



# Project Information Document (PID)

Concept Stage | Date Prepared/Updated: 24-Apr-2024 | Report No: PIDC35458

## BASIC INFORMATION



**A. Basic Project Data**

Project Beneficiary(ies) Egypt, Arab Republic of	Operation ID P180480	Operation Name Climate Resilient Agri-Food Transformation Project	
Region MIDDLE EAST AND NORTH AFRICA	Estimated Appraisal Date 13-May-2024	Estimated Approval Date 01-Jul-2024	Practice Area (Lead) Agriculture and Food
Financing Instrument Investment Project Financing (IPF)	Borrower(s) Ministry of International Cooperation	Implementing Agency Ministry of Water Resources and Irrigation, The Ministry of Environment , Ministry of Agriculture and Land Reclamation	

**Proposed Development Objective(s)**

To foster the adoption of CSA technologies and practices in the project area and to strengthen the nation-wide agriculture information system and early warning services

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

**Maximizing Finance for Development**

Is this an MFD-Enabling Project (MFD-EP)? Yes

Is this project Private Capital Enabling (PCE)? Yes

**SUMMARY**

<b>Total Operation Cost</b>	<b>250.00</b>
<b>Total Financing</b>	<b>250.00</b>
<b>of which IBRD/IDA</b>	<b>250.00</b>
<b>Financing Gap</b>	<b>0.00</b>

**DETAILS**

**World Bank Group Financing**

International Bank for Reconstruction and Development (IBRD)	250.00
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Environmental and Social Risk Classification

Moderate

Concept Review Decision

The review did authorize the preparation to continue

## B. Introduction and Context

### Country Context

**Egypt's macroeconomic environment has been affected by concurrent global shocks and domestic supply bottlenecks.** Egypt's real GDP growth declined to 4.2 percent during FY23, from 9.1 percent during the same period last year. Annual headline urban inflation increased to record 38.0 percent in September 2023, up from 37.4 percent in August 2023. It continues to be driven by food items' inflation as annual food inflation recorded 73.6 percent in September 2023. On the other hand, annual non-food inflation witnessed a slow down for the first time since October 2021, to record 20.6 percent in September 2023 (Central Bank of Egypt, 2023).

**Despite the strong growth performance before the pandemic, the national poverty rate in Egypt increased from 27.8 percent in 2015 to 32.5 percent in 2022.** Rural annual inflation rose to 42.6 percent and continued to be higher than nationwide inflation. While the national poverty rate is currently 32.5 percent spatial disparities persist, especially across rural and urban areas. Approximately 66 percent of the poor live in rural areas. The World Bank Systematic Country Diagnostic (SCD) for Egypt showed that a high share (42 percent) of the working poor who live below the 2017 official poverty line are employed by the agriculture sector. By supporting the development of a sustainable and resilient agri-food sector, a positive and direct effect on poverty and rural livelihoods can be achieved, ensuring inclusive economic growth.

**Climate change will further exacerbate Egypt's current vulnerabilities, with the potential to deepen persistent economic and human development as well as spatial disparities including for those relying on the agri-food sector for their livelihoods.** Average economic costs of climate change to Egyptian society are estimated at US\$ 55.3 billion for the 30-year period from 2020 to 2050, or US\$ 1.8 billion per year. Climate change increases the uncertainty in availability of water resources in the country, increases heatwaves and desertification affecting biodiversity, and threatens food security and availability. Moreover, in coping with climate change, the poor and vulnerable in Egypt face locational, asset, and human capital disadvantages that deepen the challenges they already face.

### Sectoral and Institutional Context

**In Egypt, the agri-food sector contributes to 25 percent of GDP, 20 percent of exports, and employs more than 35 percent of the labor force; however, a combination of structural bottlenecks and policy distortions impedes the sector's growth potential.** The most pressing structural bottlenecks include land fragmentation and water scarcity. Land-fragmentation reduces the productivity of Egyptian agriculture, as it limits on-farm efficiency and access to markets. Egypt's agriculture sector is characterized by two distinct farming systems. Eighty percent of farming units are small-scale, using less than three feddans (approximately 1.5 ha) of farmland located in the old lands along the Nile River (Nile Valley and Delta). Such high fragmentation of land challenges the efficient use of machinery in land cultivation to improve productivity and increase production. This fragmentation of farms also hinders competitiveness of Egypt's agricultural sector in global markets, limiting access to markets for smallholder farmers due to the small volumes produced by the highly fragmented farming units. In addition, farmer cooperation is underdeveloped and does not operate on a market-based approach, but rather serves as a distribution system for subsidized inputs. Aggregation is also difficult due to lack of physical and digital infrastructure, resulting in fragmented value chains and smaller volumes. Moreover, access to finance by small agri-food producers is a critical constraint to investing in sector modernization. The remaining 20 percent



of the farming units are larger farms common in the new lands in reclaimed desert areas, where large scale production takes place.

**Climate change is increasing water scarcity and exacerbating water quality challenges, both of which constrain agricultural productivity.** Egypt relies almost entirely on water flows from the Nile for agriculture and drinking water, but freshwater availability is already insufficient to meet water user demands. According to the National Water Resources Plan (2017),<sup>1</sup> the annual water availability in Egypt from the Nile is on average 55.5 BCM representing 544 m<sup>3</sup> of freshwater per person per year, creating a gap of more than 20 BCM between the demand and availability of water.<sup>2</sup> Egypt's drainage water reuse policy helps to address this gap by raising the system efficiency up to 78.1 percent, however it significantly reduces water quality and limits productivity due to soil and water salinization.<sup>3</sup> The country is also highly vulnerable to sea level rise, which results in further salinization and desertification of soils. Nearly 15 percent of the most fertile arable land in the Nile Delta, where about half of Egypt's crop production takes place, is already negatively affected by sea level rise and saltwater intrusion. Climate change scenarios predict that, without action, yields for food crops are projected to decline about 10 percent by 2050 as a result of heat stress, water stress and salinity. By commodity, the highest declines are estimated for maize (-16.2 percent), sugar crops (-12.0 percent), and fruits and vegetables which are the backbone of agri-food exports (-11.7 percent). Livestock production is also likely to decrease due to heat stress and higher incidence of diseases.

**Climate Smart Agriculture (CSA) technologies and practices can increase productivity and build resilience against the negative impacts of climate change on water and land resources and reduce GHG emissions.** Crop yields have been stagnant on average since 2005. Depending on agro-ecological conditions, different crop and livestock management technologies could be used to achieve the triple win—raising agricultural productivity, increasing the adaptive capacity to climate change, and reducing greenhouse gas emissions. Moreover, complementary activities are required to support increased sustainability and resilience at the local level. Such activities include employing the use of integrated weather forecasting and communication systems to help producers prepare for adverse climatic events, information systems that can support risk management and planning, and relevant energy saving technologies (such as energy efficient motors and precision sowing of fertilizers or solar pumps for off-grid farms with required policies to accompany such investments).

**Public investments and incentives for crowding-in the private sector are required to facilitate the uptake of CSA technologies and practices.** As laid out in the World Bank Group Country Private Sector Diagnostic and Maximizing Finance for Development diagnostics, to enable private investment in the agri-food sector, priority actions need to be taken, including: (a) improving inter-governmental coordination and supporting integrated sustainable resource management ; (b) enhancing agricultural advisory services with focus on promoting R&D and ICT enabled extension services; and (c) expanding access to finance for agri-food sector producers and MSMEs.

#### Relationship to CPF

**The proposed project responds to the strategic sectoral and national priorities set forth by the Government of Egypt (Figure 1) and is fully aligned with the Country Partnership Framework.** It would directly contribute to High-Level Outcome (HLO) 3 on “*Greater Resilience to Shocks*” by proposing to enhance the resilience of farmers and other stakeholders in the agri-food sector to climate shocks through an improved Early Warning System to facilitate the flow of relevant information related to climate risks and through the adoption of farm level resilience building adaptation activities. The project would also contribute to HLO1 on “*More and Better Private Sector Jobs*” through a faster and wider adoption of CSA technologies, promoting private investment in agriculture and improving infrastructure and delivery of irrigation services to farmers.

<sup>1</sup> Ministry of Water Resources and Irrigation. 2017. National Water Resources Plan. Cairo, Arab Republic Egypt.

[http://gis.nacse.org/rewab/docs/National\\_Water\\_Resources\\_Plan\\_2017\\_en.pdf](http://gis.nacse.org/rewab/docs/National_Water_Resources_Plan_2017_en.pdf)

<sup>2</sup> Author estimate based on population data from WB Data portal: 102 million total population in 2020

<sup>3</sup> MWRI, 2015

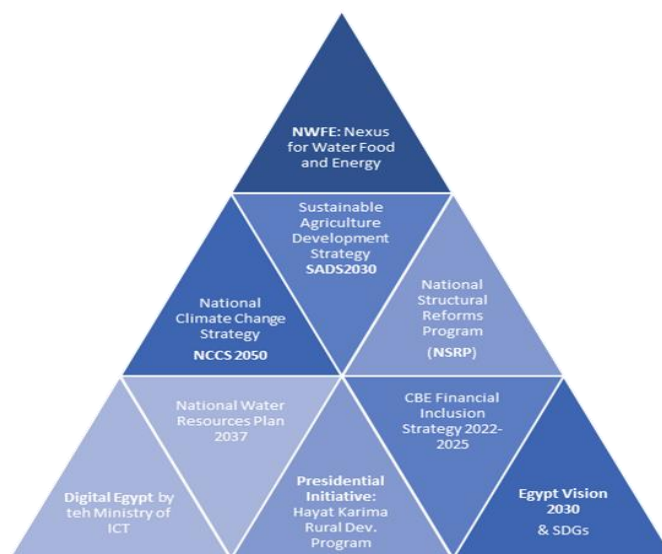


Aligned with the World Bank’s updated mission, the proposed project would focus on building the long-term resilience of Egypt’s agri-food sector to improve food security. The project would support sustainable food and nutrition security, through safeguarding local production and strengthening the agri-food sector to make it more resilient to climatic risks. The project would also create new job opportunities in rural areas. Finally, the project would support climate-smart and resilient agri-food value chains and community-based small-scale water infrastructure.

The proposed project reflects the priorities of the WBG MENA Enlarged Strategy, which focuses on leveraging digital technologies and Maximizing Finance for Development (MFD) and responds to the MENA Climate Roadmap (2021-2025) by enabling a climate smart approach to agriculture and natural resource management. The project also builds on the WBG Climate Change Action Plan which aims to increase WBG investments in climate-smart projects and policy reforms, balance actions of adaptation and mitigation and integrate climate risk management.

The proposed project builds on the Egypt Country Climate and Development Report (CCDR), which explores the challenges and opportunities of improving the alignment of Egypt’s development goals with its climate ambition. To strengthen resilience, the recommendations identified in the CCDR include (i) enhancing the use efficiency and allocation of water and natural resources; (ii) improving information for government, firms, and people to adapt better and faster, including investing in strengthening information systems that share climate- and hydrology-related information with affected stakeholders to help mitigate risks and reduce the costs of flooding; and (iii) strengthening the resilience of ongoing and projected investments to ensure long-term sustainability and avoid stranded assets. Implementing the needed adaption actions will require mobilizing private finance, and the government can provide the right signals through stronger action through “green” public investments.

Figure 1: CRAFT Project Alignment with GoE Strategies



### C. Proposed Development Objective(s)

To enhance the climate resilience of agrifood producers in the project area.

Key Results (From PCN)

The following key results would contribute to the achievement of the PDO:

- a) Area provided with new/improved irrigation or drainage services (ha) – Corporate Results Indicator
- b) Farmers adopting improved agricultural technology (percent of which are female) - Corporate Results Indicator
- c) Beneficiaries reached with financial services - Corporate Results Indicator
- d) Agriculture Information Systems Enabling Decisions

### D. Concept Description

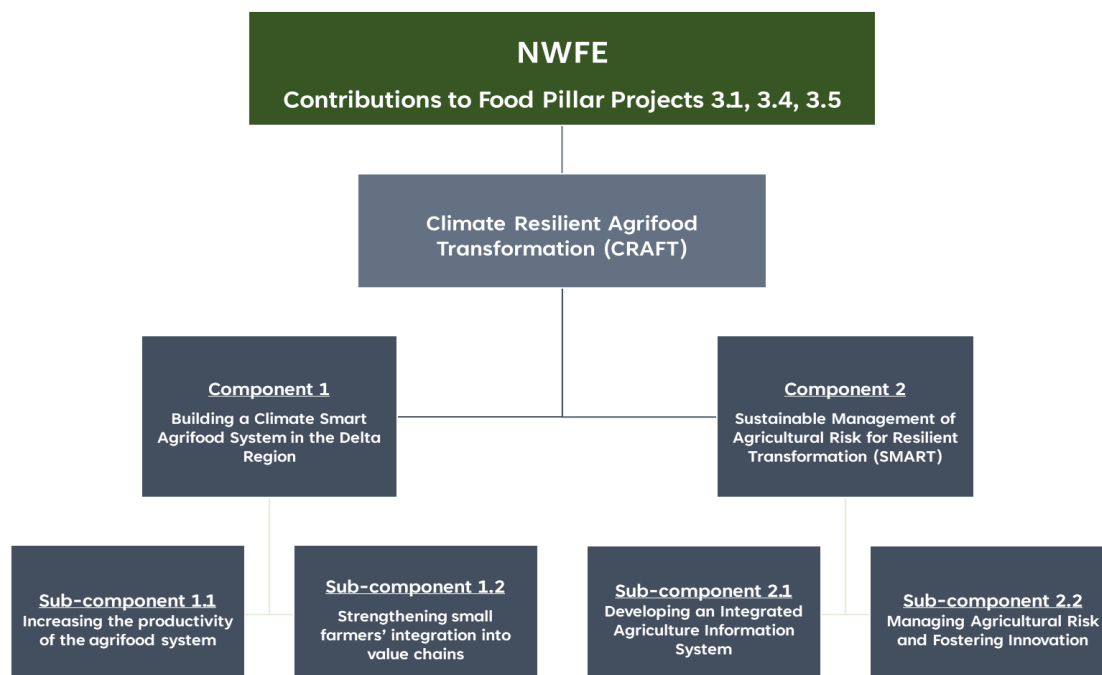


The indicated financial amount is indicative and based on preliminary costing analysis and will be confirmed and agreed upon with the GoE at appraisal.

The project development objective would be achieved by: (i) improving resource use efficiency and productivity by scaling up climate smart technologies and practices (e.g. soil fertility management, crop protection and irrigation water management); (ii) increasing preparedness to climate related shocks through early warning systems ; (iii) supporting streamlined service delivery and resilience by creating an integrated information system and decision support tool; and (iv) supporting the creation of sectoral risk management and insurance mechanisms. To promote innovation and private sector investment, different project investment modalities will be explored during preparation. The overall Project framework is outlined in Figure 2 (below).

The Project Development Objective is fully aligned with that of the NWFE Program “to improve adaptation and resilience of agricultural lands, and support farmers in adopting new adaptation practices expected to have significant human development impacts in improving food production, reliability of food supply in addition to leading to economic benefits related to a more stable and increased productivity”. The proposed project would optimize the synergies and complementarities and respond specifically to NWFE Projects 3.1 and 3.5 through the following interventions: (i) the adoption and scale up of climate smart agriculture technologies and practices, and (ii) the development of an integrated climate information system, which enables risk management, increased productivity, resource use efficiency and multi-sectoral evidence-based planning.

Figure 2: Proposed CRAFT Project Design



**Component 1: Building a Climate-Smart Agri-food System in the Delta Region.** This component would focus on improving productivity by reducing the impact of climate risk at the upstream production level and increasing the sector's



competitiveness by improving access to markets and adding value beyond the farm level. The component would support activities in selected project governorates in the Delta region.

**Component 2: Sustainable Management of Agriculture Risk for Resilient Transformation (SMART).** The objective of this Component is to strengthen the climate resilience of the agrifood system in Egypt by: (i) synergistically strengthening agricultural information and early warning systems, ensuring data reliability and informing climate-related operational decision making; and (ii) fostering innovation and developing risk management products that de-risk the agri-food sector and enable private sector investment.

**Component 3 – Project Management and Results Monitoring.** This component would support project management and knowledge management activities envisaged under the project. With regards to project management activities, this component would support financial management (including audit), procurement, monitoring and evaluation, communications and ESF compliance (including a citizen engagement mechanism and a strengthened Grievance Redress Mechanism (GRM) for better risk management).

### Legal Operational Policies

	Triggered?	
	Last approved	Current
Projects on International Waterways OP 7.50	No	
Projects in Disputed Area OP 7.60	No	

Summary of Screening of Environmental and Social Risks and Impacts

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**APPROVAL**

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