



**The World Bank**

Morocco Sustainable Oasis Ecosystems Management Project (P500402)

@#&OPS~Doctype~OPS^blank@pidaprcoverpage#doctemplate

# Project Information Document (PID)

Appraisal Stage | Date Prepared/Updated: 19-Apr-2024 | Report No: PIDA0121



## BASIC INFORMATION

### A. Basic Project Data

|  |   |  |   |
|--|---|--|---|
| Project Beneficiary(ies)<br>Morocco                        | Region<br>MIDDLE EAST AND NORTH AFRICA  | Operation ID<br>P500402                | Operation Name<br>Morocco Sustainable Oasis Ecosystems Management Project |
| Financing Instrument<br>Investment Project Financing (IPF) | Estimated Appraisal Date<br>18-Apr-2024   | Estimated Approval Date<br>23-May-2024 | Practice Area (Lead)<br>Environment, Natural Resources & the Blue Economy |
| Borrower(s)<br>Ministry of Finance                         | Implementing Agency<br>Agence Nationale pour le Développement des Zones Oasiennes et de l'Arganier (ANDZOA) |  |   |

### Proposed Development Objective(s)

The project development objective (PDO) is to strengthen the integrated oasis ecosystems management for climate resilience in Aoufouss and Akka Oasis and develop a national standard for integrated oasis management in Morocco.

### Components

Component 1: Institutional Strengthening and Sharing of Innovative Oasis Knowledge

Component 2: Restoration of Oasis Ecosystems and Livelihoods

Component 3: Project Management

## PROJECT FINANCING DATA (US\$, Millions)

### Maximizing Finance for Development

Is this an MFD-Enabling Project (MFD-EP)? No

Is this project Private Capital Enabling (PCE)? No

### SUMMARY

|                      |       |
|----------------------|-------|
| Total Operation Cost | 16.30 |
| Total Financing      | 16.30 |



|   |       |
|---|-------|
| Financing Gap   | 0.00  |
| <b>DETAILS</b>  |       |
| <b>Non-World Bank Group Financing</b>                       |       |
| Trust Funds   | 12.00 |
| Global P'ship for Sust. and Resilient Landscapes - PROGREEN | 12.00 |
| Counterpart Funding   | 4.30  |
| National Government   | 4.30  |
| Environmental And Social Risk Classification                |       |
| Substantial   |       |
| Decision  |       |
| The review did authorize the team to appraise and negotiate |       |

## B. Introduction and Context

### Country Context

1. **After post-COVID recovery stalled in 2022, economic growth accelerated once more in 2023.** Economic growth declined from 8 percent in 2021 to 1.3 percent in 2022 due to the collapse of agricultural production, a terms-of-trade shock triggered by the war on Ukraine, and inflation. Real gross domestic product (GDP) growth recovered to 2.9 percent year-on-year in the first semester of 2023, sustained by the improved performance of agricultural output and the solid recovery of tourism. On the demand side, net exports have become the main contributor to growth. Instead, domestic demand (private consumption and investment) is contributing negatively to growth, which can be partly attributed to the inflationary shock.

2. **Inflation declined in 2023, prompting the central bank to pause its tightening cycle.** After peaking at 10.1 percent in February 2023, inflation declined to 4.3 percent in October largely due to lower energy prices and a slowdown of food inflation. Core inflation is also on a downward trend (from 8.5 percent in February to 4.3 percent in September). The central bank responded to the inflationary shock with a 150 basis points cumulative increase of its policy rate to 3 percent, which was left unchanged in June and September given trends in the consumer price index.

3. **Despite an (exogenous) decline in price subsidies, public spending continues to edge upward.** Preliminary data at end October 2023 indicates declining price subsidies (from 2.7 percent of GDP for the same period in 2022 to 1.7 percent of GDP in 2023), but the windfall has not yet reduced overall spending as the government rolls out key reforms, injects liquidity into state-owned entities, and addresses the water crisis. Thus, the budget deficit reached 2.6 percent of GDP, up by 0.3 percent of GDP compared to 2022. Public debt increased by 7.6 percent in nominal terms at end of August 2023 compared to the end of December 2022. The sovereign has retained good access to financial markets, as evidenced by a successful international bond issuance (US\$2.5 billion) in early March 2023.



**4. The current account deficit increased in 2022 but narrowed in 2023.** Due to a surge in commodity prices, the current account deficit reached 3.5 percent of GDP in 2022, up from 2.3 percent of GDP a year before. It narrowed substantially in 2023 thanks to strong tourism and remittances inflows. As of September 2023, foreign exchange reserves provided a solid external liquidity buffer of more than five months of imports.

**5. Growth is expected to firm up further in the medium term.** After expanding by 2.8 percent in 2023, real GDP growth is projected to reach 3.1 percent in 2024, 3.3 percent in 2025, and 3.5 percent in 2026. The current account deficit improvement is expected to revert as more dynamic domestic demand feeds imports. The budget deficit is projected to continue its gradual decline, reaching 3.6 percent of GDP in 2025, assuming ongoing tax reforms and reforms of the system of price subsidies. This would stabilize Morocco's debt ratio to under 70 percent of GDP.

**6. The September 2023 earthquake in Al Haouz was devastating for remote mountain communities but is unlikely to have major macroeconomic impacts.** While the human impact was high, claiming close to 3,000 lives, the earthquake's macroeconomic impact is expected to be modest as the affected areas contribute a small share of Morocco's GDP. The government responded with financial assistance for affected households and an ambitious development plan for the High Atlas provinces. This plan could stimulate more inclusive growth in the medium to long term but, depending on how it is financed, could also place additional pressure on public finances.

**7. Morocco's external resilience has been relatively strong in the face of multiple disturbances such as the pandemic, the war in Ukraine, and the Al Haouz earthquake.** The country has maintained a stable currency, reinforced its external liquidity buffers, maintained good access to international financial markets, and continued to attract large volumes of foreign direct investment. The country has also had remarkable success in tradeable sectors, including the rapid growth of its automotive industry and the consolidation of the Tangier port as a leading logistical hub.

#### Sectoral and Institutional Context

**8. Moroccan oases—recognized as unique ecosystems for their biological, cultural, and architectural diversity—are facing a challenging socioeconomic situation.** Oases are found in the south and southwest of Morocco, and cover about 34 percent of the land area. Four percent of the population live in oases. In 2021, the poverty rate of oasis inhabitants was significantly higher than the national average (16 percent against the national average of 9 percent). Critically, 72 percent of residents in oasis and argan zones (argan vegetation belt is in the west-eastern Morocco, also managed by Agence Nationale pour le Développement des Zones Oasiennes et de l'Arganier (ANDZOA)) lack access to water.

**9. Two third of Moroccan Oases have disappeared over the past century.** About two-thirds of the Moroccan oases have disappeared<sup>6</sup>. The main barriers to sustainable development of oases are: (i) regional imbalances and socioeconomic conditions; (ii) unsustainable land and agriculture management practices, including intensive monoculture; (iii) water scarcity and unregulated water management, including the unregulated digging of artisanal wells and the depletion of water tables in the context of increasing droughts over the past four decades; (iv) weak institutions, low capacities to implement nature-based and geo-enabled oasis management systems, and lack of participatory methods to involve local communities in planning integrated oasis management; (v) overexploitation of existing natural resources; (vi) high levels of gender bias, despite advancements in promoting gender equity; and, (vii) climate change. Regarding climate change, irregular rainfall and deteriorating water quality and quantity contribute to renewable water resources of only 530 cubic meters ( $m^3$ ) per inhabitant per year (national average: 620  $m^3$  per inhabitant per year). Climate change will probably exacerbate wildfires and the risk of disease, including Bayoud, which destroyed 10 million palm trees in a century.<sup>7</sup> Climate change is further expected to reduce agricultural yields, increase poverty, and drive the deterioration of natural resources, prompting urban migration, especially of the youth.



**10. Rationale for selecting two pilot oases: Aoufous and Akka Oasis.** The project focuses on two oases located in different geographic zones: namely intermediate and plain zones (in the Ziz and Rhriss basins for the **Aoufous** valley) and Saharan oases (in the Draâ-Oued Noun basins for the **Akka** region). The specific criteria that were considered in selecting these two oasis include: (i) severity of the degradation of historical oasis's natural capital stock, (ii) Contrasting biophysical and ecological settings, (iii) availability of underpinning studies that can inform the project designs and activities selection (feasibility studies and preliminary engineering designs for the rehabilitation of traditional water infrastructure), (iv) availability of indigenous species that could be re-introduced, (v) existence of joint ANDZOA and other Ministries, Departments and Agencies (MDAs) working committee on the ground, (vi) existence strong community leadership and cooperative groups, and (vii) opportunity for piloting replicable successful models.

**11. Residents of Aoufous and Akka face socioeconomic challenges that are typical to oasis dwellers.** These two oases encompass 24 catchment areas (over 5,127 hectares) and include 37,000 inhabitants.<sup>8</sup> Both areas have high rates of illiteracy (30 percent for Aoufous, 36 percent for Akka) and unemployment (11 percent for Aoufous, 24 percent for Akka), and a low multidimensional local development index (0.65 for Aoufous, 0.66 for Akka), for an average development deficit of 34 percent.

**12. ANDZOA coordinates public action in oasis and argan regions.** The Kingdom of Morocco established ANDZOA in 2010. ANDZOA's mandate is to drive sectoral policies and improve the living conditions of oasis populations by promoting integrated and sustainable oasis management, with a focus on water resource management, agriculture, and eco-tourism. Despite this, the presence of multiple institutions and relatively limited capacities pose challenges to effective oasis management. As part of project preparation, ANDZOA, with the World Bank's assistance, assessed the capacity of the institutions that manage oases at the national and regional levels. The assessment identified a need to build capacity in terms of personnel, skills, and software, and to enhance inter-agency coordination.

**13. A new strategy for developing oasis areas and argan trees for the period leading up to 2030 is being prepared.** To this end, ANDZOA is developing a diagnosis with a roadmap and action plan that includes an evaluation and monitoring system and a communication strategy. This new strategy, which is expected to be approved on November 22, 2024, will form part of the Green Generation Strategy, a government program for the agri-food sector for 2020–2030. The Green Generation Strategy, which was launched in February 2020, focuses on human development and the sustainability of agricultural development.

**14. Important efforts for the preservation, restoration, and rehabilitation of oases are under way by Government and partners in Morocco.** Efforts for the restoration of oasis territories have doubled since 2008. In April 2012, three partnerships agreements were signed for the development of palm trees, saffron, and rose perfume between 2012 and 2020. In May 2023, these partnerships were renewed, for the period 2020-2030.

### C. Proposed Development Objective(s)

The Project development objective is to strengthen the integrated oasis ecosystems management for climate resilience in Aoufous and Akka Oasis and develop a national standard for integrated oasis management in Morocco.

**PDO level indicators**

- Land area under sustainable oasis landscape management practices
- Oasis landscape with same or increased vegetation cover and diversified with local species
- Beneficiaries of job-focused interventions (green jobs, livelihoods and handicrafts etc.,).

**D. Project Description****Component 1: Institutional Strengthening and Sharing of Innovative Oasis Knowledge**

**15. Subcomponent 1.1: Strengthening of the capacity of ANDZOA and other stakeholders.** This sub-component will build institutional and community capacity to promote integrated oasis landscape management and inclusive livelihoods in a changing climate. It will support strengthening the capacity of ANDZOA and other relevant MDAs that are implementing the *Morocco Climate Operation / Support to the Nationally-Determined Contribution (NDC) (P178763)*, by providing technical assistance based on recommendations contained in the institutional capacity assessment and strengthening plan for ANDZOA and other stakeholders. In other words, this project will build the capacity of institutions, such as ANDZOA and others, that are implementing the PforR. It will also build the monitoring, evaluation, and reporting systems of Moroccan institutions to enhance alignment with international best practices, making it the cornerstone for the sustainability of the PforR's achievements. Thus, both the climate PforR (P178763) and this IPF (P500402) are presented as one package. PROGREEN-financed activities will be processed as IPF, as requested by the client.

**16.** Specifically, it will strengthen ANDZOA's capacity to: (i) implement inclusive and participatory approaches when planning and implementing the project, and (ii) monitor and report on progress, especially for the Climate Operation PforR. The subcomponent will also support: (i) the strengthening of capacity for locally led climate action, including implementing an institutional assessment tool and preparing action plans to implement the diagnostic's findings; (ii) the development of a gender strategy for ANDZOA and strengthening of risk management systems; (iii) development of national guidelines for the preparation of gender and climate-sensitive integrated local development plans (ILDPs); and (iv) the development and dissemination of a national framework for integrated oasis management.

**17. Subcomponent 1.2: Innovative solutions geoinformatics platform and integrated local planning and promotion of oasis as part of Morocco's national heritage:** To support *Morocco's National Oasis Strategy*, the project will design, develop, and maintain a geographic information system (GIS) by mapping all Morocco's oases using modern digital geospatial technologies and analytics methods. This tool will build on available World Bank and other open-source data and analytics while modernizing institutions and facilitating information-sharing between stakeholders. Specifically, this subcomponent will support the operationalization of a Geo-Enabled Oasis Knowledge Hub. This subcomponent will embed geospatial data and analytics within institutions by supporting the development of robust yet accessible IT systems and apps backed by cloud analytics, data visualization, dashboards and other interactive modalities. Training and outreach are included to socialize this technology with government, researchers, and community organizations, especially those that work with the youth. The knowledge hub will also: (i) foster further research (in collaboration with local NGOs and academia, in line with the project's Stakeholder Engagement Plan or SEP); (ii) pilot innovative approaches for integrated oasis management; (iii) support awareness to promote oasis as part of Morocco's national heritage; and (iv) support municipalities (*collectivités locales*) with developing local development plans that are gender-responsive, participatory, and climate-resilient.

**Component 2: Restoration of Oasis Ecosystems and Livelihoods**



**18.** **This component will use a participatory process to prioritize climate-resilient investments** in restoration, job creation, and livelihood restoration in a climate-informed manner.

**19. Subcomponent 2.1: Restoration of oasis landscapes and ecosystem services.** This subcomponent will support, among other activities: (i) the use of nature-based solutions (including climate-smart planting and nurturing of palms and local native species); (ii) the protection of oases against floods and sandstorms; (iii) the restoration of soil fertility, reduction of soil erosion, and control of runoff; (iv) the rehabilitation of climate-smart traditional water infrastructure (20 kilometers [km] of *seguias* in Aoufous valley and *khettaras* in Akka); (v) landscape-level investments and community-led climate actions as prioritized in the local ILDP (for example, the upgrade of rural roads or managed aquifer recharge); (vi) investments for community work in restoration activities, with a focus on encouraging women and youth to participate in restoration action plans such as tree planting and knowledge-sharing of traditional uses of oases.

**20. These activities will be implemented by ANDZOA.** The related project operational manual (POM) will include: (i) specifications for the eligibility and selection criteria of subprojects and subproject promoters (based on specific vulnerabilities), as well as the climate resilience and demonstrated benefits of proposed subprojects; and (ii) activities to be financed by the project and the bidding procedures, including technical assistance for the preparation of proposals, submission procedures, and the provision of matching grants.

**21. Subcomponent 2.2: Community resilience and livelihoods restoration.** This subcomponent will improve local livelihoods and enhance the economic, social, and environmental sustainability of the livelihoods of vulnerable groups, especially rural women, and youth. It will do this by supporting innovative solutions for new and existing enterprises. Matching Grants (MG), which will be a one-off, non-reimbursable transfer to project beneficiaries. It is based on a specific project rationale for purposes and on condition that the recipient makes a specified contribution for the same purpose (usually in kind). Under this project, MG will be provided through a competitive bidding process to women's associations/cooperatives or women-led producers' groups as well as by prioritizing individuals or groups who have been historically excluded based on their (often intersectional) identities (gender, age, disability) and income level. It will also provide setup support for cooperatives and post-creation support (for example, entrepreneurship training or product quality certification) to enhance the competitiveness and productivity of existing cooperatives. Economic diversification will focus on both farming and non-farming activities, which are less sensitive to climate impacts. The subcomponent will promote inclusive, climate-resilient livelihoods, natural capital management and productive alliance as well as selected value chains (such as date palm, medicinal and aromatic plants, saffron and roses for perfumes) to improve the incomes of local agricultural producers in a climate resilient manner.

### **Component 3: Project Management**

**22. This component will support overall project management, communication, monitoring, and implementation at the national and regional levels.** It will finance: (i) general operating costs; (ii) the development of monitoring systems and dashboards, including geo-enabled monitoring systems, to track progress and facilitate ongoing learning and scaling; (iii) the improvement of workflow processes to facilitate coordination across agencies at the central and regional levels, including enhancing strategic support to ANDZOA and other implementing entities of the PforR; and (iv) coordination activities to ensure alignment with fiduciary and environment, social, and risk management requirements (such as implementing a Grievance Redress Mechanism or GRM).

**23. This component will also support the development and implementation of a communication strategy and related action plan for targeted oases and the public, as well as knowledge management to improve dialogue and co-**



**learning.** The geo-enabled information system will be used to disseminate nature-based solutions for climate-smart oases restoration and protection. A communication specialist will be recruited to the PIU to execute these tasks.

| Legal Operational Policies                  | Triggered? |
|---|------------|
| Projects on International Waterways OP 7.50 | Yes        |
| Projects in Disputed Area OP 7.60           | No         |

#### Summary of Screening of Environmental and Social Risks and Impacts

**24. The overall rating of environmental risk is Substantial.** Given the nature of the activities and ecosystems involved in the project, which are not overly complex, the environmental and social and impacts are deemed Substantial. The effects of the project on areas of high biodiversity value or sensitivity, such as traditional oases, are expected to be lower than High risk projects. There is the potential for indirect and cumulative impacts, but these are likely to be less severe (specifically on water resources) and can be avoided or mitigated relative to High or other Substantial risk projects. According to rapid screening using the Integrated Biodiversity Assessment Tool (IBAT), the oases of Aoufous and Akka are sensitive areas due to the presence of species of conservation concern 50 kilometers from the targeted oases. Component 2 is expected to have limited adverse impacts during the construction of small hydraulic and/or access infrastructure, which may present risks or impacts linked to the generation of waste including hazardous waste, air emissions, and noise.

**25. The project's social risk rating is Moderate,** with most risks emanating from the second component, focused on the revitalization of oasis ecosystems and the enhancement of local livelihoods. Specifically, the rehabilitation of climate-resilient traditional water infrastructure and the improvement of rural roads have the potential to spark social tensions due to issues like temporary limitations on land and water access and usage, occupational health and safety concerns, as well as minor, land acquisition. Nevertheless, these risks are regarded as manageable, particularly in light of the comprehensive stakeholder consultations that have been conducted. The ongoing meaningful consultations and a well-established grievance redress mechanism are expected to further mitigate these concerns. Additionally, careful attention is being paid to the eligibility and selection criteria for bidding processes and sub-projects to prevent the exclusion of groups with higher vulnerabilities and lower incomes, including people with disabilities, the elderly, and women in Not in Education, Employment or Training (NEET), and to avoid elite capture—a risk that was identified during field visits—to ensure the distribution of projects benefits and to promote inclusivity, with a focus on the enhancement of women's roles within the oases. The institutional capacity building outlined in the first component will equip responsible authorities with the necessary training and tools for informed decision-making regarding the selection of subprojects. Effective communication of project activities and plans to the affected stakeholders is crucial, as is the creation of a robust feedback mechanism to ensure prompt access to necessary resources and services. Lastly, with the ANDZOA's plan to augment its workforce by recruiting civil servants, consultants, contracted personnel, and potentially community and primary supply workers, labor-related risks are foreseen but are expected to be minimal across components one through three.

#### E. Implementation



26. ANDZOA will be responsible and accountable for implementing the operation and for coordinating and supervising the work of regional offices and implementing entities. They will be supported by a consultancy firm embedded in the PIU. Two regional implementation units will be established in ANDZOA's Aoufous and Akka offices to strengthen field implementation capacity and facilitate institutional coordination in the targeted oases. The Project Operational Manual (POM) will describe implementation and M&E arrangements, including Financial Management and procurement procedures and Environmental and Social Framework instruments, and will provide terms of references (ToRs) for experts.

## CONTACT POINT

### World Bank

Amos Abu  
Senior Natural Resources Management Specialist

Kimberly Vilar  
Senior Social Development Specialist

### Borrower/Client/Recipient

**Ministry of Finance**  
Abdelmajid Mellouki  
Coordonnateur des Relations avec le Groupe de la Banque mondiale  
[m.mellouki@tresor.finances.gov.ma](mailto:m.mellouki@tresor.finances.gov.ma)

### Implementing Agencies

**Agence Nationale pour le Développement des Zones Oasiennes et de l'Arganier (ANDZOA)**  
Ahmed Amrani  
Chef de division stratégie & partenariats  
[felusamrani@andzoa.ma](mailto:felusamrani@andzoa.ma)

## FOR MORE INFORMATION CONTACT

The World Bank  
1818 H Street, NW  
Washington, D.C. 20433  
Telephone: (202) 473-1000  
Web: <http://www.worldbank.org/projects>

## APPROVAL



|                      |                          |
|----------------------|--------------------------|
| Task Team Leader(s): | Amos Abu, Kimberly Vilar |
|----------------------|--------------------------|

**Approved By**

|                           |              |             |
|---------------------------|--------------|-------------|
| Practice Manager/Manager: | Maria Sarraf | 08-Feb-2024 |
| Country Director:         | Mouna Hamden | 19-Apr-2024 |