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Ex Post Evaluation Summary Report

Project “Enhancing Resilience of Communities to the Adverse Effects of Climate Change on Food Security in Mauritania (PARSACC)”



Technical Evaluation
Reference Group
ADAPTATION FUND

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The Adaptation Fund supported project "Enhancing Resilience of Communities to the Adverse Effects of Climate Change on Food Security in Mauritania" (PARSACC) was implemented by the United Nations World Food Programme (UN WFP) and executed by the Ministry of Environment and Sustainable Development of Mauritania between 2014 and 2019.

This ex post evaluation was commissioned by the AF-TERG. The management team for this evaluation included Susan Legro (AF-TERG focal point), Vladislav Arnaoudov (Team Task Leader) and Mariana Vidal Merino (Evaluation Officer). The evaluation was conducted by BAASTEL (Le Groupe Conseil Baastel Ltee). The evaluation team consisted of Margarita Gonzales (Team Leader), Marie-Karin Godbout (Evaluator), Malal Ba (National Evaluator) – and his company BetaPlus, Camile Gelb (Junior Evaluator), Alain Lafontaine (Quality Assurance Advisor) and Isalyne Couëteux (Project Manager).

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Cover page image: ex post evaluation site visit in Kewalla, Mauritania.
Source: Baastel, 2025.





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Evaluation Background

The ex post evaluation of the project “Enhancing Resilience of Communities to the Adverse Effects of Climate Change on Food Security in Mauritania” (PARSACC) represents the fifth in a series of evaluations aimed at understanding the long-term impacts of strategically selected projects closed between three to five years ago. These evaluations, commissioned and managed by the Technical Evaluation Reference Group of the Adaptation Fund (AF-TERG), focus on assessing the sustainability of adaptation benefits over time amidst various influencing factors.

This evaluation, conducted by Baastel, from September 2024 to April 2025, was designed to assess the sustainability of project outcomes and their contribution to local resilience five years after the project’s closure. It addressed three key questions:

1. Have the project outcomes been sustained since completion?
2. What factors have contributed to or hindered the sustainability of adaptation outcomes?
3. How do the sustained outcomes contribute to local resilience?

Project General Information

The PARSACC project was funded by a USD 7.8 million grant from the Adaptation Fund. It was implemented by the World Food Programme (WFP) in collaboration with the Ministry of Environment and Sustainable Development (MEDD) of Mauritania, which served as the project’s executing entity. It aimed to enhance the resilience of vulnerable communities to the effects of climate change on food security.

PARSACC was designed in response to Mauritania’s arid climate and the impacts of climate change, which are driving desertification through increasing temperatures, decreasing rainfall and increasing risk of drought – all factors that adversely affect food production. The project targeted communities living in eight wilayas, or regions, with livelihoods that were predominantly dependent on subsistence farming and livestock and highly sensitive to climatic variability.

The findings from the Terminal Evaluation, conducted in 2019, warranted an overall project rating of Satisfactory, although evaluators concluded that sustainability remained fragile. The project prepared an exit strategy, which included recommendations to strengthen sustainability. However, this strategy largely relied on a “Phase 2” of PARSACC, which did not materialize.

Table 1. PARSACC Project General Information

Project Name	Enhancing Resilience of Communities to the Adverse Effects of Climate Change on Food Security in Mauritania (PARSACC) (project site)		
Project ID	MTN/MIE/Food/2011/1/PD		
Location	Mauritania (8 Wilayas in the South-Eastern and Western regions of Mauritania, namely Trarza, Brakna, Gorgol, Tagant, Assaba, Guidimakha, Hodh El Gharbi and Hodh El Chergui)		
Implementing Entity (IE)	UN World Food Programme	Approval date	28/06/2012
Executing Entity (EE)	Ministry of Environment and Sustainable Development (MEDD)	Implementation period	08/2014 – 09/2019 The project requested and received a one-year extension.
Focal area	Food security	Date of mid term review	February 2017
Grant amount	USD 7,803,605	Date of final evaluation	July 2019
Objective	To enhance the resilience of vulnerable communities to the effects of climate change on food security		
Components	<p>Component 1: Support technical services and the communities they serve to (a) better understand climate risks, their impact on livelihoods and food security; and (b) facilitate participatory decentralized adaptation planning.</p> <p>Component 2: Design and implement concrete adaptation measures identified through community adaptation planning that aim to combat desertification and land degradation.</p> <p>Component 3: Design and implement concrete adaptation measures identified through community adaptation planning that aim to diversify and strengthen the livelihoods of the most vulnerable population</p>		



Evaluation Methods

Ex post evaluations of Adaptation Fund projects are guided by the AF-TERG Sustainability Framework for the Ex Post Evaluation of Adaptation Interventions (Ex-Post-EAI)¹, to systematically analyze the project's medium to long term impacts and sustainability.

The ex post evaluation team analyzed data covering the period from September 2019, when the project ended, to February 2025. The evaluation assessed all nine project outcomes and analyzed the project's sustainability² and contribution to resilience in three intervention sites: the villages of Kewalla (Assaba Wilaya), Moyasser 2 (Trarza Wilaya) and Dionaba (Brakna Wilaya). These sites were selected using a purposive sampling methodology, with validation from the WFP and AF-TERG. Additionally, the village of Leweinatt (Guidimakha Wilaya) was visited to collect data related specifically to water retention-related activities, as these could not be covered by the three sampled project sites. Given the limited number of sites covered by data collection (3) relative to the total sites supported by the project (85), the results of this analysis cannot be generalized to the entire project.

The evaluation adopted a mixed-methods approach, combining extensive document review, key informant interviews, community focus group discussions, a quantitative survey with project beneficiaries, on-site observation in the three selected sites, and review of available satellite data.

1. Available at: <https://www.adaptation-fund.org/document/toolkit-for-the-ex-post-evaluation-of-adaptation-interventions-2/>

2. The narrative justification for the rating of sustained outcomes can be found in the Ex Post Evaluation Toolkit, available at: <https://www.adaptation-fund.org/document/toolkit-for-the-ex-post-evaluation-of-adaptation-interventions-2/>



Key Findings

Sustainability of Project Outcomes

The evaluation found mixed results regarding the sustainability of the project's outcomes five years after closure. While some environmental and livelihood outcomes have been partially sustained, institutional capacities and systemic support mechanisms have largely deteriorated.

Component 1: Support technical services and the communities they serve to (a) better understand climate risks, their impact on livelihoods and food security; and (b) facilitate participatory decentralized adaptation planning

1.1 Strengthened awareness, ownership and facilitation capacities of government services

The valuable contributions made by the project to the capacities of regional environmental directorates were for the most part not sustained. While awareness and technical capacities remain, the lack of financial resources, personnel rotation and limited ownership have hindered continued support to community adaptation. Local NGOs that partnered with the project have become empowered to support communities with climate change adaptation. Some subsequent projects have enabled continued action, including activities to support the institutionalization of a village management committee (VMC).

Sustainability rating:
Moderately unsatisfactory

1.2 Strengthened awareness, ownership, planning and management capacities at community level

While some level of awareness about climate change has been maintained across the project communities visited, communities have not continued to plan for adaptation. However, one of the VMCs created with the project's support is building its capacity to sustainably manage its natural resources. Sustainability of this outcome to date depends on the strength of local organizational capacity, which is highly contextual. This capacity has been strong in women's cooperatives in the three sites but variable for VMCs.

Sustainability rating:
Moderately satisfactory

1.3 National ecologic monitoring system strengthened and tested

The system, implemented by a bilateral agency, is no longer operational for reasons beyond the project's control. Activities related to the national ecologic monitoring system have not been sustained, neither have related benefits.

Sustainability rating:
Unsatisfactory



Image 1. The left side of the fence shows the impact of fencing on preserving protected grazing areas in the village of Kewalla (Assaba Wilaya).

Component 2: Design and implement concrete adaptation measures identified through community adaptation planning that aim to combat desertification and land degradation.

2.1 Advance of sand dune slowed down, halted or reversed (analyzed for 2 sites)

There is evidence of dune stabilization in both project sites where this activity was implemented, effectively protecting homes, buildings and/or agricultural land. However, poor maintenance threatens the future sustainability of these benefits as vegetation on dunes degrades. Efforts to sustain the vegetation were supported by beneficiaries' awareness about their benefits but were also hindered by a limited perception of immediate benefits. Additional challenges included poor organizational capacity, lack of financial resources, and climate-related hazards.

Sustainability rating:
Moderately satisfactory to Satisfactory

2.2 Increased vegetation cover in intervention zones (analyzed for 3 sites)

Few vegetation-related activities were successful at the end of the project. However, the establishment of protected grazing areas and dune stabilization, supported by the project, has led to increased vegetation cover in all three communities, leading to benefits such as increased fodder availability and controlled soil erosion. Nonetheless, the sustainability of these benefits is threatened in two out

of three sites due to a lack of maintenance, which stems from low organizational capacities and the communities' perception of limited benefits, leading to poor ownership. Conversely, in the third site (Kewalla), a strong perception of significant benefits drives ownership and organizational capacities. While many factors may explain this difference, the ongoing sedentarization process in Kewalla has likely contributed to perceived benefits.

Sustainability rating:
Moderately satisfactory

2.3 Decreased loss of water and soil through surface run-off (analyzed for 1 site)

The two stone cordons built and still functional at the end of the project in Leweinatt have effectively retained water in two sites, improving soil fertility downstream. However, lack of maintenance has affected their continued effectiveness since the end of the project. Organizational capacities in Leweinatt are insufficient to plan for labor-intensive maintenance.

Sustainability rating:
Moderately satisfactory

Component 3: Design and implement concrete adaptation measures identified through community adaptation planning that aim to diversify and strengthen the livelihoods of the most vulnerable population.



Image 2. Butcher's shop in the village of Kewalla. Community and butcher's shops are managed by women's cooperatives and benefit from strong ownership.

Sustainability rating:
Satisfactory

3.1 Increased number of sources of income for participating households

Out of 12 income-generating activities (IGAs) operational in 2019, seven are still functioning: two butcher's shops, two community shops, improved cookstoves craftsmanship in two villages, and market gardening in one village.

Sustainability rating:
Moderately satisfactory

3.2 Increased income for participating households

96% of participants still engaged in IGAs are reporting an increase in income because of the activity. However, the number of active IGAs and of participants has decreased since the end of the project.

3.3 Increased availability of and access to food for participating communities

95% of participants still engaged in IGAs report an increase in access to food for themselves, and 75% also report an increase in access to food for their households.

Sustainability rating:
Satisfactory

Sustainability factors for Component 3 outcomes: The project's emphasis on community engagement resulted in IGAs that benefitted from strong ownership from participants, and lack of ownership was not the reason for abandoning most IGAs that failed after the project ended. Rather, equipment and asset failure has been the most important constraint to the success of IGAs in the three visited sites. Women's cooperatives are supported by strong community engagement and have helped ensure sustainability of benefits where they are present.

Emerging outcomes

Five years after the end of the project, several emerging, unexpected outcomes were observed. These included the fact that NGOs engaged as partners on the project have become empowered to support community adaptation through other initiatives, and women in Dionaba are exploring ways to make their gardens more climate resilient.



Image 3. Women of the Kewalla cooperative meet with the evaluator. This group of women runs a butcher shop and grows vegetables, but had to stop operating the grain mill due to frequent breakdowns.



Contribution to Local Resilience

Evidence from the sites selected for the ex post evaluation shows that five years after the project's closure, the sustained outcomes continue to support communities' resilience to climate change:

- While results varied across sites, the project contributed significantly to restoring and maintaining the resilience of local ecosystems and infrastructure through sustained localized landscape restoration. This was achieved by stabilizing sand dunes, enhancing vegetation cover, and improving water retention. However, in most sites, these resilience benefits are at risk in the short to medium term due to insufficient ongoing maintenance of the protected perimeters.
- Sustained adaptation outcomes have increased the availability of livelihood options for project beneficiaries, contributing to additional sources of revenues and/or food production and supporting resilience to climate risks.
- Most women in the villages visited remain active in the successful IGA cooperatives and contribute to decision making at this level. Moreover, women's involvement in traditionally male-dominated activities marks a significant innovation. It also represents a meaningful step toward greater equity in opportunities, as the IGAs primarily targeted individuals from the most vulnerable groups. Nevertheless, there is limited evidence of a broader diversification of actors and contributions working toward shared resilience objectives beyond the immediate, practical management of IGAs.
- While the project established essential groundwork for adaptation, its long-term impact on improving local responsiveness to climatic shocks remains uneven. Notably, women's groups have demonstrated resilience and continuity beyond the project implementation period, suggesting they may be more effective at maintaining organizational momentum and adapting to evolving local conditions. These characteristics position them as a potential lever for enhancing system flexibility in future community-based climate adaptation efforts.
- The project led to some improvements in communication, access to information, and partnerships for adaptation to shocks and stressors, though results were uneven. While regional environmental directorates no longer provide adaptation-related support, NGOs have retained their capacities, and they continue to engage in adaptation work, indicating a more durable impact on local partnerships. The planned community-level early warning system was not established, limiting access to critical information. Village management committees have had mixed outcomes, with some remaining active and others becoming inactive. However, the continued activity of women's cooperatives highlights the project's success in strengthening these groups' capacity for self-organization.



Conclusions

Over five years after the end of PARSACC, the sustainability of project outcomes is Moderately Satisfactory. PARSACC's exit strategy, which depended on a Phase 2 that never occurred, was not implemented. Nonetheless, several project outcomes have been sustained over five years. These include stabilized dunes, increased vegetation, and improved water retention, that help sustain local ecosystems and provide fodder for cattle. In the visited sites, seven out of twelve IGAs are still operating, providing income and food access. However, institutional outcomes were less sustainable: regional environment directorates did not maintain their capacities, and information systems like early warning and monitoring mechanisms are non-functional. This weakens project outcomes sustainability and contribution to resilience, as partnerships to sustain communities' capacities and are no longer in place and contributing to long-term resilience.

Despite increased awareness about climate change risks, activities that generate direct, short-term benefits are the ones that continue to contribute the most to outcome sustainability. Actual perception of these benefits varies from one site to the other based on local context, significantly influencing the sense of ownership for project outcomes. Ownership and capacities reinforce each other, and where they are strong, have ensured the continued success of some activities, despite lack of partnerships and limited resources. This is especially visible among women's organizations, which have remained particularly active due to strong ownership and tangible benefits.

Unfortunately, damage to crucial infrastructure and assets, particularly water infrastructure, has sometimes become insuperable. In most cases, continued support from regional environmental directorates would likely have helped sustain related benefits. Many of the project outcomes are still vulnerable to climate change, particularly droughts, as challenges around water access pose an important risk to sustainability. For this reason, some of the additional sources of income have only a limited contribution to resilience.

Nonetheless, the examples of unexpected outcomes identified throughout this evaluation provide valuable indications as to the types of opportunities that could be leveraged in future adaptation projects, especially related to women's cooperatives, local NGOs and the success of specific activities.

Overall, it is important to recognize that the sustainability of project results often relies significantly on a complex combination of local variables that are difficult to fully anticipate, or even to evaluate.



Lessons Learned and Corresponding Recommendations

Several lessons emerged from the evaluation that can inform future adaptation projects in similar contexts:

For implementing and executing entities:

Institutional capacity-building efforts are unlikely to deliver sustainable results unless they are accompanied by clear mandates, adequate resourcing, and sustained engagement mechanisms. Strengthening institutions without clarifying their continued relevance and ensuring their accountability, and motivation leads to rapid erosion of initial gains.

- ➔ Establish roles, responsibilities, performance incentives, and identify resources for post-project sustainability.
- ➔ Strengthen capacity-building for effective information management in decentralized institutions.
- ➔ Consider continued support to PARSACC beneficiaries to maintain and possibly scale up sustained results.

For the Adaptation Fund and other funders:

When project outcomes do not lead to direct and immediate benefits, they are often not perceived as relevant by stakeholders. This can limit ownership and reduce the likelihood of sustaining results over time.

- ➔ Include the practical demonstration of longer-term resilience benefits in project activities to foster ownership and ensure the sustainability of project outcomes.

For projects designed with infrastructure and labor-intensive activities:

The sustainability of larger-scale infrastructure or infrastructure requiring labor-intensive input cannot be ensured without partnerships—whether with local actors, NGOs, or other donors—that can provide continued support, oversight, or resources beyond the duration of the project.

- ➔ Secure partnerships to support the sustainability of community infrastructure beyond the duration of the project.

For projects designed for arid areas:

In arid areas, the sustainability of production activities is deeply tied to reliable water access. When water infrastructure is damaged or insufficient due to climate shocks, it can undermine entire project outcomes, which were precisely intended to strengthen resilience to such shocks. This was observed in market gardening and arboriculture, and it could also eventually impact butcher shops, where livestock production is vulnerable to extreme weather conditions. Inadequate maintenance

of water access infrastructure, often due to financial constraints or lack of local capacity, has proven to be a critical barrier to long-term success.

- ➔ Prioritize water access and water infrastructure sustainability from the outset in arid region project design

For ex post evaluations:

Detailed information on implemented activities and site-specific outcomes is essential for conducting robust ex post evaluations and for accurately assessing sustained results and contributions to resilience as this information becomes the baseline for assessing outcome sustainability ex post.

- ➔ Document project activities and results systematically to enable future evaluations.

When a project addresses a wide range of outcomes across a large number of sites, budgetary constraints may necessitate limiting data collection to a small number of locations. This restricted coverage significantly limits the ability to draw robust, representative conclusions about the project's overall results and impact across the full beneficiary population. It also highlights the trade-off between collecting data on a wide range of outcomes versus focusing in depth on a limited number. While the latter can offer more detailed insights and the opportunity to build a rich and nuanced narrative with regards to the evolution of the resilience of the beneficiary, it can also be difficult to isolate and understand the long-term effects of individual outcomes.

- ➔ Ensure that evaluation design is aligned with the scale and scope of the project.

Analyzing the potential contribution of a project's outcomes to resilience attributes prior to fieldwork is essential. It is important to recognize that these contributions may fall outside the explicit logical framework of the project. This approach ensures that both qualitative and quantitative data collection tools capture all relevant information, including aspects not directly outlined in the project's framework.

- ➔ Encourage early reflection on how each project's outcomes contribute to resilience.
- ➔ Prioritize relevant resilience attributes to investigate the project's outcomes' contribution.