UNEP GEF PIR Fiscal Year 2024

Reporting from 1 July 2023 to 30 June 2024

1. PROJECT IDENTIFICATION

1.1. Project details

Identification Table		GEF ID.: 10103	Umoja WBS: SB-017872
		SMA IPMR ID: 86069	Grant ID: S1-32LDL-000051
		Project Short Title: Mauritania AMSTRA	
Project Title		Climate Change Adaptation and Livelihoods in Three Arid Regions of Mauritania	
Duration months	*Planned*	48	
	Age	32	
Project Type		Full-Sized Project	
Parent Programme if child project		N/A	
Project Scope		National	
Region		Africa	
Countries		Mauritania	
GEF Focal Area(s)		Climate Change Adaptation	
GEF financing amount		USD 4,416,000	
Co-financing amount		USD 13,770,374	
Date of CEO Endorsement/Approval		28 May 2021	
UNEP Project Approval Date (on Decision Sheet)		Insert the date as per Decision Sheet (As per date on the project approval sheet signed by the Divisional Director approving the UNEP GEF Project)	
Start of Implementation (PCA entering into force)		23 October 2021	
Date of Inception Workshop, if available		Political / high-level inception workshop: 24 February 2022 Technical inception workshop: 9 August 2022	
Date of First Disbursement		3 March 2022	
Total disbursement as of 30 June 2024		USD 2,129,693	
Total expenditure as of 30 June 2024		USD 1,446,094	
Midterm undertaken?		No	
Actual Mid-Term Date, if taken		N/A	
Expected Mid-Term Date, if not taken		December 2024	
Completion Date	*Planned – original PCA*	22 October 2025	
	Revised – Current PCA	N/A	
Expected Terminal Evaluation Date		June 2026	
Expected Financial Closure Date		December 2026	

1.2. Project description

Climate Change Adaptation and Livelihoods in Three Arid Regions of Mauritania (AMSTRA) project was designed to increase the adaptive capacity of the populations of the arid wilayas (regions) of Mauritania (Adrar, Inchiri and Trarza) by strengthening local and regional institutional capacities through the introduction of ecosystem-based adaptation approaches (EbA).

The areas targeted by the project are characterized by high temperatures and erratic rainfall. Indeed, the average annual rainfall in these areas is less than 100 mm. These arid conditions are exacerbated by a northeast trade wind, the Harmattan – a hot, dry wind that originates in the Sahara and persists throughout the long dry season.

The main objective of the project is to strengthen the adaptive capacity and climate resilience of rural communities in the wilayas of Adrar, Inchiri and Trarza. This specifically involves (i) strengthening the institutional and technical capacities of actors in charge of rural development planning, in order to promote better integration of reflection on adaptation to climate change, and in particular the ecosystem-based adaptation (EbA); (ii) improve sustainable access to drinking water; (iii) promote resilience of livelihoods to climate change through EbA interventions and diversification of livelihoods; and (iv) strengthen knowledge and management of ecosystem-based adaptation (EbA).

The AMSTRA project has four components, namely:

Component 1: Institutional and technical capacity development for the planning and implementation of climate change adaptation in arid ecosystems. The outcome under this component will lead to the increased technical and institutional capacity for climate change adaptation, particularly EbA in arid ecosystems. Four outputs are envisaged (i) Climate change impact and vulnerability assessments undertaken, and adaptation options identified and validated by stakeholders in each of the 3 target wilayas and 8 project sites; (ii) 575 representatives of regional governments, private sector, civil society organizations and community-based organization across the 3 target wilayas trained on adaptation approaches including EbA; (iii) 3 Regional Development Plans, integrating adaptation into climate change and gender, revised or developed and shared with stakeholders; (iv) An upscaling strategy and action plan for climate change adaptation in arid ecosystems of Mauritania developed in collaboration with national stakeholders, focusing on EbA approaches.

Component 2 on sustainable access to and efficient use of water has one outcome: Enhanced sustainable access to and efficient use of water for increased drought-resilience of local communities and ecosystems in the wilayas of Adrar, Inchiri and Trarza. This outcome has four outputs: (i) 16 new efficient water provisioning systems (e.g. new wells, boreholes, solar pumps, desalination units) and 4 water collection and storage systems installed in the 8 project sites; (ii) Small-scale infrastructures implemented on 4 water courses to increase infiltration and to reduce erosion and flooding; (iii) 8 efficient irrigation water distribution systems established (one in each project site); (iv) 8 community associations (e.g. cooperatives, AGPOs) trained on sustainable and efficient water management and distribution (one in each project site)

Component 3: Protection, productivity, and diversification of local livelihoods. The planned outcome under this component is the protection, productivity and diversification of livelihoods enhanced through EbA interventions to increase climate-resilience in the wilayas of Adrar, Inchiri and Trarza. Four outputs are planned: (i) Regional community nurseries specialized in plant production for arid ecoregions established and operational, and training for their sustainable management provided to local communities or cooperatives in 3 wilayas; (ii) EbA interventions implemented on 400 hectares of dunes to protect vulnerable communities, livelihoods and ecosystems from dune-migration; (iii) EbA interventions implemented on 150 hectares to shelter vulnerable communities from dune migration, heat and wind and to provide forage for livestock and non-timber forest products; (iv) Additional natural resource-based livelihoods introduced for local populations

Component 4: Knowledge for action on climate change and EbA in arid ecosystems. The only outcome will see stakeholder demonstrate strengthened knowledge and action-oriented attitudes on climate change and adaptation approaches, particularly EbA. This outcome has 3 outputs: (i) 5 publications on policy-relevant research findings published based on monitoring of adaptation results generated under Components 2 and 3, and disseminated to at least 45 decision-makers; (ii) A series of 4 EbA handbooks detailing best practices for arid ecosystems developed and shared with at least 550 members of local implementation

structures across the 3 target wilayas; (iii) At least 750 local stakeholders informed of climate change adaptation and good EbA practices in the three target wilayas The project targets 37,867 beneficiaries in the municipalities of Chinguetti, Aoujeft and Tawaz (Adrar), Akjoujt, Bénichab and M'Heijératt (Inchiri), and Boutilimit and Ajouer (Trarza).

1.3. Project Contacts

Division(s) Implementing the project	Climate Change Division
Executing Agency(ies)	Ministry of Environment and Sustainable Development (MEDD), Mauritania
Names of Other Project Partners	Ministry of Agriculture Ministry of Hydraulics Ministry of Social Affairs, Children and Family National Agency for the Great Green Wall Ministry of Interior Awleigatt National Park Directorate of Programming, Cooperation and Statistics
UNEP Portfolio Manager(s)	Jessica Troni
UNEP Task Manager(s)	Anna Kontorov
UNEP Budget/Finance Officer	Bwiza Wameyo-Odemba
UNEP Support/Assistants	Linda Chemutai Choge, Ruth Mutinda
EA Manager/Representative	Moussa BA
EA Project Manager	Amadou Diam BA
EA Finance Manager	Hanan Wadady
EA Communications Lead, if relevant	N/A

2. OVERVIEW OF PROJECT STATUS

2.1 UNEP PoW and UN

UNEP Current Subprogramme(s)	Climate action, Nature action
PoW Indicator(s)	**Strategic objective 1**: **"Climate stability".** **PoW 2022-2023 Indicators:** (i) Number of national, subnational and private-sector actors that adopt climate change mitigation and/or adaptation and disaster risk reduction strategies and policies with UNEP support (ii) Amounts provided and mobilized in $ per year in relation to the continued existing collective mobilization goal of the $100 billion commitment through to 2025 with UNEP support (iv) Positive shift in public opinion, attitudes and actions in support of climate action as a result of UNEP action **Strategic Objective 2: "Living in harmony with nature".** **PoW 2022-2023 Indicators:**

	(i) Number of national or subnational entities that, with UNEP support, adopt integrated approaches to address environmental and social issues and/or tools for valuing, monitoring and sustainably managing biodiversity (iii) Number of countries and national, regional and subnational authorities and entities that incorporate, with UNEP support, biodiversity and ecosystem-based approaches into development and sectoral plans, policies and processes for the sustainable management and/or restoration of terrestrial, freshwater and marine areas (iv) Increase in territory of land- and seascapes that is under improved ecosystem conservation and restoration
UNEP previous Subprogramme(s)	Climate change sub-programme
UNSDCF / UNDAF linkages	UNDAF Pillar 1 Outcome 3: Environmental Sustainability and Disaster Risk Reduction Systems and Services Operationalized
Link to relevant SDG Goal(s)	Goal 6: Clean Water and Sanitation Goal 13: Climate Action Goal 15: Life on Land
Link to relevant SDG Target(s)	Goal 6: Targets 6.1 and 6.6 Goal 13: Targets 13.1, 13.2, 13.3, 13.a and 13.b Goal 15: Targets 15.1, 15.2, 15.3, 15.5, 15.9, 15.a and 15.b

2.2. GEF Core Indicators:

Indicators	Targets – Expected Value			Materialized to date
	Mid-term	End-of-project	Total target	
Total no. of direct beneficiaries	19,700	37,292	37,292	24,350 beneficiaries, of whom 13,392 (i.e. 55%) women
Area of land managed for climate resilience (ha)	N/A	550 ha	550 ha	149 ha (111 ha of dune stabilization and 38 ha of agroecology systems)
Total no. of policies/plans that will mainstream climate resilience	N/A	11	11	0
Total no. of people trained	N/A	575	575	190

2.3. Implementation Status and Risk

	FY 2023	FY 2024	FY 20__	FY 20__	FY 20__
PIR #	1st	2nd	3rd	4th	….
Rating towards **outcomes (DO)** (section 3.1)	S	S			
Rating towards **outputs (IP)** (section 3.2)	S	S			
Risk rating (section 4.2)	M	M			

Although the Project Cooperation Agreement (PCA) between MEDD and UNEP was signed in October 2021, due to many changes in government, the project activities only effectively started in the second quarter of 2022. In February 2022, MEDD organized the high-level political inception of the project, but technical inception workshop could only be organized in August 2022.

In the project inception phase, a Project Management Unit (PMU) was instituted, with the MEDD regional delegations being in charge of the day-to-day project oversight and support on the ground. The project governance structure was also put in place, with a national level Project Steering Committee (PSC) and eight commune-level management committees.

Despite the initial delays in project inception, the project has made good progress in its activities in its first 2 years of implementation, as outlined below. The rating for progress towards the project's outcomes in this second reporting period is assessed as satisfactory.

In terms of Outcome 1 ("Increased technical and institutional capacity of stakeholders for climate change adaptation – particularly EbA – in arid ecosystems"), the capacity of the targeted institutions and other project stakeholders to plan and implement adaptation (including EbA) interventions has continued to be strengthened in this reporting period, through several approaches. The staff at the regional delegations of MEDD (DREDDs) have continued to engage in and support the project interventions, at the same time increasing their own capacity to plan and implementation EbA and other adaptation interventions. Furthermore, through the additional training workshops for civil society organizations and private sector actors, the capacity of an additional 50 training participants to plan and implement adaptation interventions in arid and hyper-arid environments was increased, bringing the total number of training participants to date to 190. Finally, the capacity of local communities and community-based organizations has continued to be strengthened through their interaction with the project team (Regional Delegations and PMU) during their monitoring missions and through their extensive engagement in the planning and implementation of the project activities on the ground.

For Outcome 2 ("Enhanced sustainable access to and efficient use of water for increased drought-resilience of local communities and ecosystems"), access to water has been improved for an additional 8,100 beneficiaries (of whom 51% women). This brings the total number of people benefiting from improved access to water to 15,443 (53% women). In this reporting period, access to water was further improved through the installation 6 new boreholes, 2 additional water storage facilities, and the establishment of small-scale infrastructures (CES/DRS interventions) in two watersheds to increase infiltration and reduce erosion and flooding. In addition, the installation of irrigation water distribution systems was initiated at 6 additional agroecology sites, bringing the total number of sites to 11.

Progress towards Outcome 3 ("Protection, productivity and diversification of livelihoods enhanced through EbA interventions to increase climate-resilience") has also continued. As indicated in the last PIR, considering the very arid conditions in most of the project sites, the original dune stabilization target of 400 ha and the agroecology target of 150 ha will not be realistic with the budget available. A formal revision of these targets will be undertaken following the project's Mid-Term Review (MTR) in Q4 2024. To date, dune stabilization and agroecology interventions have been implemented on a total of 149 hectares (111 ha for dune stabilization and 38 ha for agroecology), of which 96 ha were additional in this reporting period (76 ha for dune stabilization and 20 ha for agroecology). Following the exceptionally good rains in the first year of project implementation, in the second year extremely low rainfall was experienced, in particular in the Wilaya of Adrar where only 20mm of rainfall were received in the past year. This has had a dramatic negative impact on the survival rate of the seedlings planted, in particular for the dune stabilization interventions which do not currently have a water source nearby. In contrast, in the Wilaya of Trarza the survival rate of seedlings is relatively good, as a result of fairly reliable rainfall. Finally, in terms of alternative income-generating activities, approximately 585 cooperative members (almost exclusively women) participate as direct beneficiaries in the 39 activities established by the project to date across all project sites. Additional activities were not added in the current reporting period, but are planned in the next one, targeting 12 additional cooperatives.

For Outcome 4 ("Stakeholders demonstrate strengthened knowledge and action-oriented attitudes on climate change and adaptation approaches (particularly EbA))", all stakeholders including local administrative and municipal authorities, have continued to be sensitized on climate change adaptation and the EbA approach during the project field missions. Indeed, the arid nature of the project intervention area has made it easier to illustrate to the various stakeholders the impacts of climate change and the relevance of healthy ecosystems in addressing its impacts. As outlined under Outcome 1, the knowledge, awareness and capacity of local communities and community-based organizations has continued to be increased

through their interaction with the project team during their monitoring missions and through their engagement in the planning and implementation of the project activities on the ground.

The rating for progress towards the project's outputs is assessed as satisfactory for this second reporting period.

Under project Component 1 ("Institutional and technical capacity development for the planning and implementation of climate change adaptation in arid ecosystems"), the main progress to date has been in the training and capacity building activities under Output 1.2. In this reporting period, the project organized two additional training workshops on adaptation to climate change in arid and hyper-arid environments. The first training workshop targeted grassroots civil society and community-based organizations (cooperatives, associations, NGOs, AGPOs) in the Wilaya of Adrar, and was attended by thirty (30) participants. The second training workshop targeted representatives of the private sector in the Wilaya of Inchiri, and was attended by twenty (20) participants. On the other hand, activities under Output 1.1 (climate change impact and vulnerability assessments) have been delayed and will only be initiated in Q4 2024.

For Component 2 ("Sustainable access to and efficient use of water"), good progress continued to be made in this reporting period under most outputs. Under Output 2.1, in this reporting period, six new boreholes were installed (1 in Inchiri, 4 in Adrar and 1 in Trarza), following the geophysical and hydrogeological study carried out in the previous reporting period. Two additional water storage facilities were also completed in this reporting period (1 in Inchiri and 1 in Adrar). For Output 2.2, CES/DRS techniques were installed in 2 watersheds in the Adrar, and the procurement process for equipment for 2 additional watersheds was initiated. Establishment of efficient irrigation systems (Output 2.3) continued at the project's agroecology sites (under Output 3.3). 6 new irrigation water distribution systems were installed in this reporting period, bringing the total number of systems to 11.

For Component 3 ("Protection, productivity, and diversification of local livelihoods"), the project has established three regional nurseries, one in each project Wilaya, which have produced a total of 215,000 plants to date (of which 75,000 in current reporting period), distributed mainly to communities and community-based organizations. The project has also completed dune stabilization works on 111 hectares with mechanical and biological fixation (of which 76 ha in current reporting period). Preparations for stabilizing an additional 70 hectares of dunes have been undertaken, with the production of 35,000 plants and fencing of the sites. Furthermore 33,000 plants were produced for replenishment planting at existing sites with poor survival rates. In addition, 38 hectares of agroecological systems have been established on 11 sites across the three Wilayas (of which 20 ha in 6 sites in current reporting period). These systems are connected to boreholes for watering, provided by the project under Component 2. Finally, approximately 585 cooperative members (almost exclusively women) participate in the 39 alternative income-generating activities established by the project to date as direct beneficiaries.

As for Component 4 ("Knowledge for action on climate change and EbA in arid ecosystems"), in this reporting period, Terms of References were completed for the engagement of a research institution under Output 4.1 and for the identification of approaches to be included in the EbA manuals under Output 4.2. As for Output 4.3, although the more structured knowledge and awareness-raising activities of the project are still to be launched, all stakeholders including local administrative and municipal authorities, as well as local communities and community-based organizations, have continued to be sensitized on climate change adaptation and the EbA approach during the project field missions. In addition, the engagement of young people and women in the production of plants and in dune stabilization interventions has served a specific awareness-raising function, in addition to contributing to the restoration of the natural and living environment as well as to the promotion of green jobs.

Overall risk rating:

The overall project risk level remains moderate in this reporting period, although the risk level of several national-level risks has remained low.

The moderate-level risks concern the following (with more details provided in PIR Section 4):

- Lack of funds available for ensuring the sustainability of certain activities beyond the duration of the project;

• Natural hazards and climate shocks, and in particular arid conditions in the project sites and distances between community water points (this risk has fully materialized in this reporting period, in particular in the Wilaya of Adrar); and • Limited participation of women in some project activities (formal off-site trainings). The project will continue to implement the mitigation measures identified in each case. These key risks will be revisited every year so that adequate measures can be identified and put in place on time.

2.4. Co-financing

Planned Co-finance Total:	Planned total: USD 13,770,374 This is composed of: MEDD in-kind: USD 660,000 PAMB initiative: USD 1,940,000 GCF National Adaptation Plan (NAP) project: USD 2,670,374 PRCPNA (Parc National d'Awleigatt): USD 7,200,000 GIE 3P Action Carbone: USD 1,000,000
Actual to date:	Actual to date: USD 3,687,708 (27%), as of 30 June 2024 This is composed of: MEDD in-kind: USD 481,250 PAMB initiative: USD 1,940,000 GCF National Adaptation Plan (NAP) project: USD 946,458 PRCPNA (Parc National d'Awleigatt): USD 320,000
Progress	From the in-kind co-financing provided by MEDD, USD 481,250 has been mobilized to date. This has been through the provision of office space, equipment, materials, utilities, staff time at national and regional levels, and the occasional use of regional delegation vehicles for the project activities. From the Project Agropole Maraicher of Benichab (PAMB) initiative, the full co-finance amount of USD 1,940,000 has been mobilized. PAMB was a market gardening community-level initiative being implemented in Benichab, in the Wilaya of Inchiri. The AMSTRA project is building on its results and lessons learned, and is upscaling some of the its improved water management and irrigation technologies implemented in small collective and individual market gardening areas. From the GCF-funded National Adaptation Plan (NAP) project, the amount of co-finance mobilized to date is USD 946,458. Specifically, the training and awareness-raising on climate change adaptation provided by the NAP project for state and non-state actors at the national and regional levels complement the proposed project's trainings on EbA measures. Finally, co-financing mobilized from the Awleigatt National Park project (PRCPNA) amounts to USD 320,000 to date. This has contributed mainly to the restoration of the ecosystems and to the strengthening of their resilience to the impacts of climate change.

2.5. Stakeholder engagement

Date of project steering committee meeting	Project Steering Committee meetings have been convened three (3) times to date: 20 July 2022, 16 February 2023 and most recently (in this reporting period) 15 March 2024.

Stakeholder engagement	The project has identified, consulted and engaged multiple stakeholders since its design phase, ranging from national stakeholders to the local communities. At the national level, in addition to MEDD, other relevant ministries and government institutions engaged include the Ministry of Agriculture, the Ministry of Hydraulics and Sanitation, the National Meteorological Office, the Ministry of Social Action, Children and Families and the Ministry of Interior and Decentralization. The various ministries are represented in the membership of the Project Steering Committee. At the regional level, the Regional Delegations for Environment and Sustainable Development (DREDDs) in the three projects Wilayas play a key role in the monitoring and support to project implementation. The Walis as presidents of the Regional Development Committees, the Regional Councils, and the Regional Delegations of Hydraulics and Sanitation and the Regional Delegations of Agriculture are consulted and engaged. At the local level, local authorities and leaders, including regional commissions and delegations, Hakems, Councils and Mayors are involved. Also engaged in the planning and implementation of the interventions are the local communities, as well as local associations including cooperatives and producers' organizations, NGOs, and the private sector. The stakeholders consulted by the project during this reporting period also include particularly vulnerable groups such as women, youth and people with disabilities. All the key stakeholders attended the project inception workshop, during which the project details were discussed, and the roles and responsibilities clarified. At the start of the field activities, the project initiated a series of introductory meetings with the beneficiary communities across the regions, with the view of presenting and discussing the project objectives, main activities, and associated benefits, as well as the expected contributions from the communities. As the project unfolds, the PMU is developing a clear stakeholder engagement strategy that is allowing stakeholders to participate fully in the planning and implementation of field activities at the three Wilayas. Some of these key stakeholders are members of the Project Steering Committee which is the overarching supervisory body that ensures that the project's activities are implemented as planned. For each of the 8 communes, the project has also established a management committee to guide and manage project activities, with 7 members (at least one from each site within the commune).

2.6. Gender

Does the project have a gender action plan?	Yes
Gender mainstreaming	A Gender Action Plan (GAP) was designed and submitted as part of the CEO Endorsement Request. The GAP outlines specific sections for gender mainstreaming in the project activities to ensure that men and women participate in and fully benefit from the project's activities. A national Gender Expert is currently under recruitment, and will be in charge of updating the Gender Action Plan, integrating specific gender-related activities into the project work plan and budget, and providing concrete recommendations for strengthening gender mainstreaming in all project interventions. In the project's implementation to date, gender mainstreaming has included ensuring the full engagement of women both in the technical aspects of project implementation, and as the beneficiaries of the project interventions. Women

	have fully participated in the implementation of almost all project interventions, including the ecosystem restoration activities (dune stabilisation, nurseries). In terms of benefits, currently 59% of project beneficiaries are women. Some project activities, in particular the support for alternative income-generating activities, target specifically women. The project has been successful in including women's participation in the eight commune-level project management committees put in place. The average women's participation rate in these committees is about 40%, and some of them have women as presidents or vice presidents. In general, women's participation in formal project training workshops and traditional decision-making processes can be a challenge, although women do generally influence decision-making through more informal channels. In terms of the training workshops under Component 1, approximately 33% of the participants in the training workshops targeting civil society organizations have been women, whereas the corresponding figure for the private sector workshop is 40% to date. For the on-site training events, women's participation usually reaches 75-80%.

2.7. Environmental and social safeguards management

Moderate/High risk projects (in terms of Environmental and social safeguards)	Was the project classified as **moderate/high risk CEO Endorsement/Approval Stage**? Yes If yes, what specific **safeguard risks** were identified in the SRIF/ESERN? Moderate safeguards risks were identified in relation to Standard 1 (Biodiversity, Ecosystems and Sustainable Natural Resource Management), Standard 2 (Climate Change and Disaster Risks), and Standard 8 (Labour and Working Conditions).
New social and/or environmental risks	Have any new social and/or environmental risks been identified during the reporting period? No
Complaints and grievances related to social and/or environmental impacts (to be filled in by TM and EA)	Has the project received complaints related to social and/or environmental impacts (actual or potential) during the reporting period? No
Environmental and social safeguards management	The project has undertaken an environmental and social safeguards assessment and a draft Environmental and Social Management Plan (ESMP) has been developed. The ESMP underlines that AMSTRA is a project of major importance in the context of the development of the three regions. The ESMP specifies that the impact of the project will be generally positive in the long-term in this area, both in terms of quality of life and the resilience of targeted populations and ecosystems. The impact assessment of the project indicates that majority of the impacts will be positive, and that no significant negative impacts are expected. The application of specific risk mitigation measures will help minimize any minor potential adverse environmental impacts caused by the project. In terms of the safeguards risks rated as moderate at CEO endorsement stage, for Standard 1 (Biodiversity, Ecosystems and Sustainable Natural Resource Management), the use of the potentially-invasive alien species *prosopis juliflora*

	for the dune stabilization has been limited to only two sites (at the request of populations). As water availability in these sites is low, invasive spread of the species is very unlikely. Nonetheless, the situation is monitored. For Standard 2 (Climate Change and Disaster Risks), in terms of the arid environment and concerns regarding seedling survival, this risk has fully materialized in this reporting period. Extremely low rainfall (20mm) was experienced in the past year in the North (Wilaya of Adrar), which resulted in poor seedling survival rate in the dune stabilization sites. Species selection and location of water provisioning infrastructure have been undertaken with the arid conditions in mind. Specifically, water supply infrastructure provided under project Component 2 has been co-located with those project interventions that require irrigation, in particular the agroecological systems and market gardens under Component 3. Furthermore, additional provision of water to the hyper-arid dune stabilization sites has been organized and is being further enhanced, both through water deliveries and through providing connections to existing water sources (where these are close enough). Regarding possible risk of depletion of groundwater reserves by the water infrastructure interventions, the hydrological and geophysical studies undertaken ensured adequate water levels in the areas where these interventions were recommended. The boreholes installed by the project are located on large aquifers (notably those of Trarza and Benichab) which are known for their water reserves. Authorization acquired from the Ministry of Hydraulics and Sanitation ensures that the boreholes are located in areas indicated for this purpose by the Government. Finally, the installation of small-scale infrastructure (gabions or thresholds) by the project to slow down the flow of water (in two watersheds to date) also contributes to infiltration and groundwater recharge, which contributes to the availability of water for the (less deep) wells installed or equipped by the project.

2.8. Knowledge management

Knowledge activities and products	Since the beginning of the project, several studies have been carried out by the project to support the implementation of certain activities. A baseline study and an environmental and social safeguards risk assessment were conducted. The project has undertaken a hydraulic study of the intervention areas to assess the water needs, a stocktake of existing water infrastructure, and propose measures to be implemented to resolve water-related challenges at each site. In addition, a second geophysical and hydrogeological study was undertaken to support the identification of appropriate sites and approaches for the establishment of boreholes by the project. Other technical feasibility studies undertaken include ones on value chains for alternative income generating activities, on the stabilization of dunes and on small infrastructure for increasing water infiltration and reducing erosion and flooding risk (DRS/CES interventions). The project website (www.amstra.mr), which was finalized in 2023, is still to be populated and reactivated.
Main learning during the period	This past reporting period was marked by an extreme lack of rain in the northern project areas (Wilaya of Adrar), which has resulted in a poor seedling survival rate at the dune stabilization sites. Mitigation actions (additional provision of water) are being put in place to ensure better survival rates of the

	replacement plantations, in the face of the possibility of low rainfall continuing into the next year.

2.9. Stories to be shared

Stories to be shared	The availability of water at some project sites has attracted migratory birds from the Palearctic, including several dozen white storks.

3. PROJECT PERFORMANCE AND RISK

*Based on inputs by the Project Manager, the **UNEP Task Manager**[1] will make an overall assessment and provide ratings of:*
(i) Progress towards achieving the project Results(s)- see section 3.1
(ii) Implementation progress – see section 3.2

Section 3.3 on Risk should be first completed by the Project Manager. The UNEP Task Manager will subsequently enter his/her own ratings in the appropriate column.

3.1 Rating of progress towards achieving the project outcomes (Development Objectives)

Project Objective and Outcomes	Indicator	Baseline level	Mid-term target	End-of-project target	Progress as of current period	Summary by the EA of attainment of the indicator & target as of 30 June 2023	Progress rating[2]
Objective: To increase the adaptive capacity of rural communities in the wilayas of Adrar, Inchiri and Trarza	Number of beneficiaries; % of women	Number of beneficiaries to be determined in the baseline study	19,700	37,867, of which 60% women	64%	To date, the project interventions have reached 24,350 beneficiaries, of whom 13,392 (i.e. 55%) are women.	S
Outcome 1: Stakeholders demonstrate increased technical and institutional capacity for climate change adaptation – particularly EbA – in arid ecosystems	1.1 Degree to which the capacity of targeted institutions is strengthened to identify, plan, implement and monitor adaptation (including EbA) interventions	Baseline study to be conducted at the project inception stage to define the baseline level of capacity of targeted institutions to identify, plan, implement	N/A	Increase of 5 in the capacity score of each institution	33% (based on number of training participants vs Output 1.2 target)	The capacity of the targeted institutions and other project stakeholders to plan and implement adaptation (including EbA) interventions in arid ecosystems has continued to be strengthened in this reporting period, through several approaches. Additional training workshops for civil society and grassroots organizations and private sector actors were organized in this reporting period (Q1 and Q2 2024) under project Output 1.2, reaching an additional 50 training participants in the Wilayas of Inchiri and Adrar. As a result of the training workshops provided under Output 1.2, the capacity	S

[1] For joint projects and where applicable ratings should also be discussed with the Task Manager of co-implementing agency.
[2] Use GEF Secretariat required six-point scale system: Highly Satisfactory (HS), Satisfactory (S), Marginally Satisfactory (MS), Marginally Unsatisfactory (MU), Unsatisfactory (U), and Highly Unsatisfactory (HU).

Project Objective and Outcomes	Indicator	Baseline level	Mid-term target	End-of-project target	Progress as of current period	Summary by the EA of attainment of the indicator & target as of 30 June 2023	Progress rating[2]
		and monitor adaptation (including EbA)				of a total of 190 training participants (to date) to plan and implement adaptation interventions in arid and hyper-arid environments has been increased. The feedback on the workshops from local authorities, DREDDs and the workshops participants (through post-training questionnaires) has been positive. The capacity of local communities and community-based organizations has also continued to be increased through their interaction with the project team (Regional Delegations and PMU) during their monitoring missions and through their engagement in the planning and implementation of the project activities on the ground. In the previous reporting period, the staff at the regional delegations of MEDD were trained in data gathering tools and techniques to enable them to participate fully in the baseline study. Through their participation in the study (undertaken in Q2 2022), as well as subsequent technical studies undertaken in 2023-2024, their capacity to analyze challenges around environmental degradation and climate change and to understand and plan EbA interventions was strengthened. As the project baseline study did not successfully establish the baseline level for the indicator ("capacity of targeted institutions"), the indicator will need to be revised at the project Mid-Term Review (MTR) stage (Q4 2024). Since there is no baseline, progress towards the original indicator cannot be measured. Nonetheless, considering the progress made in the project's capacity building activities,	

Project Objective and Outcomes	Indicator	Baseline level	Mid-term target	End-of-project target	Progress as of current period	Summary by the EA of attainment of the indicator & target as of 30 June 2023	Progress rating[2]
						progress towards the outcome is estimated as satisfactory at this stage.	
Outcome 2: Enhanced sustainable access to and efficient use of water for increased drought-resilience of local communities and ecosystems in the wilayas of Adrar, Inchiri and Trarza	2.1 Estimated number of beneficiaries with improved access to water (disaggregated by gender)	0	10,000	20,047 (50% men and 50% female)	77%	The number of community members benefitting from the project's water access interventions to date is 15,443, of whom 8,185 (53%) are women. This represents an increase of 8,100 beneficiaries in this reporting period. In this reporting period, six boreholes were completed in sites identified by the geophysical and hydrogeological study undertaken in previous reporting period. The six boreholes were installed in the following sites: one in Benichab (Inchiri), three in Chinguetti (two in Tindwali and one in Tekemkount site) (Adrar), one in El Menar (Trarza) and one in Dakhlet Hel Abdawa (Adrar). These sites are also associated with the project's agroecology interventions. In terms of water storage facilities, in this reporting period, a water tower was completed in Benichab (Inchiri), and a water basin constructed in Dhaya (Adrar). In the previous reporting period, a water tower and a water basin were built in Zem Zem (Trarza). In addition, it should be noted that under Component 3, the project has installed two new wells for a vegetable gardening cooperative in Akjoujt (Inchiri) and equipped them with smaller solar pumping systems. Sixteen cooperatives focused on vegetable gardening and date cultivation in the municipality of Tawaz (Adrar) have also benefited from the	S

Project Objective and Outcomes	Indicator	Baseline level	Mid-term target	End-of-project target	Progress as of current period	Summary by the EA of attainment of the indicator & target as of 30 June 2023	Progress rating[2]
						installation of smaller solar pumping equipment on one artisanal well for each cooperative, of which two were additional in this reporting period. In the previous reporting period, a hydraulic study was carried out in the intervention area to assess the water needs, take stock of the existing water infrastructure, and propose measures to be implemented to resolve water-related challenges at each site. Following the findings of the study, to date, four existing boreholes and two wells have been equipped with solar pumping systems (pumps and solar panels) at the following project sites: Zem Zem and Sourour (Trarza), Bénichab (Inchiri), and Dhaya, Tindwali and Aoujeft (Adrar). These are sites where the project is undertaken agroecology interventions under its Component 3 (or dune stabilization in the case of Aoujeft). In addition, two standpipes were installed in the town of Zem Zem for domestic water use. In this reporting period, CES/DRS infrastructures (gabions to slow down the flow of water) were installed in two sites in the Wilaya of Adrar (Dhaya and Haye Daira). A second tendering process was launched for the acquisition of materials for the two other sites (Dakhlet Hel Abdawa and Amouchterki). This followed a study undertaken in previous reporting period to identify CES/DRS techniques and appropriate sites in four watersheds in Adrar. Finally, in this reporting period, the installation of irrigation water distribution systems has been initiated for 6 additional agroecology sites, bringing	

Project Objective and Outcomes	Indicator	Baseline level	Mid-term target	End-of-project target	Progress as of current period	Summary by the EA of attainment of the indicator & target as of 30 June 2023	Progress rating[2]
						the total number of sites to 11. The additional sites are 1 in Trarza, 1 in Inchiri and 4 in Adrar. These installation works will be completed in the second half of 2024. In addition, at the Aoujeft dune stabilization site, a water pipe was connected to the well equipped with solar pumping system to provide water for the nurseries and the planting site. Eventually this will be used for irrigation for a henna plantation to be established on the site. The project has also provided 13 plastic tanks across project sites for water storage and transport.	
Outcome 3: Protection, productivity and diversification of livelihoods enhanced through EbA interventions to increase climate-resilience in the wilayas of Adrar, Inchiri and Trarza	3.1 Extent to which EbA measures generate livelihood protection benefits for communities	To be determined in the baseline study[3]	To be determined	Livelihoods of 30% of the communities in the three target wilayas protected against dune invasion, heat and wind through EbA measures implemented	27%	To date, dune stabilization and agroecology interventions have been implemented on a total of 149 hectares. It should be noted that, considering the very arid conditions in most of the project sites, the target of 550 ha will not be realistic with the budget available. A revised target, including also the % of population protected, will be adopted following the project's Mid-Term Review (MTR). In this reporting period, the project's dune stabilization interventions were expanded onto an additional 76 hectares, resulting in a total achievement to date of 111 ha. This was accompanied by the production and installation of 40,000 linear meters of wattle in this reporting period	MS

[3] Level 0: TBD in baseline study; Level 1: 200 hectares of land stabilised or under agro-forestry; Level 2: 400 hectares of land stabilised or under agro-forestry; Level 3: 65% survivorship of plants achieved; Level 4: Dunes are fixed and livelihoods protected for 30% of people living in the three target wilayas against dune invasion, heat and wind through EbA measures implemented on 550 hectares.

Project Objective and Outcomes	Indicator	Baseline level	Mid-term target	End-of-project target	Progress as of current period	Summary by the EA of attainment of the indicator & target as of 30 June 2023	Progress rating[2]
				on 550 hectares		(for a total achievement of 75,000 meters to date). Preparations for dune stabilization on an additional 70 ha in the second half of 2024 were also undertaken, with the production of 35,000 plants and the fencing of the sites. In addition, 33,000 plants were produced for replenishment at the sites with poor survival rate in the current reporting period (see below). In the wilaya of Adrar, in particular, the extremely low rainfall this year (only around 20mm) resulted in the poor survival rate for the dune stabilization interventions. This risk is being mitigated by the ongoing enhancement of water access in areas with no access to irrigation water. This is being done either through water deliveries (in tanks) or by providing connections to existing water sources through long pipes / hoses, where there are water sources close enough to do so. The installation of 20 additional hectares of agroecological systems was initiated in this reporting period, at 6 additional sites across the 3 project Wilayas. Once finalized in Q3 2024, this will result in a total achievement to date of 38 hectares across 11 sites. These agroecology sites are set up with a perimeter windbreak and interior windbreaks consisting of various trees species (many of which can be also used for fodder and other products). In the new sites initiated in this reporting period, larger (30-50m wide) forest tree perimeters are established, for optimizing soil conservation benefits and the protection of the	

Project Objective and Outcomes	Indicator	Baseline level	Mid-term target	End-of-project target	Progress as of current period	Summary by the EA of attainment of the indicator & target as of 30 June 2023	Progress rating[2]
						market gardening interventions inside the perimeter. Fruit trees are planted inside the blocks thus created, and the spaces between the trees are used for market gardening. These systems are connected to boreholes, reservoirs or water towers for watering, provided by the project under Component 2.	
	3.2 Increase in the income of 800 producer cooperative participants as a result of the introduction of alternative income-generating activities (gender disaggregated)	Zero	To be established by the baseline study	To be established by the baseline study	73%	Approximately 585 cooperative members (almost exclusively women) participate as direct beneficiaries in the alternative income-generating activities established by the project to date. In the previous reporting period, the project introduced 39 alternative income-generating activities, with the provision of equipment and materials, across all project sites in the three Wilayas. Almost all the beneficiaries of the income-generating activities are women. In this reporting period, no additional livelihoods or income generating activities were introduced, and the focus was on consolidating and supporting those established in the previous reporting period. The increased number of beneficiaries and activities in this report results from the erroneous omission of 2022 activities in the last PIR report. The activities supported to date are as follows: Community shops: 23 Butcher's shops: 5 Couscous production: 6 Fishmongers: 1 Gas depot: 2	S

Project Objective and Outcomes	Indicator	Baseline level	Mid-term target	End-of-project target	Progress as of current period	Summary by the EA of attainment of the indicator & target as of 30 June 2023	Progress rating[2]
						Vegetable trade: 1 Plant production nursery for young people: 1 Furthermore, in the previous reporting period, a value chain feasibility study was carried out by the project to inform the selection of the livelihoods to be developed. Some of the recommendations of the study included the processing of dates and NTFPs. Depending on the interest of the communities, the project may provide training and support for these value chains. To support alternative income-generating activities, the project has also installed two new wells for a vegetable gardening cooperative in Akjoujt (Inchiri) and equipped them with solar pumping systems. Fourteen cooperatives focused on vegetable gardening and date cultivation in the municipality of Tawaz (Adrar) also benefited from the installation of solar pumping equipment on one well for each cooperative.	
Outcome 4: Stakeholders demonstrate strengthened knowledge and action-oriented attitudes on climate change and adaptation approaches (particularly EbA)	4.1 Proportion of the population in the three target wilayas with knowledge and action-oriented attitudes on climate change and adaptation approaches	There is limited knowledge and action-oriented attitudes on climate change and adaptation approaches in the three wilayas (less	To be established	At least 5 out of 10 people in the target population with knowledge and action-oriented attitude on climate change and adaptation	30%	Although the more structured knowledge and awareness-raising activities of the project are still to be launched, all stakeholders including local administrative and municipal authorities, have been sensitized on climate change adaptation and the EbA approach during the project field missions. Indeed, the arid nature of the project intervention area has made it easier to illustrate to the various stakeholders the impacts of climate change and the relevance of healthy ecosystems in addressing its impacts.	S

Project Objective and Outcomes	Indicator	Baseline level	Mid-term target	End-of-project target	Progress as of current period	Summary by the EA of attainment of the indicator & target as of 30 June 2023	Progress rating[2]
		than 5%, to be confirmed by the baseline study)		approaches (of which ~50% are women)		As outlined under Outcome 1, the knowledge, awareness and capacity of local communities and community-based organizations have continued to be increased through their interaction with the project team (Regional Delegations and PMU) during their monitoring missions and through their engagement in the planning and implementation of the project activities on the ground. In addition, the engagement of young people and women in the production of plants and dune stabilization interventions has served a specific awareness-raising function, in addition to contributing to the restoration of the natural and living environment as well as to the promotion of green jobs.	

3.2 Rating of progress implementation towards delivery of outputs (Implementation Progress)

Outputs/Activities[4]	Expected completion date[5]	Implementation status as of 30 June 2022 (%)	Implementation status as of 30 June 2023 (%)	Progress rating justification[6], description of challenges faced and explanations for any delay	Progress rating[7]
COMPONENT 1: Institutional and technical capacity development for the planning and implementation of climate change adaptation in arid ecosystems					
Output 1.1: Climate change impact and vulnerability assessments undertaken, and adaptation options identified and validated by stakeholders in each of the 3 target wilayas and 8 project sites	Q4 2022	10%	15%	In this reporting period, the recruitment of the national consultants and an international consulting firm to undertake the activities under this output has been initiated. The activities under this output have been restructured. The site-level vulnerability assessments and identification of adaptation options have been integrated in the elaboration of Local Development Plans (PDLs) under Output 1.3, whereas the activities focused on the regional (wilaya) level will be undertaken in conjunction with the climate risk assessment process under the GCF-funded NAP project. The activities will be launched in Q4 2024, with expected completion in Q3 2025. The initiation of the activities under this output was delayed due to insufficient budget allocated to them in project design, which necessitated a budget revision and restructuring of the activities.	MU
Output 1.2: 575 representatives of regional governments, private sector, civil society organizations and community-based organizations (e.g., cooperatives, AGPOs) across the 3 target wilayas trained on adaptation approaches (including EbA)	Q4 2023	20%	33%	In current reporting period, the project organized two training workshops on adaptation and EbA approaches in arid and hyper-arid environments, which were attended by 50 participants. This has brought the cumulative total number of persons trained to 190.	S

[4] Outputs and activities (or deliverables) as described in the project logframe (and workplan) or in any updated project revision.
[5] The completion dates should be as per latest workplan (latest project revision).
[6] As much as possible, describe in terms of immediate gains to target groups, e.g. access to project deliverables, participation in receiving services; gains in knowledge, etc.
[7] To be provided by the UNEP Task Manager

Outputs/Activities[4]	Expected completion date[5]	Implementation status as of 30 June 2022 (%)	Implementation status as of 30 June 2023 (%)	Progress rating justification[6], description of challenges faced and explanations for any delay	Progress rating[7]
				The first training workshop, organized in Q1 2024 in the Wilaya of Adrar and attended by 30 participants, targeted grassroots civil society and community-based organizations (cooperatives, associations, NGOs, AGPOs) from oasis and non-oasis areas covered by the project. This complemented the workshops with the same focus and target audience organized in the Wilayas of Inchiri and Trarza in previous reporting period. These three workshops were organized by an NGO ("*l'Association pour la Protection de l'Environnement*"). The second workshop, organized in Q2 2024 in the Wilaya of Inchiri and attended by 20 participants, targeted representatives of the private sector, and complemented a workshop with the same focus and target audience organized in the Wilaya of Trarza organized in previous reporting period. The first workshop was organized by an NGO ("*Lamtoro*"), and the second one by a consultancy firm ("*Loti consulting"*). A third workshop on this topic is planned for Adrar in Q3 2024. In addition, in previous reporting period (Q1-Q2 2023), two training workshops focusing on vegetable (market) gardening as an adaptation and livelihood diversification option were organized in Trarza and Adrar, with a total of 60 participants. Overall, the activities under the output are progressing well, although with some delay considering the original target completion date.	
Output 1.3: 3 Regional Development Plans (PDRs) and 8 Local Development Plans (PDLs), integrating adaptation to climate change and	Q2 2025	0%	5%	The TOR for the activities under this output is being finalized. The activities will be initiated in Q4 2024, with a slight delay.	S

Outputs/Activities[4]	Expected completion date[5]	Implementation status as of 30 June 2022 (%)	Implementation status as of 30 June 2023 (%)	Progress rating justification[6], description of challenges faced and explanations for any delay	Progress rating[7]
gender, revised, or developed and shared with stakeholders					
Output 1.4: An upscaling strategy and action plan for climate change adaptation in arid ecosystems of Mauritania developed in collaboration with national stakeholders, focusing on EbA approaches	Q3 2025	0%	0%	Activities under this output will be initiated in Q1 2025, in accordance with the work plan.	S
COMPONENT 2: Sustainable access to and efficient use of water					
Output 2.1: 16 new efficient water provisioning systems (e.g., new wells, boreholes, solar pumps, desalination units) and 4 water collection and storage systems installed in the 8 project sites	Q2 2023	80%	90%	To date, the project has installed a total of fourteen (14) water provisioning structures across the project sites, of which six (6) in the current reporting period (all boreholes). In addition, two (2) water collection and storage systems were completed in this period, in addition to the two (2) completed in the previous period. Following the geophysical and hydrogeological study undertaken in previous reporting period which identified six sites for drilling new boreholes, in this reporting period these six boreholes were completed. These boreholes were installed in the following sites: one in Benichab (Inchiri), three in Chinguetti (two in Tindwali and one in Tekemkount sites) (Adrar), one in El Menar (Trarza) (under finalization), and one in Dakhlet Hel Abdawa (Adrar). These sites are also associated with the project's agroecology interventions (see Output 3.3). In terms of water storage facilities, in this reporting period, a water tower was completed in Bénichab (Inchiri), and a water basin constructed in Dhaya (Adrar). In previous reporting period, a water tower and a water basin were built in Zem Zem (Trarza).	S

Outputs/Activities[4]	Expected completion date[5]	Implementation status as of 30 June 2022 (%)	Implementation status as of 30 June 2023 (%)	Progress rating justification[6], description of challenges faced and explanations for any delay	Progress rating[7]
				In addition, it should be noted that under Output 3.4, the project has installed two new wells for a vegetable gardening cooperative in Akjoujt (Inchiri) and equipped them with smaller solar pumping systems. Sixteen (16) cooperatives focused on vegetable gardening and date cultivation in the municipality of Tawaz (Adrar) have also benefited from the installation of smaller solar pumping equipment on one artisanal well for each cooperative, of which two (2) were additional in this reporting period. In the previous reporting period, a hydraulic study was carried out in the intervention area to assess the water needs, take stock of the existing water infrastructure, and propose measures to be implemented to resolve water-related challenges at each site. Following the findings of the study, four existing boreholes and two wells were equipped with solar pumping systems (pumps and solar panels) at the following project sites: Zem Zem and Sourour (Trarza), Bénichab (Inchiri), and Dhaya, Tindwali and Aoujeft (Adrar). These are sites where the project is undertaken agroecology interventions under its Component 3 (or dune stabilization in the case of Aoujeft, where further valorization of the site is planned with cultivation of henna with the water accessed). In addition, two standpipes were installed in the town of Zem Zem (Trarza) for domestic water use purposes.	
Output 2.2: Small-scale infrastructures[8] implemented on 4 water courses to increase infiltration and to reduce erosion and flooding	Q4 2025	20%	50%	In this reporting period, CES/DRS infrastructures (gabions to slow down the flow of water) were installed in two (2) sites in the Wilaya of Adrar (Dhaya	S

[8] DRS : Défense et Restauration des Sols : diguettes, digues filtrantes, gabions, seuils, corrections de ravines, cordons pierreux (i.e. water speed deceleration infrastructure that increases infiltration, such as check dams, gabions, bunds, stone rows…).

Outputs/Activities[4]	Expected completion date[5]	Implementation status as of 30 June 2022 (%)	Implementation status as of 30 June 2023 (%)	Progress rating justification[6], description of challenges faced and explanations for any delay	Progress rating[7]
				and Haye Daira, in Tawaz). A second tendering process was launched for the acquisition of materials for the two (2) other sites (Dakhlet Hel Abdawa and Amouchterki, in Aoujeft). In previous reporting period, a study was undertaken to identify CES/DRS techniques in four watersheds. This study was carried out on around ten sites throughout the Wilaya of Adrar and resulted in the selection of the four priority sites according to well-defined criteria: Haye Daira, Dakhlet Hel Abdawa, Dhaya and Amouchterki.	
Output 2.3: 8 efficient irrigation water distribution systems established (one in each project site)	Q2 2023	60%	70%	In this reporting period, the installation of irrigation water distribution systems has been initiated for 6 additional agroecology sites, bringing the total number of sites to 11. The additional sites are 1 in Trarza, 1 in Inchiri and 4 in Adrar. These installation works will be completed in the second half of 2024. In the previous reporting period, irrigation water distribution systems were installed within 5 agroecology sites (2 in Trarza, 1 in Inchiri and 2 in Adrar). In addition, at the Aoujeft dune stabilization site, a water pipe was connected to the well equipped with solar pumping system (see Output 2.1) to provide water for the nurseries and the planting site. Eventually this will be used for irrigation for a henna plantation to be established on the site. The project has also provided 13 plastic tanks across project sites for water storage and transport. These are currently used for providing irrigation to project interventions, where those interventions are far from other sources of water. As the plastic tanks are	S

Outputs/Activities[4]	Expected completion date[5]	Implementation status as of 30 June 2022 (%)	Implementation status as of 30 June 2023 (%)	Progress rating justification[6], description of challenges faced and explanations for any delay	Progress rating[7]
				mobile, they can be easily moved around to provide irrigation support where most needed. The scope of the activities under this output was somewhat reduced at the project inception stage, and now focuses mainly on irrigation systems at project agroecology sites.	
Output 2.4: 8 community associations (e.g. cooperatives, AGPOs) trained on sustainable and efficient water management and distribution (one in each project site)	Q4 2025	0%	0%	Activities under this output will be initiated in Q1 2025, with some delay.	MS
COMPONENT 3: Protection, productivity, and diversification of local livelihoods					
Output 3.1: Regional community nurseries specialized in plant production for arid ecoregions established and operational, and training for their sustainable management provided to local communities or cooperatives in 3 wilayas	Q2 2023	50%	75%	In this reporting period, 75,000 additional plants were produced in the 3 regional nurseries (25,000 in each project Wilaya). In the previous reporting period, the project established three regional nurseries, one in each project Wilaya, managed by the regional delegations of MEDD. The three nurseries produced 65,000 plants in 2022 (20,000 in Adrar, 20,000 in Inchiri and 25,000 in Trarza), and 75,000 plants in 2023 (25,000 in each site). The plants have been distributed mainly to communities and community-based organizations, as the project's contribution to national reforestation efforts. Most of the plants were distributed during the National Tree Weeks in 2022, 2023 and 2024.	S
Output 3.2: EbA interventions implemented on 400 hectares of dunes to protect vulnerable communities, livelihoods, and ecosystems from dune-migration	Q4 2025	20%	28%	In this reporting period, dune stabilization interventions were expanded onto an additional 76 hectares, resulting in a total achievement to date of 111 ha. This was accompanied by the production and	MS

Outputs/Activities[4]	Expected completion date[5]	Implementation status as of 30 June 2022 (%)	Implementation status as of 30 June 2023 (%)	Progress rating justification[6], description of challenges faced and explanations for any delay	Progress rating[7]
				installation of 40,000 linear meters of wattle in this reporting period. The sites covered in the second half of 2023 were Zem Zem and Démam in Trarza, and Terja, Mali, Aoujeft, Dakhlet Hel Abdawa, Toungad and L'Oudeye in Adrar. All dune stabilization sites are fenced with wire mesh. Furthermore, preparations for dune stabilization on an additional 70 ha, accompanied by 9,000 meters of wattle, were undertaken in this reporting period. The sites to be covered in second half of 2024 include Aoujeft, Médina Ghadime, Tenyall and Chinguetti, all in Adrar. 35,000 plants have been produced for this purpose, as well as 33,000 additional plants for replenishment at existing sites with poor survival rate. In previous reporting period, in 2022, the project completed dune stabilization works on 35 hectares with mechanical and biological fixation. These sites are located in Zem Zem in Trarza, and Aoujeft and Tekemkount in Adrar. 35,000 linear meters of wattle were also produced and installed in 2022. Considering the very arid conditions in most of the project sites, which in this reporting period resulted in poor survival rates in Adrar, the target of 400 ha will not be realistic with the budget available. A revised target in the order of 200 ha will be set following the project's Mid-Term Review (MTR), in Q4 2024.	
Output 3.3: EbA interventions implemented on 150 hectares to shelter vulnerable communities from dune migration, heat, and wind and to provide forage for livestock and non-timber forest products	Q4 2025	20%	25%	In this reporting period, the establishment of an additional 20 hectares of agroecological systems has been initiated across 6 additional sites, which correspond to the sites of the 6 new boreholes established under Output 2.1: Tabrenkount / Benichab (Inchiri), Tekemkount, Chinguetti, Tindwali and Dakhlett Hel Abdawa (Adrar), and El Menar	MS

Outputs/Activities[4]	Expected completion date[5]	Implementation status as of 30 June 2022 (%)	Implementation status as of 30 June 2023 (%)	Progress rating justification[6], description of challenges faced and explanations for any delay	Progress rating[7]
				(Trarza). The sites have been enclosed and will be fully established in Q3 2024. This results in a total achievement to date of 38 hectares across 11 sites. In previous reporting period, 18 hectares of agroecological systems were established in 2022, across 5 sites: Zem Zem and Sourour (Trarza), Bénichab (Inchiri), and Dhaya and Tindwali (Adrar). The agroecology sites are set up with a perimeter windbreak and interior windbreaks consisting of various tree species (many of which can be also used for fodder and other products). In the new sites initiated in this reporting period, larger (30-50m wide) forest tree perimeters are established, for optimizing soil conservation benefits and the protection of the market gardening interventions inside the perimeter. Fruit trees are planted inside the blocks, and the spaces between the trees are used for market gardening. These systems are connected to boreholes for watering, provided by the project under Component 2. In addition, reservoirs have been built at the agroecology sites in Dhaya (Adrar) and Zem Zem (Trarza), and a water tower in Bénichab (Inchiri). Considering the very arid conditions in most of the project sites, the focus of the activities has been shifted somewhat, from agroforestry and NTFPs to a broader agroecological system approach. The NTFP potential is very limited or even non-existent in the project intervention area, with the exception of Trarza, where they may be introduced depending on the interest of the communities. Most NTFPs sold on local markets come from other Wilayas. Furthermore, the target of 150 ha will not be realistic with the budget available, and a revised target in the	

Outputs/Activities[4]	Expected completion date[5]	Implementation status as of 30 June 2022 (%)	Implementation status as of 30 June 2023 (%)	Progress rating justification[6], description of challenges faced and explanations for any delay	Progress rating[7]
				order of 75 ha will be adopted following the project Mid-Term Review (MTR) in Q4 2024.	
Output 3.4: Additional natural resource-based livelihoods introduced for local populations	Q4 2025	50%	73%	In this reporting period, no additional livelihoods or income generating activities were introduced, and the focus was on consolidating and supporting those established in the previous reporting period. In the second half of 2024, an additional 12 cooperatives will be targeted for support under this output. At present, approximately 585 cooperative members (almost exclusively women) participate in the alternative income-generating activities established by the project, as direct beneficiaries. The increased number of beneficiaries and activities in this report results from the erroneous omission of 2022 activities in the last PIR report. In the previous reporting period, the project introduced 39 alternative income-generating activities, with the provision of equipment and materials, across all project sites in the three Wilayas. Almost all the beneficiaries of the income-generating activities are women. The activities supported to date are as follows: Community shops: 23 Butcher's shops: 5 Couscous production: 6 Fishmongers: 1 Gas depot: 2 Vegetable trade: 1 Plant production nursery for young people: 1 Furthermore, in the previous reporting period, a value chain feasibility study was carried out by the project to	S

Outputs/Activities[4]	Expected completion date[5]	Implementation status as of 30 June 2022 (%)	Implementation status as of 30 June 2023 (%)	Progress rating justification[6], description of challenges faced and explanations for any delay	Progress rating[7]
				inform the selection of the livelihoods to be developed. Some of the recommendations of the study included the processing of dates and NTFPs. Depending on the interest of the communities, the project may provide training and support for these value chains. To support alternative income-generating activities, the project has also installed two new wells for a vegetable gardening cooperative in Akjoujt (Inchiri) and equipped them with solar pumping systems. Sixteen cooperatives focused on vegetable gardening and date cultivation in the municipality of Tawaz (Adrar) have also benefited from the installation of solar pumping equipment on one small artisanal well for each cooperative.	
COMPONENT 4: Knowledge for action on climate change and EbA in arid ecosystems					
Output 4.1: 5 publications on policy-relevant research findings published based on monitoring of adaptation results generated under Components 2 and 3, and disseminated to at least 45 decision-makers	Q4 2025	5%	10%	The activity has not been started yet (which is in line with the work plan). In this reporting period, the Terms of Reference for the recruitment of a research institution were finalized, and the engagement of the institution will be undertaken in Q4 2024.	S
Output 4.2: A series of 4 EbA handbooks detailing best practices for arid ecosystems developed and shared with at least 550 members of local implementation structures across the 3 target wilayas	Q4 2023	0%	10%	In this reporting period, the Terms of Reference were developed for the identification of the EbA approaches to be included in the handbooks. The timeline for this output has been pushed back compared with the original plan, and the activities will be launched in Q4 2024.	MS
Output 4.3: At least 750 local stakeholders informed of climate change adaptation and good EbA practices in the three target wilayas	Q4 2025	10%	30%	In this reporting period, the knowledge, awareness and capacity of local communities and community-based organizations have continued to be increased through their engagement in the planning and	S

Outputs/Activities[4]	Expected completion date[5]	Implementation status as of 30 June 2022 (%)	Implementation status as of 30 June 2023 (%)	Progress rating justification[6], description of challenges faced and explanations for any delay	Progress rating[7]
				implementation of the project activities on the ground, and through their continued interaction with the project team (Regional Delegations and PMU) during their technical support and monitoring missions. Although the more structured knowledge and awareness-raising activities of the project are still to be launched, in this reporting period, an increased number of local stakeholders have been sensitized on climate change adaptation and the EbA approach during the project field missions. Indeed, the arid nature of the project intervention area has made it easier to illustrate to the various stakeholders the impacts of climate change and the relevance of healthy ecosystems in addressing its impacts. In addition, the engagement of young people and women in the production of plants and in dune stabilization interventions has served a specific awareness-raising function, in addition to contributing to the restoration of the natural and living environment as well as to the promotion of green jobs.	

4. Risk Rating

4.1 Table A. Project management Risk

Please refer to the **Risk Help Sheet** for more details on rating.

Risk Factor	EA's Rating	TM's Rating
1. Management structure – Roles and responsibilities	L	L
2. Governance structure – Oversight	L	L
3. Implementation schedule	L	L
4. Budget	H	S
5. Financial Management	L	L
6. Reporting	M	M
7. Capacity to deliver	L	L

If any of the risk factors is rated a Moderate or higher, please include it in table B below.

4.2 Table B. Risk-Log

Risk	Risk affecting:	Risk Rating							Variation respect to last rating	
	Outcome / outputs	CEO ED	PIR 1	PIR 2 (this PIR)	MTR	PIR 3	PIR 4	PIR 5	Δ	Justification
Risks at the national level										
High turnover of staff in the project team or on the project steering committee.	All outcomes and outputs	L	L	L					=	The project is housed in the Climate and Green Economy Directorate at the Ministry of Environment and Sustainable Development (MEDD) and is managed by a Project Management Unit (PMU). In the field, the monitoring of activities is ensured by the Regional Delegations in the three project Wilayas. The project is governed by the Project Steering Committee (PSC), chaired by the MEDD Secretary General.

Risk	Risk affecting:	Risk Rating							Variation respect to last rating	
	Outcome / outputs	CEO ED	PIR 1	PIR 2 (this PIR)	MTR	PIR 3	PIR 4	PIR 5	Δ	Justification
										To date, there has been no project staff turnover. However, at the central level, there have been significant changes in senior MEDD positions (Minister, SG, Director). Furthermore, at the regional / local level, there is a new environment delegate in Trarza and environment inspector in Boutilimit (Trarza). For the time being, the risk on project implementation remains low, nonetheless.
Possible differences in practices, procedures, mandates and visions between key project partners and non-governmental stakeholders.	All outcomes and outputs	L	L	L					=	No change observed at this stage (the risk remains low).
Unwillingness to collaborate or to share information, and disagreement among stakeholders on the distribution of roles in the proposed project.	All outcomes and outputs	M	L	L					=	This risk has been reduced to low. During the project inception workshop, the roles, responsibilities, and priorities of all the stakeholders were clarified. Synergies and collaboration between all project stakeholders are facilitated by the PMU at national, regional, and local levels.
Limited technical capacity to develop and implement the project interventions.	All outcomes and outputs	M	L	L					=	This risk has been reduced to low. A series of training events have been undertaken during the first years of project implementation, significantly strengthening the capacity of national, regional and local implementing partners to plan and implement EbA measures. Specifically, the DREDDs and other institutions have participated in the formal trainings provided project under Component 1, but also in more informal trainings conducted by key experts and specialized NGOs. In addition, PMU supervision missions have helped to reduce this risk. Most recently, capacity challenges with the environment delegate in one of the regions have posed an issue, which is being managed with additional support provided.
Procurement delays due to inefficient or overly complex administrative procedures.	All outcomes and outputs	M	L	L					=	An internal commission was set up to handle procurement issues. Only acquisitions exceeding the thresholds set by law are submitted to the Central Procurement Commission. These thresholds are approximately USD 41,500 for consulting services

Risk	Risk affecting:	Risk Rating							Variation respect to last rating	
	Outcome / outputs	CEO ED	PIR 1	PIR 2 (this PIR)	MTR	PIR 3	PIR 4	PIR 5	Δ	Justification
										and 70,000 USD for the acquisition of equipment. As such, procurement delays are not expected to constitute a significant risk to the project, nor have any issues been faced to date.
Climate change adaptation priorities undermined by political events, national emergencies or civil unrest.	All outcomes and outputs	M	L	L					=	There have been some changes at the local level, which have resulted in shifting political priorities (for example the turnover of the Mayor positions in Aoujeft and Ajouer). However, these have not posed a major risk to project implementation to date.
Risks at the local level										
Limited acceptance and/or adoption of adaptation interventions by local communities.	All outcomes and outputs	M	L	L					=	No issue has been identified at this stage and the risk level has been reduced to low. Local communities have been involved in the design and implementation of the adaptation technologies, which are being implemented in an equitable manner. In addition, the project has focused on raising awareness of the local communities on the risks associated with the continuous degradation of ecosystems and associated impacts on community livelihoods, on climate change and potential impacts, and on the benefits of adaptation and EbA approaches through activities under Components 1 and 4. Interventions generating tangible benefits (including water provisioning infrastructure and income-generating alternative livelihoods) were prioritized in the first years of the project, to ensure benefits for community and optimal community buy-in.
Lack of funds available for ensuring the sustainability of certain activities beyond the duration of the project.	All outcomes and outputs	M	M	M					=	The risk level remains moderate until later in the project cycle when the project partners (MEDD, UNEP, etc.) are able to develop a sustainability plan beyond the project lifetime.
Natural hazards and climate shocks.	All outcomes and outputs	M	M	H					↑	This risk has been increased to high, following the major negative impacts on seedling survival rates experienced in this reporting period in the Wilaya of Adrar, as a result of lack of rainfall (see below, next risk). Overall, the project areas and

Risk	Risk affecting:	Risk Rating							Variation respect to last rating	
	Outcome / outputs	CEO ED	PIR 1	PIR 2 (this PIR)	MTR	PIR 3	PIR 4	PIR 5	Δ	Justification
										indeed the entire country continue to be exposed to serious natural hazards and climate shocks, even though apart from drought, other challenges have not materialized to date in this regard.
Arid conditions in the project sites and distances between community water points.	All outcomes and outputs	H	H	H					=	This risk remains high, and has materialized in the past year, where almost no rainfall was received in the Wilaya of Adrar (Chinguetti and Aoujeft). This has resulted in a very poor survival rate of planted seedlings, especially for the dune stabilization interventions. This risk may eventually decrease as more water infrastructures are established and the distances between community water points are reduced.
Limited participation of women in project activities and/or limited access to its benefits by women, associated with a gender inequitable national context.	All outcomes and outputs	M	M	M					=	This risk remains moderate. The engagement of women in almost all project activities is high. Nonetheless, women's participation in formal project training workshops and decision-making processes can remain a challenge, which needs to be continuously addressed.
Continued presence of the COVID-19 pandemic in Mauritania (and/or a resurgence of the pandemic), resulting in restrictions on in-person meetings and on in-country and international travel	All outcomes and outputs	H	L	L					=	The risks associated with the COVID-19 pandemic have reduced significantly and the restrictions put in place by the health authorities have been lifted with a return to a normal life across the country.
Consolidated project risk		**M**	**M**	**M**					**=**	

4.3 Table C. Outstanding Moderate, Significant, and High risks

Risk	Actions decided during the previous reporting instance (PIR_{t-1}, MTR, etc.)	Actions effectively undertaken this reporting period	Additional mitigation measures for the next periods		
			What	When	By whom
Lack of funds available for ensuring the sustainability of certain activities beyond the duration of the project.	CEO ER: Financing needs and possible funding options for ensuring the long-term sustainability of project results will be identified in the sustainability strategy. Adaptation measures will also be integrated into policies and awareness raising will be conducted for decision makers. The participation of key stakeholders in implementation will be progressive and their responsibility for site management will increase by 25% each year. PIR 1: Discussions with participating institutions and beneficiaries on the possible sources and types of support needed to maintain the project investments beyond the lifetime of the project. The participation of key stakeholders in project implementation will be continued and their responsibility increased. Linkages with the ongoing NAP process in Mauritania will be strengthened, to ensure the integration of arid lands adaptation measures in its capacity building, awareness raising and policy mainstreaming activities.	In this reporting period, discussions on how to sustain the project activities have been undertaken with various stakeholders, with a view to making the project's restoration sites future development hubs. In previous reporting period, awareness raising of stakeholders during the inception workshop included mobilizing the co-financing pledged during the project design phase. In addition, liaison with several other projects in the AMSTRA project area has been undertaken. These include an IUCN drylands project, a UNEP GCF project, and an Adaptation Fund project implemented by OSS.	Discussions will be continued with participating institutions and beneficiaries on the possible sources and types of support needed to maintain the project investments beyond the lifetime of the project. The participation of key stakeholders in project implementation will be continued and their responsibility gradually increased. Linkages with the ongoing NAP process in Mauritania will be strengthened, to ensure the integration of arid lands adaptation measures in its capacity building, awareness raising and policy mainstreaming activities.	Continuously	Project Management Unit/MEDD, administrative authorities, village management committees

Risk	Actions decided during the previous reporting instance (PIR_{t-1}, MTR, etc.)	Actions effectively undertaken this reporting period	Additional mitigation measures for the next periods		
			What	When	By whom
Natural hazards and climate shocks.	CEO ER and PIR 1: Activities will take into account and integrate climate and early warning information. EbA interventions will be designed to withstand the climate (for example, best practices will be followed in terms of climate-resilient planting operations, species selection, etc.).	Activities have continued to be designed and implemented keeping in mind potential climate shocks, in particular drought. Most importantly, in areas with very limited rainfall, access to irrigation water has been improved in the current reporting period to enhance seedling survival rates.	The risk mitigation measures identified and implemented previously will be continued.	Continuously	Project Management Unit and partners
Arid conditions in the project sites and distances between community water points.	CEO ER: Sufficient watering and protection of the seedlings will be ensured by the project teams in all target wilayas. PIR 1: The establishment of water provisioning infrastructure will be continued. Seedlings will continue to be protected in the nurseries and after planting.	Following the assessment of water needs, existing infrastructure and recommended interventions, the implementation of water provisioning activities has continued in this reporting period. For details on the infrastructures put in place across all the target Wilayas to date, please see reporting under Component 2.	The establishment of water provisioning infrastructure will be continued. Seedlings will continue to be protected in the nurseries and after planting.	Continuously and specifically at the nursery and planting stages	Project Management Unit and partners
Limited participation of women in project activities and/or limited access to its benefits by women, associated with a gender inequitable national context.	CEO ER: The project will adopt a locally-adapted participatory approach to include women in project activities as much as possible, informed by the gender consultant, and work towards women's empowerment while respecting local cultural norms (to ensure transparency and acceptance). PIR 1: The participation of women in the project activities will continue to be ensured. In particular, their full participation in the project trainings and decision-making will be encouraged.	A national Gender Expert is currently under recruitment. They will be in charge of updating the Gender Action Plan, integrating specific gender-related activities into the project work plan and budget, and providing concrete recommendations for strengthening gender mainstreaming in all project interventions. Participatory approaches taking into account of gender and age have been continued across the	The recommendations of the gender expert will be integrated in the project implementation. The participation of women in the project activities will continue to be ensured. In particular, their full participation in the project trainings and decision-making will continue to be encouraged.	Continuously	Project Management Unit and partners

Risk	Actions decided during the previous reporting instance (PIR_{t-1}, MTR, etc.)	Actions effectively undertaken this reporting period	Additional mitigation measures for the next periods		
			What	When	By whom
		target wilayas. Women's participation in almost project activities is high, including ecosystem restoration interventions. Women make up 59% of the current project beneficiaries, and almost all beneficiaries of the income-generating activities are women. Furthermore, around 33% and 40% of the participants in the regionally-organized civil-society and private sector training workshops, respectively, have been women, which is a relatively high percentage in the context in question. For the on-site training events, women's participation reaches 75-80%.			

High Risk (H): There is a probability of greater than 75% that **assumptions** may fail to hold or materialize, and/or the project may face high risks.
Significant Risk (S): There is a probability of between 51% and 75% that **assumptions** may fail to hold and/or the project may face substantial risks.
Moderate Risk (M): There is a probability of between 26% and 50% that **assumptions** may fail to hold or materialize, and/or the project may face only modest risks.
Low Risk (L): There is a probability of up to 25% that **assumptions** may fail to hold or materialize, and/or the project may face only modest risks.

Project Minor Amendments

5.1 Table A: Listing of all Minor Amendment

☐ Results framework

- [ ] Components and cost
- [x] Institutional and implementation arrangements
- [ ] Financial management
- [ ] Implementation schedule
- [ ] Executing Entity
- [ ] Executing Entity Category
- [ ] Minor project objective change
- [ ] Safeguards
- [ ] Risk analysis
- [ ] Increase of GEF project financing up to 5%
- [ ] Co-financing
- [ ] Location of project activity
- [ ] Other

Minor amendments	The National Unit for Environmental Observation and Arid Zones (CNOEZA) initially planned to lead the implementation of the project, ensure monitoring, and prepare for the sustainability of the project's interventions was dissolved immediately after the GEF CEO endorsement. CNOEZA was replaced in its role by the Directorate of Climate and Green Economy under MEDD.

5.2 Table B: History of project revisions and/or extensions

Version	Type	Signed/Approved by UNEP	Entry into Force (last signature Date)	Agreement Expiry Date	Main changes introduced in this revision
Original legal instrument	PCA	1 October 2021	23 October 2021	31 March 2026	

GEO Location Information:

The Location Name, Latitude and Longitude are required fields insofar as an Agency chooses to enter a project location under the set format. The Geo Name ID is required in instances where the location is not exact, such as in the case of a city, as opposed to the exact site of a physical infrastructure. The Location & Activity Description fields are optional. Project longitude and latitude must follow the Decimal Degrees WGS84 format and Agencies are encouraged to use at least four decimal points for greater accuracy. Users may add as many locations as appropriate. Web mapping applications such as OpenStreetMap or GeoNames use this format. Consider using a conversion tool as needed, such as: https://coordinates-converter.com Please see the Geocoding User Guide by clicking here

Location Name Required field	Latitude Required field	Longitude Required field	Geo Name ID Required field if the location is not an exact site	Location Description Optional text field	Activity Description Optional text field
Zem Zem	17.527102	-14.695564			
Demame	17.501246	-14.625869			
Sourour	17.252003	-14.318798			
Ajouer	17.28818	-14.346318			
El Mabrouk 2	17.572689	-14.731836			
Boutilimitt	17.546923	-14.696407			
Chinguetti	20.461645	-12.362244			
Toukoumkount	20.490961	-12.329126			
Tindewaly	20.473167	-12.352099			
Tawaz	20.683978	-12.884158			
Amder	20.542766	-12.944925			
Dhaya	20.653502	-13.007621			
Talhayatt	20.142131	-13.051096			
Loudeye Bodiamoz	20.014362	-13.058954			
Dakhlet Elhel Abdawo	20.045523	-13.063045			
Aoujeft	20.037739	-13.043681			
Aboyra	20.488329	-12.319720			
Toueizikt	20.621173	-13.030973			
Toungade	20.060508	-12.982162			

Akjoujt	19.752136	-14.385979			
Benichab	19.97634	-15.395135			
M'heijératt	19.02943	-16.183086			
Tiwilit	18.885776	-16.183086			
Lemcid	18.688622	-16.13852			
Bellewakh	18.516964	-16.071685			

Please provide any further geo-referenced information and map where the project interventions is taking place as appropriate. *