

Morocco Climate Operation

- Support to the Nationally Determined Contribution Program -

Environmental and Social Systems Assessment

Executive Summary

I. Background

1. This Program is a joint-financing operation with the World Bank's (WB) Program-for-Results (PforR) and the Asian Infrastructure Investment Bank's (AIIB) Results Based Financing (RBF) for Climate Operation – Support to the Nationally Determined Contribution. The key objectives of the Program are to accelerate climate action through better coordination and targeted mechanisms, to preserve climate-sensitive ecosystems through a spatial approach, and to protect groups most exposed to climate impacts. It supports the revitalization of traditional oases and the deployment of nature-based solutions, in line with Morocco's development priorities and the WB and AIIB's strategic frameworks.
2. In April 2023, an Environmental and Social Systems Assessment (ESSA) was conducted in accordance with the World Bank's policy for the PforR financing requirements. The ESSA examined the capacity and adequacy of existing national systems to plan and implement effective measures to manage environmental and social (E&S) risks and impacts under the program and identified additional measures needed to strengthen national systems. The Program Action Plan (PAP) includes recommended actions to address the identified gaps. In addition, public consultations regarding the ESSA of the program were organized in May 2023 and were able to gather various opinions and suggestions that were incorporated into the final version of the evaluation. Some ES actions in the PAP have been started implementation from January 2024.
3. With participation of AIIB in financing, the Program has been re-structured /up-scaled (joint financing between WB and AIIB for some activities and some new activities financed only by AIIB). To ensure that negative ES risks and impacts of the Program continue to be adequately avoided, mitigated, and managed - the additional ESSA was conducted by the WB and AIIB during June-September 2025. As a result, the Addendum to the original ESSA was prepared to cover any additional ES risks and impacts of re-structured/up-scaled activities as well as the new activities under the Program. The ESSA Addendum is being finalized and validated by the WB.
4. The objectives of the additional ESSA are to (i) Assess the progress of the implementation of the recommendations and actions of the PAP of the existing program (Parent Program); (ii) identify relevant legislative and procedural changes since the preparation of the existing program ESSA; (iii) Identify potential new ES risks and impacts of additional financing (all re-structured /up-scaled and new activities); (iv) assess the capacity of newly involved agencies in the Program in assessing and managing of ES risks and impacts of the activities; and (v) recommend measures to strengthen the ES systems and update the ES action plan.

II. Findings of Additional ESSA (Addendum to the Conducted ESSA)

5. The Additional Financing (re-structured /up-scaled and new activities) will significantly amplify the expected results of the Climate Program by contributing to: (i) increasing the budget allocations available to partner implementing agencies in order to strengthen priority interventions; (ii) expand the volume of funding allocated to sub-projects aimed at strengthening the climate resilience of vulnerable ecosystems and improving the availability and use of climate data; (iii) consolidate the technical, operational and environmental capacities of those responsible for implementation, including through support for the structuring of environmental and social monitoring; (iv) strengthen the leverage effect of the Program by attracting additional co-financing and promoting convergence between public partners and climate initiatives; (v) further support non-structural investments such as applied research, territorial coordination, improvement of climate data systems, and outreach to local communities; (vi) reach a significantly higher number of direct and indirect beneficiaries, including rural populations, youth and women, in areas of high climate vulnerability.

6. No changes to the program boundaries are planned, and the categories under the program expenditure framework will be maintained. The geographic and operational boundaries of the program are therefore not changed. On the other hand, some indicators have been broadened in scope to better reflect the diversity of vulnerable ecosystems and to include more targeted communities. This evolution aims to capture the expected results more precisely, while remaining strictly aligned with the existing scope and execution methods.
7. The majority of structuring projects (such as the extension of the state climate network and weather radars, the planting of resilient species over large areas, the rehabilitation of *khettaras* and *seguias*, or the ramp-up of date palm by-product recovery units) raise ES risks that are likely to be substantial. However, these risks are well documented and remain manageable within the framework of existing national systems, especially since the technical design of these projects is carried out and monitored by the relevant implementing agencies. Their impact on land acquisition remains minimal, since it is mainly a question of interventions in the public hydraulic domain or plantations on collective land already mobilized within the framework of agricultural programs.
8. At the same time, non-structuring projects (such as support for agricultural cooperatives, awareness-raising actions for water users, the inclusion of women and young people in user associations, or support for applied climate research in partnership with INRA) do not generate any particular ES risks. On the other hand, they play an essential role in anchoring the sustainability of structuring activities, strengthening local governance and promoting social ownership of the program.
9. The structural activities identified mainly concern localized and targeted interventions for the sustainable management of natural resources (soil and water conservation, erosion control, reforestation, rehabilitation of degraded ecosystems, protection of pastoral rangelands, etc.) in order to strengthen the resilience of rural populations and territories to climate risks. The structural interventions, although bringing tangible benefits for the sustainability of rural territories, are likely to generate limited, predictable and reversible environmental and social impacts, manageable within the framework of national systems and the Environmental and Social Technical Manual (ESMT). The ES risks associated with these structural activities remain broadly similar to those encountered in natural resource management or light development projects. They mainly concern the impacts related to work in natural or rural areas, in particular the management of construction waste, temporary disturbances to ecosystems and landscapes, the risks of local soil and water pollution, the occasional disturbance of biodiversity and habitats, as well as noise and dust pollution generated by the circulation of machinery.
10. In the case of large-area plantations, the risks also relate to inappropriate selection of species, increased pressure on water resources for irrigation, or competition for land with other uses. For water infrastructure (*khettaras*, *seguias*, water points) and rural roads, additional risks include erosion, changes in the hydrological regime, use of local building materials and worker safety.
11. Upgrading units, production workshops and hydroponic units can generate effluents, by-products or specific waste (organic, plastic, liquid effluents), which will need to be managed appropriately.
12. Finally, on the social level, risks related to occupational health and safety (OHS), the workforce, the inclusion of vulnerable groups (young people, women), as well as the one-off acquisition of land or the sharing of water between users may appear. However, these risks are considered to be limited, predictable and reversible, and can be effectively avoided or mitigated through the application of good environmental and social practices, the implementation of environmental and social clauses in contracts, and regular monitoring through the Environmental and Social Technical Manual (ESMT) and the ES focal points of the implementing agencies.
13. To ensure compliance with the WB PPR Policy and that ES risks and impacts are effectively considered and mitigated to acceptable levels, the activities of the above-mentioned projects will continue to be subject to prior screening. In this sense, the MTES developed in the framework of the Parent Program will be updated to integrate the activities of the additional funding.
14. Capacity-building in ES management has been a priority for the Program since the implementation phase. Several training sessions have already been organised by the WB ES specialists, in particular during the supervision missions (May and December 2024 and April 2025), for the benefit of the ES focal points and institutional stakeholders. This mechanism will be expanded within the framework of the Additional Financing, with specific support for the new entities involved and attention paid to the integration of gender, youth and social vulnerabilities dimensions. ES reporting now benefits from a structured framework thanks to the

designation of ES focal points in all implementing agencies and the use of a harmonized framework validated by the PMU. The Additional Funding will support the consolidation of these good practices and allow the harmonization of monitoring formats between the different agencies involved, including those newly mobilized under this joint-financing.

15. Two new institutions join the scheme as new implementing agencies of the Program, include (i) the Directorate of Irrigation and Agricultural Spatial Planning (DIAEA), responsible for the rehabilitation activities of khetaras and seguias, and (ii) the National Institute of Agronomic Research (INRA), involved in applied climate research. DIAEA benefits from solid experience in ES management, acquired through the successful implementation of the recently WB financed project "Large Scale Irrigation Modernization Project". The agency has dedicated ES focal points, already familiar with the requirements of the Environmental and Social Framework (ESF) of the WB. In addition, the agency is already a stakeholder in the World Bank's recent project "Resilient and Sustainable Water in Agriculture", which confirms its institutional capacity and operational experience in managing ES aspects. For INRA, as the agency involves only with climate research, experiences on ES assessment and management by projects are not required to assess.

III. Measures to Strengthen the Environmental and Social Systems

16. The recommendations of the ES Action Plan and the PAP remain relevant, although some updates are needed. Recommended actions to strengthen the program's E&S systems are summarized as follows:

- Designation of ES focal points for entities joining the program;
- Capacity building
- Update of the Environmental and Social Technical Manual and the implementation of an ES reporting system.

17. As part of the additional funding, the MTES will be updated to integrate the new activities, whether structuring (water infrastructure, climate-resilient plantations, extension of the state climate network) or non-structuring (applied research, local governance, awareness-raising). This update consolidates the institutional anchoring of the Program and provides a structured and harmonized framework for the planning, implementation, monitoring, documentation and reporting of environmental and social activities, thus ensuring inter-agency coherence and sustainability of results.

18. Although the environmental and social risks related to the activities of the Climate Program are generally considered to be moderate, the Additional Financing represents a strategic opportunity to strengthen existing mechanisms and sustainably consolidate the ES management system put in place under the parent program. In particular, it makes it possible to better support the ramp-up of the Program, the involvement of new entities, and the introduction of more technical activities (e.g. climate observation systems, traditional hydraulic infrastructures).

19. The additional financing will contribute to the following measures. All these measures will be implemented through the Program ES Technical Manual, under the supervision of the ES focal point of the Program Management Unit.

- Further strengthen the institutional ES management system through training, technical support and harmonized tools;
- Consolidate the dissemination of good ES management practices within the implementing agencies;
- Improve the quality of ES monitoring and evaluation, by integrating qualitative indicators, enhanced documentation, and feedback mechanisms.

20. Based on the results of assessment and consultations, the action plan for the reinforcement actions proposed under the program is described in the table below:

| Action Category | Specific Activities | Responsible Entities | Timeline | Expected Results and Indicators |
|---|--|-------------------------------------|-----------------------------|---|
| E&S Focal Points Designation | Formal appointments in each new agency with clear terms of reference and reporting lines | INRA, DIAEA, ADA | 30 days post-effectiveness | Consolidated list of focal points with contact information and capacity assessment baseline |
| MTES Actualization | Comprehensive update, validation, and dissemination of Environmental and Social | MEF + agencies via E&S focal points | 3 months post-effectiveness | Updated manual available, applied, and annually disseminated with training materials |

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| | Technical Manual incorporating new activities and lessons learned | | | |
| Grievance Mechanism & Community Mobilization | Enhanced engagement plans, complaint channels, women's access mechanisms, and community consultation protocols | All executing agencies | Continuous implementation | Stakeholder engagement activities and complaint mechanisms documented and reported to World Bank quarterly |
| Capacity Building Enhancement | Comprehensive training modules, workshops, monitoring tools, and technical assistance programs | All agencies with E&S specialist support | Throughout program implementation | Enhanced E&S capacities measured through training completion rates, knowledge assessments, and implementation quality |
| Electronic Waste Management | Updated protocols, specific clauses, enhanced reporting, and partnership agreements for proper disposal | MEF, DGM, and partners | Continuous monitoring | Quarterly documentation of consultations, complaints, and disposal activities with quantified waste volumes |
| ANEF Access Restriction Compensation | Application of Decree 1855-01 (modified), enhanced consultations, gender-sensitive approaches, and livelihood restoration | ANEF | Developed pre-construction, valid throughout implementation | Developed training modules, regular consultation sessions, and livelihood monitoring reports |
| Gender and Inclusion Integration | Comprehensive Gender Plans (ANEF, ANDZOA, ADA), gender-sensitive consultations, dedicated activities, and vulnerability assessments | ANEF, ANDZOA, ADA | 6 months post-effectiveness | Gender assessments completed (ANDZOA), Gender Action Plans prepared (ANEF), and inclusion monitoring reports |
| OP 7.50 Verification and Monitoring | Enhanced piezometric monitoring, coordination with Hydraulic Basin Agencies, and international waterway notification protocols | DRPE, MEF, ANDZOA | 6 months post-commencement, then semi-annual | Semi-annual reports on water table quality and levels with trend analysis and mitigation recommendations |