Public Disclosure Authorized

Program Information Document (PID)

Concept Stage | Date Prepared/Updated: 12-Jul-2022 | Report No: PIDC266221

BASIC INFORMATION

A. Basic Program Data

Country	Project ID	Parent Project ID (if any)	Program Name
Morocco	P178763		Morocco Climate Operation / Support to NDC
Region	**Estimated Appraisal Date**	**Estimated Board Date**	**Does this operation have an IPF component?**
MIDDLE EAST AND NORTH AFRICA	12-Dec-2022	15-Feb-2023	No
Financing Instrument	**Borrower(s)**	**Implementing Agency**	**Practice Area (Lead)**
Program-for-Results Financing	Ministry of Economy and Finance	ANDZOA (Agence Nationale de Développement des Zones Oasiennes et Arganier), DGM (Direction Générale de la Météorologie), Direction Generale des Collectivités Territoriales, Ministry of Agriculture, Ministry of Energy Transition and Sustainable Development, Ministry of Industry, National Forest Agency (ANEF)	Environment, Natural Resources & the Blue Economy

Proposed Program Development Objective(s)

The Objective of the operation is to mainstream climate considerations into public finance management and implement a selected number of NDC commitments contributing to resilient and low-carbon rural areas and cities.

COST & FINANCING

SUMMARY (USD Millions)

Government program Cost	1,000.00
Total Operation Cost	200.00
Total Program Cost	200.00
Total Financing	200.00

Financing Gap	0.00

FINANCING (USD Millions)

Total World Bank Group Financing	200.00
World Bank Lending	200.00

Concept Review Decision

The review did authorize the preparation to continue

B. Introduction and Context

Country Context

Morocco has embarked on a new development model with ambitious goals. The structural reforms launched two decades ago gave way to a sustained period of economic growth and poverty reduction that is unparalleled in the country's contemporary history. However, even before the abrupt recession triggered by the pandemic, this model began to exhibit signs of exhaustion, prompting the launch of an inclusive national debate on how to reinvigorate Morocco's path towards faster economic growth and social inclusion. This resulted in the New Development Model (NDM), which sets ambitious development targets with a 2035 horizon, including doubling per capita GDP levels. To get there, Morocco will need to boost private investment, strengthen productivity growth, and foster human capital accumulation, while preparing to mitigate the risks and seize the opportunities associated with climate change, which is expected to have major impacts on the country's development trajectory.

Climate-related shocks are a major source of macroeconomic volatility in Morocco. Real GDP contracted by 7.2 percent in 2020, followed by a rebound in 2021 (7.9 percent growth rate), enough to recover the output losses undergone during the first year of the pandemic but not to place the economy back to pre-pandemic trends. By the end of 2021, however, this recovery began to lose steam due to the global slowdown and the commodity price shock triggered by the war in Ukraine. As a result, growth is expected to slow to 1.3 percent in 2022. The swings exhibited by the Moroccan economy in recent years have been amplified by a succession of droughts (three in the last four years). This evidences a structural feature of the Moroccan economy: agricultural value added, and hence overall GDP growth, continues to be highly correlated with rainfall levels (Figures 1 to 3). Given that droughts are becoming more frequent and extreme, the Moroccan economy could also become more volatile in the context of climate change.

Climate change would most adversely impact vulnerable groups both in rural areas and urban centers. Poor households tend to be disproportionally exposed to climate shocks, including droughts and floods but also climate stressors (such as

water scarcity and sea-level rise). They are also the ones that face the most challenges to recover from shocks. Given their relatively low endowment in human capital, these groups may also be the ones that would struggle the most to adjust to climate interventions (such as carbon pricing, restriction in water access...). Going forward, climate change could intensify migration to urban centers, and the Groundswell 2.0 report projects that up to 1.9 million Moroccans (representing 5.4 percent of the total population) could migrate out of rural areas by 2050. Climate migrants tend to settle in poorer urban areas, often in peripheries that have a constrained access to services and mobility, and which are more exposed to the effects of floods and extreme heatwaves.

Figure 1: Cereal production and rainfall

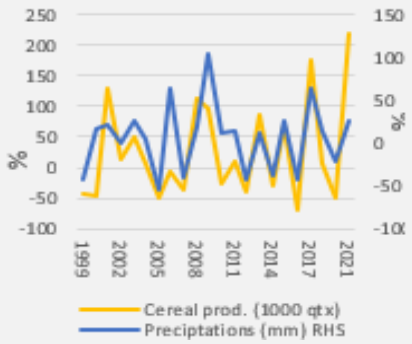


Figure 2: Agriculture Value Added and rainfall

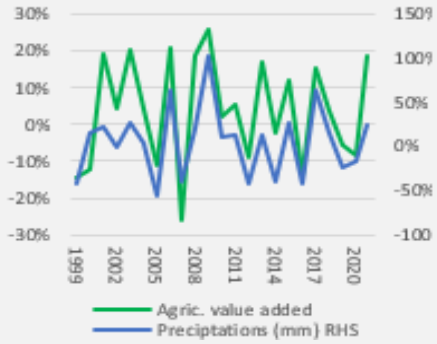
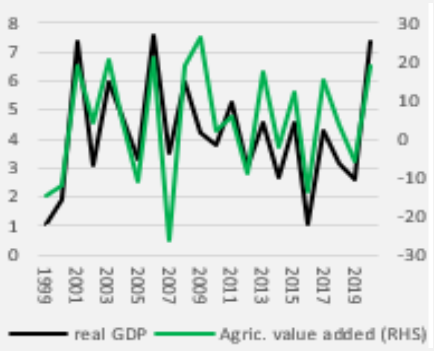


Figure 3: Agriculture Value Added and GDP



Source: Authors' calculations

Decarbonization could bring significant opportunities to the Moroccan economy. Morocco is a small emitter (0.2 of global emissions) that is particularly well placed to reap the economic benefits that could emanate from the global decarbonization agenda. Its economy is closely integrated with the European Union, which is among the regional blocks that has embraced more ambitious climate action targets. In this context, decarbonizing the Moroccan economy could be a key precondition to maintain and expand market share in Europe, and to continue attracting FDI. Moreover, Morocco has a large renewable energy potential (solar and wind), the realization of which may be facilitated by rapid and cost-effective technological change. Developing renewable energy sources would also help to substitute imported hydrocarbons, the reliance on which constitutes another important macroeconomic vulnerability.

Massive investments would be required for Morocco to transition towards a resilient and net zero pathway. According to the recently completed CCDR, the investments required to decarbonize the Moroccan economy while increasing its resilience to droughts, water scarcity and floods, would amount to USD192 billion for the 2022-2050 period (USD67.9 billion in present value terms). The recent string of adverse shocks has significantly reduced fiscal space (the debt to GDP ratio has increased from 60.3 percent of GDP in 2019 to about 68.9 percent of GDP), implying that much of this effort will have to be shouldered by the private sector in order not to challenge the sustainability of public finances.

Sectoral (or multi-sectoral) and Institutional Context of the Program

Morocco's Nationally-Determined Contribution (NDC) sets a renewed ambition on climate action both on adaptation and mitigation fronts. Ahead of the CoP-26 in Glasgow in November 2021, Morocco put forward a revised NDC, with a renewed ambition. The revised NDC confirms that adaptation and resilience are a high priority for the Kingdom, with an expansion of the scope of activities and a more comprehensive approach. The adaptation objectives defined in the NDC are further

developed in the National Strategic Adaptation Plan (NSAP 2020-2030) adopted in January 2022, setting a concerted and inclusive framework to support adaptation planning and priority actions to strengthen population and territory resilience to climate change. In February 2021, Morocco also launched a 2020-2030 National Disaster Risk Management Strategy, building on the Ministry of Interior efforts on Disaster Risk Mitigation (DRM) over the past decade. The revised NDC has also set ambitious target in terms of decarbonization. Despite having doubled over two past decades, Morocco's GHG emissions remain comparatively small, representing only 0.2 percent of global emissions.[1] That said, the Kingdom's NDC aims at a 45.5 percent reduction of its GHG emissions by 2030.[2] According to the Climate Action Tracker, Morocco's climate targets and policies as "Almost sufficient" and that the targets set under its unconditional commitment meet its fair-share contribution to the Paris Agreement.[3]

Morocco is one of the most water-scarce countries in the world. Rising temperatures and more erratic rainfall, have reduced river flows and increased evaporation and siltation of storage dams, leading to a 20 percent reduction in overall water resources in the last 30 years. With about 620 m^3 of available renewable water per person per year, Morocco is considered a situation of structural water stress (below 1,000 m^3), fast approaching the absolute water scarcity threshold of 500 m^3 per person per year.[4] Morocco in a situation of structural water stress: Morocco ranks 64th among 181 countries in the 2019 ND-GAIN Index.[5]

Droughts and water scarcity exacerbate vulnerability in rural areas, with significant social consequences. Thanks to massive infrastructure investments in dams and modernized irrigation system, the agriculture sector has overall become more resilient to droughts over the past decades.[6] However not enough to compensate increasing water scarcity.[7] Also, rainfed agriculture, representing 80 percent of agricultural lands (*bour*) on which depends a large share of rural workforce, is still highly and increasingly vulnerable to droughts. Cereals, and in particular wheat, the most important rainfed crop (both in terms of value and of relevance for food security), are particularly vulnerable to rainfalls shocks with large swing in production based on rainfalls patterns.[8] Only 17 percent of agricultural areas are insured against climate risks and access for the small farmers is below 3 percent. The increasing incidence and severity of droughts, combined with the decline in water availability have become a major driver of vulnerability in rural areas, with risks of income losses, asset depletions, malnutrition and eventually migration.[9]

Moroccan cities play a central role in combatting climate, both on mitigation and adaptation fronts. On one side urban centers are also adversely impacted by climate-induced events. Morocco is particularly prone to floods: 20 major events

[1] Morocco's GHG emissions increased from 44.6 to 91.2 Mt CO2 eq. between 2000 and 2019
[2] Under the revised NDC, 18.3 percent of this target is unconditional, and the remaining 27.2 percent are conditional to international assistance.
[3] This indicates that Morocco's climate policies and commitments are almost consistent with the Paris Agreement's 1.5°Celsius temperature limit and could reach consistency with moderate improvements
[4] This is a drop from 2,560 m^3 in 1960s, resulting from a combination of growing demand pushed by demographic growth and economic development and declining water inflows.
[5] The ND-GAIN Index (URL: https://gain.nd.edu/our-work/country-index/) calculates a country's vulnerability to climate change and other global challenges as well as their readiness to improve resilience: the lower the ranking, the highest the level of vulnerability.
[6] While representing only 20 percent of the agricultural lands, irrigated agriculture contributes to more than half of total agricultural value added, which can surpass 70 percent in a dry year. Source: Social Accounting Matrix, 2020.
[7] The infrastructure-model has shown its limit as could be recently seen last February, when in the midst of yet another severe drought, the overall filling rate of the main dams has hit a historical low of 32.8 percent of the total capacity (with some of the dams below 10 percent).
[8] The coefficient of yield variation for wheat in Morocco reached 0.34 between 2000 and 2020, against 0.23 in Tunisia, 0.18 in Algeria and Spain, 0.11 in France and 0.06 in Turkey (based on FAOSTAT data). The coefficient of yield variation is the standard deviation of a given crop expressed in volumes divided over its mean. Such fluctuations are linked to the level and temporal distribution of precipitations across the agricultural season.
[9] Up to 1.9 million Moroccans (representing 5.4 percent of the total population) could migrate out of rural areas by 2050 (Groundswell 2.0 report)

have been registered between 2000 and 2021,[10] causing average direct losses estimated at US$450 million per year.[11] The hazard and vulnerability maps developed for various cities in Morocco suggest that riskier areas tend to concentrate in poorer neighborhoods. Heat waves are also expecting to increase (in both intensity and frequency) and even more so in urban areas, resulting in a greater number of people at risk of heat-related medical conditions. The elderly, children, the chronically ill, the socially isolated and at-risk occupational groups are particularly vulnerable to heat-related conditions.[12] Mitigating floods and heatwave impact on urban populations will be key to both climate adaptation and prevention. On the other side, urban centers represent 80 percent of the GHG emissions in Morocco. Overall, the energy efficiency is lagging behind and particularly relevant for urban areas, with stagnant energy intensity for the last 10 years.[13] Potential for improvements in energy efficiency exists in many sectors: buildings, industry, public lighting, and mostly relevant for urban centers but it has not been reaped yet. In addition, deploying EE solutions has the potential to create new jobs.[14]

Implementing the NDC requires multi-sector and multi-level coordination. Most of the ministries at the central level are in one way or another involved in climate action.[15] The Ministry in charge of Environment is designated as the national focal point for coordinating the climate change agenda in Morocco, including leading the preparation of the national plans and strategies related to climate change (e.g. National Climate Plan, National Adaptation Plan, NDCs, Low-carbon Strategy, etc.), and preparing the national communication to the UNFCCC. Most line ministries have embedded climate change actions as part of their mandate. Some ministries, as well as some state-owned enterprises (SOE) have prepared sectoral climate plans. In some sectors, Morocco has initiated climate action for more than 15 years with emblematic programs, e.g. climate-smart agriculture, renewable energy production.[16] While the sector-specific approach to climate change has yielded impact over the past decade, it will not suffice to put forward a comprehensive and forceful response to climate challenges in Morocco, which call for an integrated approach, to ensure (i) NDC commitments are financed; (ii) line ministries coordinate their climate-related interventions to build synergies and foster public spending efficiency; (iii) central, Local Governments (LGs, both regional and municipal levels) integrate their investments at territorial level as LGs have *de jure* competences on sectors highly relevant to climate change mitigation and adaptation[17] and the integration of multi-year public investment planning[18] is *de facto* limited. Finally, decisions-makers would need more granular weather data systems to better informed policy making.

[10] Source: EM-DAT, CRED / UC Louvain, Brussels, Belgium – www.emdat.be (D. Guha-Sapir)
[11] Source: Morocco Natural Hazard Probabilistic Assessment.
[12] Under a high emissions scenario (RCP 8.5), heat-related deaths in the elderly (65+ years) are projected to increase to almost 50 deaths per 100,000 by the 2080s compared to the estimated baseline of just under 5 deaths per 100,000 annually between 1961 and 1990. (Morocco Climate Risk Profile)
[13] RISE is a set of 31 indicators distributed among three pillars: access to electricity (Morocco score 100/100), renewable energy (Morocco scores 71/100) and energy efficiency (Morocco scores 60). Source: RISE report, December 2020
[14] While not restricted to EE, a recent World Bank study shows that the investments associated with the energy transition up to 2030 could create an estimated 28,000 net jobs per year, which is 9 percent of the 300,000 annual jobs shortfall in Morocco. The estimation is based on the Clean Energy Employment Assessment Tool developed under the World Bank's Disruptive Energy Transition and the Opportunities for Job Creation in the Middle East and North Africa study.
[15] Source: Climate Change Institutional Assessment (CCIA) was conducted as part of the preparation of the CCDR, with the delivery of a background note "Institutions and Governance for Climate Action in Morocco".
[16] The *Plan Maroc Vert* (PMV) that has contributed to position Morocco as one of the worldwide champions in climate-smart agriculture, on which the Green Generation Strategy, launched in 2020, is building on. On the energy side, the Kingdom has developed large renewable energy plants as public-private partnerships, including innovative concentrated solar power (CSP) technology with storage
[17] Regional governments competences cover inter-municipal transport and natural resource management / environment, all relevant to climate change. Municipal governments are responsible inter alia for waste and sanitation, urban transport, water/electricity distribution, green public spaces.
[18] Regional governments have developed Territorial Development Strategy (SRAT, with 15 years horizon), Regional Development Plan (PDR, once per election mandate of 5-years), then translated into a State-Region Agreement (5-year, *Contrat Programme Etat-Region*) and annual budgets. Regional

Relationship to CAS/CPF

The proposed operation directly supports the third pillar of the World Bank Group's (WBG) Country Partnership Framework (CPF) (2019-2024) for Morocco.[19] The operation is fully aligned with objectives #10: "enhance adaptation to climate change and resilience to natural disasters (NDC implementation)" on the third pillar "Promoting Inclusive and Resilient Territorial Development". By strengthening Morocco's capacity to cope with the challenges posed by climate change and seize the opportunities of the transition to a more sustainable Morocco, this operation could also indirectly contribute to meet the overarching objective of the CPF, which is to "contribute to social cohesion by improving the conditions for job creation and reducing social and territorial disparities".

The operation is also consistent with the WB Climate Change Action Plan (2021-2025)[20] as well as the Roadmap for Climate Action in MENA (2021-2025)[21]. The Program supports the GoM in implementing its NDC, through a selection of key activities contributing to both mitigation and adaption (with many activities delivering on both) and by mainstreaming climate considerations in public policies through the "whole of government" approach. It aligns with the four transformational pillars prioritized under the Roadmap for Climate Action in MENA (2021-2025), namely the (i) food systems, water security and resilient natural capital, (ii) energy transition and low carbon mobility, (iii) climate-smart cities and resilient coastal economies and (iv) sustainable finance for climate action. The PforR will finance mitigation and adaptation measures such as the creation of marine protected areas (MPAs), strengthening research on marine resources, and coastal restoration and reforestation. Building on the recently completed Climate and Development Report (CCDR) for Morocco, this operation complements other World Bank ongoing and planned operations that also aligns with the CCDR recommendations.

The operation also directly supports the Kingdom's recovery post pandemic COVID-19, in line with the WBG strategy to build back better through the promotion of a Green, Resilient and Inclusive (GRI) growth. It contributes to key elements of the MENA Regional Strategy[22] and the WBG Environment Strategy 2012-2022.[23] It is also expected to create jobs and generate opportunities in rural areas, with a focus on vulnerable groups: in particular, the operation will address critical gaps in alignment with the WB MENA Regional Gender Action Plan (FY18-23).

Rationale for Bank Engagement and Choice of Financing Instrument

This new operation results from a long-standing dialogue and engagement on climate change. Over the past years, the World Bank has supported the climate action in Morocco through a series of lending operations to some key programs, such as the *Plan Maroc Vert* in Agriculture (and now the Green Generation) as well as the Renewable Energy Noor operation. Most of the lending operations have been designed to yield substantive climate benefits.[24] In addition, the World Bank has sustained a deep dialogue on climate change, based on robust analytical work. The Climate and Development Report (CCDR) recently completed, provides a very in-depth analysis of the nexus between climate and

governments are also currently developing climate action plan. Municipalities have municipal development plan (PDC) translated in annual action plans (PAC, including a list of annual investment projects).

[19] Report No. 131039 discussed by the Executive Board of Directors on February 19, 2019

[20] World Bank (2021) Climate Change Action Plan (2021-2025). Available at: https://openknowledge.worldbank.org/handle/10986/35799

[21] World Bank (2022) Roadmap for Climate Action in MENA (2021-2025). Available at https://thedocs.worldbank.org/en/doc/6f868d4a875db3ef23ef1dc747fcf2ca-0280012022/original/MENA-Roadmap-Final-01-20.pdf

[22] World Bank (2021) Middle East and North Africa: Looking Forward. Available at: https://www.worldbank.org/en/region/mena/publication/middle-east-and-north-africa-looking-forward

[23] World Bank (2012) Toward a green, clean, and resilient world for all: a World Bank Group environment strategy 2012-2022

[24] As captured by the climate change co-benefits.

development and lays the foundations for our upcoming engagement in Morocco. This operation directly builds on the CCDR.

The PforR is deemed the most appropriate instrument for this operation based on the following considerations:

- **Support the Kingdom's commitments to climate action.** The revised NDC sets a list of priority actions that the Government is committed to implement as a contribution to the fight against climate change. The PforR instrument will help deliver on a selected number of priority actions (both on mitigation and adaptation) under the NDC. The operation will also strengthen the Government's capacity to monitor and report on progress on these actions, which will contribute to the overall effort to regularly report back to the international community (as part of its commitment under the NDC).
- **Strengthen a coordinated approach for climate action**. The operation will provide specific incentives for inter-sectoral coordination and will therefore enhance the overall government institutional capacity to deliver on its NDC. Through the "whole of Government" it will develop tools (mainly Public Finance Management PFM tools) to mainstream climate considerations in public policy. Doing so, the operation will help the Kingdom deliver on the Helsinki principles of the Coalition of Finance Ministers for Climate Change. Overall, the operation will provide a robust platform to support the Government of Morocco's in its climate action. It would re-affirm the strong stance that Morocco has traditionally taken on climate fight and would help position itself as a climate champion.
- **Strengthen country system.** The PforR instrument offers the opportunity to strengthen the existing country systems: the budget planning system and environmental and social (E&S) management and fiduciary systems. The proposed Program will expose a set of government departments to international social and environmental standards what will represent an improvement in their systems.

C. Program Development Objective(s) (PDO) and PDO Level Results Indicators

Program Development Objective(s)

The Objective of the operation is to mainstream climate considerations into public finance management and implement a selected number of NDC commitments contributing to resilient and low-carbon rural areas and cities.

PDO Level Results Indicators

Below are tentative PDO indicators that will be refined during the preparation of the operation:

Indicator 1: Increase in the share of public investment budget for climate action (in percentage)

Indicator 2: Number of small and vulnerable farmers who have adopted climate-resilient practices[25] (Number)

Indicator 3: Areas of vulnerable ecosystems under climate-resilient land uses (hectares)

Indicator 4: Net GHG emission reduction (in tons of CO2 eq.)[26]

[25] Climate-resilient practices, as well as climate-resilient land-uses, will be described in the results framework.
[26] This indicator would capture both the avoided emissions (energy efficiency programs) and the carbon sequestered through reforestation, climate-smart practices …

D. Program Description

PforR Program Boundary

The proposed PforR operation will support the implementation of a limited number of actions prioritized under the 2021 NDC. A first screening exercise was carried out during the identification phase, applying the following filters (i) importance in the NDC commitments, (ii) alignment with the priorities identified as part of the CCDR recently finalized (iii) persistence of market failures that justify the need for public interventions[27] and (iv) complementarities with the World Bank ongoing and planned operations as well as engagement from other donors. This first exercise identified two main areas: (i) enhancing the resilience and inclusion in vulnerable rural areas (RA-2) and (ii) promote low-carbon and resilient cities (RA-3). In addition, an overarching results area (RA-1) has been included: it consists in tackling coordination and information failure to support a more integrated approach to Climate Change and improve the implementation of the overall NDC. The tools and activities under RA-1 would inherently support the implementation of the two other Results Areas.

The below section presents the main outcomes of the identification mission, listing the most promising areas of engagement. However, this should be looked at as a "long list" and it was agreed with the MEF that the prioritization and selection process would be finetuned as part of the preparation process (using filters that would be jointly decided with the MEF).

Results Area 1: Support a "Whole of Government" approach to Climate Change

Grasping the complexity that climate change poses to the Moroccan development requires a "whole of government" approach. The multi-faceted challenge that climate change poses to the Moroccan development cannot be tackled through sectoral lens and requires a "whole of government" approach, that would allow to systematically include climate consideration in policy-making in an integrated and coordinated way. The Kingdom has recently joined the Coalition of Finance Ministers for Climate Change and as such, and is committed to adhere to the "Helsinki Principles" and to use fiscal planning, budgeting, public investment management and procurement practices as powerful instruments to accelerate the transition towards a low-carbon and climate resilient economy. In addition, it is acknowledged that effective climate actions/policies need to be supported by a robust and reliable climate information system.

This Result Area will address these two dimensions: (i) mainstreaming climate considerations into PFMs and (ii) strengthening the climate data system, as there are considered two fundamental elements to build a climate-informed development path and put the Kingdom on a resilient and low-carbon path.

Climate-sensitive PFM. This sub-component would have the main objective of mainstreaming climate dimensions/considerations into public finance instruments and tools and thus support the implementation of the Helsinki principles. The preparation of this sub-component will be jointly carried out with the French Agency of Development (or AFD) which is planning to also prepare a parallel operation (budgetary support). This sub-component builds on the

[27] While Morocco has set a high ambition in terms of Renewable Energy deployment in its updated NDC, this criterion dismissed its inclusion in this operation as the Government has a strong position that this agenda (as well as the development of Green Hydrogen) should be exclusively shouldered by private sector.

recommendations from the Policy Note "Embarking on a Green Transition", shared with the Government in October 2021 as well as on a series of ongoing technical assistances (notably on climate-sensitive budget and environmental fiscality).

Potential areas of engagement prioritized during the identification mission are: (i) preparation of a Green Taxonomy, (ii) Climate-sensitive public investment management (PIM), (iii) Green Procurement.

Climate data system. Robust weather and climate information systems and services are the foundation for an effective climate action to enhance preparedness for extreme events. Reliable weather and climate data is a global good essential for decision-making by public and private actors and fostering climate action (and finance) by reducing uncertainty. Potential areas of engagement are: (i) Meteorological data, (ii) Integration of data systems (cf. incl Hydromet system) and (iii) Modeling capacities for climate policies

Results Area 2: Enhance Resilience and Inclusion in Vulnerable Rural Areas

Climate Change represents a major threat for rural vulnerable groups. As highlighted in the CCDR, vulnerable groups tend to be the most exposed to climate events and the less equipped to recover from these shocks. It is particularly true in the rural areas, that concentrate the large share of the population under the poverty line[28], relying on highly climate-sensitive activities (rainfed agriculture). Enhancing the resilience of these groups as well as the resilience of the ecosystems upon which they depend is core to the development and inclusion agenda in Morocco.

The activities suggested under this Results Area have been pre-identified based on the analytical work conducted as part of the Climate and Development Diagnosis and in line with the priorities defined under the Adaptation Chapter of the NDC. The long list discussed the identification mission is presented below.

Support to vulnerable farmers and agricultural workers: (i) "Solidarity Agriculture" program (part of the Green Generation Strategy), (ii) roll out of the new Social Protection system and (iii) expansion of the agriculture insurance schemes for small farmers.

Innovation in Agriculture: (i) Genetic improvement of seeds, (ii) R&D on no-tillage practices and (iii) extension services to farmers.

Rehabilitation of Oasis, with a focus on the rehabilitation project in the great valley of Aoufouss.

Forest Program: (i) reforestation for watershed protection and (ii) Forest Fire management.

Results Area 3: Promote Low-Carbon and Resilient Cities

Moroccan cities play a central role in combatting climate, both on mitigation and adaptation fronts. On one side, cities contribute to GHG emitters as they concentrate a large share of population[29] and economic activities[30]. On the other side, urban areas can be particularly vulnerable to climate change due to extensive impervious cover, and a concentration of built structures that intensify impacts from extreme weather events such as heat waves and floods. Moroccan cities are largely concentrated along the coastline (with more than 65 percent of the population and 90 percent of industry), which makes them particularly vulnerable to sea level rise. Urban residents are at risk from a variety of climate stressors, which

[28] 79 percent of Morocco's poor live in rural areas.
[29] Today 60 percent of Moroccans already reside in cities, as opposed to 35 percent in 1970. By 2050, it is projected that over 70 percent of the country's population will be urban.
[30] Cities are estimated to account for about 75 percent of the country's GDP

can cause both physical and mental harm. The elderly, children, the chronically ill, the socially isolated and at-risk occupational groups are particularly vulnerable to heat-related conditions.[31]

Under this Result Area, a limited set of activities has been discussed during the identification mission, based on the filters mentioned above, that aim at putting Moroccan cities on a low-carbon and resilient path.[32]

Energy Efficiency (EE) in: (i) street lighting (National Street Lighting Program - *Programme National de l'Eclairage Public*, PNEP), (ii) industrial sector and (iii) public buildings

Urban and peri-urban Forests

E. Initial Environmental and Social Screening

To inform the preparation of this PforR, an Environmental and Social System Assessment (ESSA) will be conducted by the Bank to identify potential environmental and social impacts of the Program. The ESSA will examine the risks entailed by the Program activities and assess all parties' (involved in the implementation of the Program) environmental and social management systems, with a view to determining compliance with the provisions of the PforR Bank Policy and Bank Directive and suggesting risk mitigation measures to include within the Program. The results of the ESSA will inform program design and key measures to improve E&S risk management will be included in the Program Action Plan and/or in the results framework.

The preliminary assessment and available information during identification suggests that the proposed operation is compliant with PforR Bank Policy and Bank Directives. Even though the final program boundaries are not yet decided upon, the program is expected to generate significant environmental and social significant positive impacts in the country. While finalizing the program boundaries, the team will deepen the screening to ensure that any investment that might involve significant or major environmental and social risks be excluded from the scope of the program to comply with the PforR policy requirements.

Potential negative, specific or cumulative environmental and social impacts associated with the Program activities are considered Moderate. The preliminary assessment points to the following issues: (i) potential increase in use of pesticides, (ii) potential increase in waste generation, (iii) unlikely significant adverse impacts on natural habitats and physical cultural resources, (iv) unlikely physical population displacement is likely to occur and (v) potential limited land acquisition is expected (for new observation stations).

[31] Under a high emissions scenario (RCP 8.5), heat-related deaths in the elderly (65+ years) are projected to increase to almost 50 deaths per 100,000 by the 2080s compared to the estimated baseline of just under 5 deaths per 100,000 annually between 1961 and 1990. Source: World Bank Group, 2021. Morocco Climate Country Risk Profile.

[32] The World Bank has a large engagement at the municipal level (ongoing and planned), notably on urban transport, disaster risk management and solid waste management. Applying the "complementarity" filter mentioned above, these areas were not considered under this operation despite their significant contribute to the climate agenda of the cities.

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