture :

Employs more than 70% of the active population

- On the frontline
- Faced with these challenges, the country is resolutely committed to adaptation and resilience.

1. Strengthening climate governance

The CN4-RBA2-RBT1 Project: A Strategic Pillar of Climate Governance

Issues :

- Benin is ranked **152nd most climate-vulnerable country out of 181** (World Bank, 2024).
- The agricultural sector remains the most exposed.
- Without stronger adaptation, by 2050, the estimated **economic losses are 19% of GDP**.

1. Strengthening climate governance

The CN4-RBA2-RBT1 Project: A Strategic Pillar of Climate Governance

*Actions
carried
out*

Actions carried out:

A detailed assessment of vulnerability and adaptation is conducted in priority sectors, notably agriculture, livestock, and fisheries, integrating a gender-sensitive and inclusive approach

Ojectiives

Identify exposure units and high climate risk areas.

Integrate differentiated needs of vulnerable groups in the analysis.

Estimate climate impacts using local data and climate scenarios.

Propose inclusive sectoral adaptation options aligned with national priorities (PNCC).

Assess risk factors, existing strategies, and local adaptive capacities.

Develop recommendations for integration into agricultural development policies and plans.

1. Strengthening climate governance

Development of the Investment Program for Strengthening Climate Resilience in the Volta Basin (PIC-VOLTA)

Basin member countries: Benin, Burkina Faso, Togo, Mali, Ghana
Area: 411,000 km² - Benin: 11,000 km²

Objectives

Strengthen resilience and adaptive capacities to climate hazards and climate-related natural disasters in all countries. Incorporate climate change measures into national policies, strategies, and planning.

Improve education, awareness, and individual and institutional capacities on adaptation, mitigation, impact reduction, and early warning systems.

Promote capacity-building mechanisms with a focus on women, youth, local populations, and marginalized groups.

2. Soil Fertility Management Technologies

Actions carried out : Development and evaluation of a soil fertility management technologies directory, based on 17 multidimensional criteri

- Agronomic efficiency, local adaptability, sustainability, cost, profitability
- Ecological impact, climate adaptation, degradation risk
- Financial accessibility, training, technical complexity
- Scalability and adoption
- Social equity, institutional support, governance, innovation

Supplementary input

Evaluation of these solutions by regional projects at community level (TARSPPro) and the sustainable intensification strategy



Compost



*Mucuna en Plante de
couverture*



Biochar en fumure de fonds

3. Better Knowledge of Crop Water Needs

Initiative for Better Understanding of Crop Water Needs

An integrated approach for climate-based agricultural planning, especially in vegetable and cereal value chains

➤ Stratégies

- **Strategies:**
- Collection of forecast climate data from Météo-Benin.
- Development of forecast water balances with CropWat 8.0 (tomato, pepper, amaranth, maize, rice...).
- Community awareness sessions in intervention zones (targeted agroecological areas).
- Training sessions for agricultural technicians and lead farmers on interpreting seasonal forecasts.
- Strengthening their ability to use forecast water balances.

3. Une approche agroclimatique innovante pour la gestion de l'eau

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Initiative pour une meilleure connaissance des besoins en eau des cultures

Complementary Programs

- ❖ **AfDB Program (2025):** \$30.25 million to strengthen climate resilience of 150,000 farmers in northern regions.
- ❖ **LoCAL SAPO32 Project:** focuses on decentralized climate adaptation through forecasting, planning, and local capacity building.
- ❖ **Index-based agricultural insurance:** pilot project launched in March 2025 to cover 100,000 small farms (rice, cotton, livestock) to stabilize incomes against climate risks. Financed by the Green Climate Fund (GCF).

4. Perspectives

- Expand agricultural insurance to more value chains and regions
- Improve co-financing and farmer contributions
- Accelerate dissemination of seasonal forecasts and water balances
- Promote soil fertility innovations (compost, legumes, agroforestry, conservation)
- Strengthen gender and inclusion: women, youth, marginalized groups
- Improve local governance for planning and monitoring adaptation
- Ensure financial sustainability: domestic resources, external financing, communal funds

Conclusion

Benin advances with determination toward resilient and inclusive agriculture.

National experience shows adaptation to climate change is necessary and brings opportunities:

- Food security
- Rural incomes
- Sustainable agricultural systems



THANK YOU!