



Report No: ICR00258

IMPLEMENTATION COMPLETION AND RESULTS REPORT

LOAN NUMBER 8815-MA

ON A LOAN

IN THE AMOUNT OF US\$200 MILLION

TO THE

KINGDOM OF MOROCCO

FOR THE

STRENGTHENING AGRI-FOOD VALUE CHAINS PROGRAM-FOR-RESULTS

March 24, 2025

Agriculture and Food Global Practice
Middle East and North Africa Region



CURRENCY EQUIVALENTS

(Exchange Rate Effective {Sep 30, 2024})

Currency Unit = MAD

MAD 9.69 = US\$1

US\$ 1.35 = SDR 1

FISCAL YEAR

January 1 - December 31

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**ABBREVIATIONS AND ACRONYMS**

BCM	Billion cubic meters
CIA	<i>Centre d'Innovation Agro-Alimentaire</i> (Agri-food Innovation Center)
CPF	Country Partnership Framework
DDFP	<i>Direction du Développement des Filières de Production</i> (Directorate for the Development of Value Chains)
DLI	Disbursement Linked Indicator
DLR	Disbursement Linked Result
DPA	<i>Direction Provinciale de l'Agriculture</i> (Provincial Directorate of Agriculture)
DPL	Development Policy Loan
DSS	<i>Direction de la Stratégie et des Statistiques</i> (Directorate of Strategy and Statistics)
DSOQ	Distinctive Signs of Origin and Quality
E&S	Environmental and Social
FDA	<i>Fonds de Développement Agricole</i> (Agricultural Development Fund)
GDP	Gross Domestic Product
GGs	Green Generation Strategy
GRM	Grievance Redress Mechanism
IGA	<i>Inspection Générale de l'Agriculture</i> (General Inspectorate of Agriculture)
IA	Intervention Area
IBRD	International Bank for Reconstruction and Development
ICR	Implementation Completion and Results Report
IR	Intermediate Result
IRI	Intermediate Results Indicator
ISM	Implementation Support Mission
MAPMDREF	<i>Ministère de l'Agriculture, de la Pêche Maritime, du Développement Rural et des Eaux et Forêts</i> (Ministry of Agriculture, Marine Fisheries, Rural Development, Water and Forests)
MISAGRI	Integrated Financial Planning, Management and Reporting System
M&E	Monitoring and Evaluation
MTR	Mid-Term Review
ONSSA	<i>Office National de Sécurité Sanitaire des produits Alimentaires</i> (National food safety agency)
PAP	Program Action Plan
PDO	Program Development Objective
PMV	<i>Plan Maroc Vert</i> (Green Morocco Plan)
PMU	Program Management Unit
PforR	Program-for-Results
POM	Program Operations Manual
RESWAG	Resilient and Sustainable Water in Agriculture project
RF	Result Framework
RRA	Rabat Région Aménagement
RSAP	Resettlement and Social Action Plan
SDL	<i>Société de développement local</i> (Local Development Company)
SDR	<i>Société de développement régional</i> (Regional Development Company)
SME	Small and Medium Enterprise
TA	Technical assistance
ToC	Theory of Change
US\$	United States Dollar
WB	World Bank



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**DATA SHEET****BASIC DATA****Product Information**

Operation ID P158346	Operation Name Strengthening Agri-Food Value Chains
Product Program-for-Results Financing (PforR)	Operation Short Name MA: Strengthening Agri-Food Value-Chains
Operation Status Closed	Approval Fiscal Year 2018
IPF Component?	
Original EA Category	

CLIENTS

Borrower/Recipient Ministry of Economy and Finance	Implementing Agency MAPMDREF
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DEVELOPMENT OBJECTIVE

Original Development Objective (Approved as part of Approval Package on 20-Dec-2017)

The Program Development Objective is to increase the volume of added-value products commercialized in selected agri-food value chains in the Program area.

PDO as stated in the legal agreement

To increase the volume of added-value products commercialized in selected agri-food value chains in the Program area.

**FINANCING**

Financing Source	Original Amount (US\$)	Revised Amount (US\$)	Actual Disbursed (US\$)
World Bank Financing	200,000,000.00	200,000,000.00	181,100,000.00
IBRD-88150	200,000,000.00	200,000,000.00	181,100,000.00
Total	200,000,000.00	200,000,000.00	181,100,000.00

RESTRUCTURING AND/OR ADDITIONAL FINANCING

Date(s)	Type	Amount Disbursed (US\$M)	Key Revisions
30-Jun-2023	Portal	144.50	• Results • Loan Closing Date Extension • Implementation Schedule

KEY DATES

Key Events	Planned Date	Actual Date
Concept Review	22-Nov-2016	22-Nov-2016
Decision Review	19-Oct-2017	19-Oct-2017
Authorize Negotiations	03-Nov-2017	03-Nov-2017
Approval	20-Dec-2017	20-Dec-2017
Signing		21-Dec-2017
Effectiveness		27-Dec-2017
ICR/NCO	30-Mar-2025	--
Restructuring Sequence.01	Not Applicable	30-Jun-2023
Mid-Term Review No. 01	01-Jun-2020	21-Oct-2020
Operation Closing/Cancellation	30-Sep-2024	30-Sep-2024

RATINGS SUMMARY

Outcome	Bank Performance	M&E Quality
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Moderately Unsatisfactory

Moderately Satisfactory

Modest

ISR RATINGS

No.	Date ISR Archived	DO Rating	IP Rating	Actual Disbursements (US\$M)
01	23-Mar-2018	Satisfactory	Satisfactory	50.00
02	05-Oct-2018	Satisfactory	Satisfactory	57.29
03	11-Apr-2019	Satisfactory	Satisfactory	75.29
04	15-Nov-2019	Satisfactory	Satisfactory	115.96
05	13-May-2020	Satisfactory	Satisfactory	131.00
06	21-Dec-2020	Satisfactory	Moderately Satisfactory	131.00
07	24-Jun-2021	Satisfactory	Moderately Satisfactory	131.00
08	20-Jan-2022	Satisfactory	Moderately Satisfactory	131.00
09	25-Jul-2022	Satisfactory	Moderately Satisfactory	131.00
10	30-Jan-2023	Satisfactory	Moderately Satisfactory	131.00
11	23-Jul-2023	Satisfactory	Moderately Satisfactory	144.50
12	15-Feb-2024	Moderately Satisfactory	Moderately Satisfactory	144.50
13	11-Aug-2024	Moderately Satisfactory	Satisfactory	152.60

SECTORS AND THEMES

Sectors

Major Sector	Sector	%	Adaptation Co-benefits (%)	Mitigation Co-benefits (%)
FY17 - Agriculture, Fishing and Forestry	FY17 - Agricultural Extension, Research, and Other Support Activities	8	25	0
FY17 - Industry, Trade and Services	FY17 - Agricultural markets, commercialization and agri-business	92	22	18

Themes



Major Theme	Theme (Level 2)	Theme (Level 3)	%
FY17 - Environment and Natural Resource Management	FY17 - Climate change	FY17 - Adaptation	22
		FY17 - Mitigation	16
FY17 - Finance	FY17 - Financial Infrastructure and Access	FY17 - MSME Finance	5
FY17 - Human Development and Gender	FY17 - Gender		25
FY17 - Private Sector Development	FY17 - Enterprise Development	FY17 - MSME Development	25
	FY17 - Public Private Partnerships		37
FY17 - Urban and Rural Development	FY17 - Disaster Risk Management	FY17 - Disaster Preparedness	3
	FY17 - Rural Development	FY17 - Rural Markets	85



ADM STAFF

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I. PROGRAM CONTEXT AND DEVELOPMENT OBJECTIVES

A. CONTEXT AT APPRAISAL

- At the time of appraisal in 2017, Morocco was a relatively fast-growing lower middle-income country with a population of approximately 33.8 million.** Between 2000 and 2015, the average growth rate of the per capita Gross Domestic Product (GDP) was 3.4 percent, leading to a doubling of the latter to US\$7,360 in purchasing power parity terms. However, major socio-economic challenges remained, particularly regarding the quality and sustainability of growth and closing the urban-rural gap. From 2010 to 2015, only 50,000 net new jobs were created annually, while the working-age population increased by 270,000 per year. Integrating young people, who constituted 44 percent of the working-age population, into the labor market proved a major challenge. The unemployment rate stood above 9.3 percent in 2017 but reached 23.5 percent among youth.
- Agriculture was the fastest growing economic sector from 2000 to 2015, although with strong inter-annual variations due to the sector's vulnerability to climate variability.** The agriculture sector was the largest employer in Morocco, with 41 percent of total employment (an estimated four million people) and 85 percent of employment in rural areas. Approximately 64 percent of agricultural growth between 2008 and 2017 was driven by high-value, export oriented sub-sectors, including horticulture, citrus and other tree crops (citrus experienced the highest growth rate at 12 percent per year on average). Domestic demand for high-value and differentiated products was rising with a growing population, accelerating urbanization and changes in consumption habits; export opportunities were substantial for products with increasing demand worldwide, such as olive oil, fruits, and vegetables.
- In 2008, Ministry of Agriculture, Marine Fisheries, Rural Development, Water and Forests (MAPMDREF¹) launched the Government's agriculture and rural development strategy 'Plan Maroc Vert (PMV – the 'program').** It aimed at transforming the agri-food sector into a stable source of employment and broad-based economic development in rural areas through a combination of investments and systemic public sector reforms, while promoting the sector's integration into the global economy. The PMV was considered a paradigm shift from a highly protected agriculture sector that focused on primary production towards boosting value-addition along the various agri-food chains. Under the PMV, service delivery and investment support in agriculture were increasingly delegated to the regional and local levels). One of the core objectives of the PMV was to create an enabling environment for additional private sector investments.

¹ Ministère de l'Agriculture, de la Pêche Maritime, du Développement Rural et des Eaux et Forêts



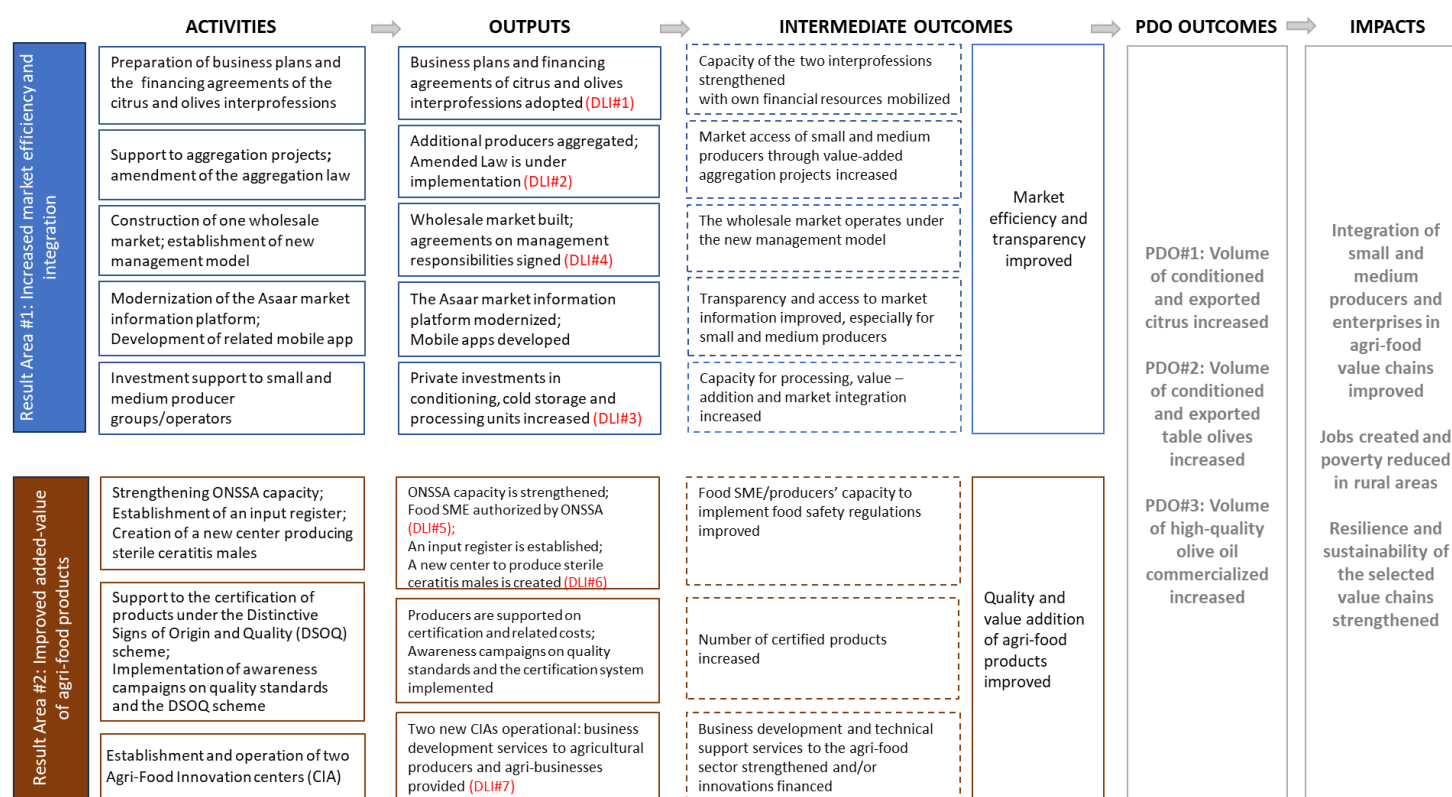
4. **The citrus and olive subsectors were considered engines for inclusive growth and employment generation.** At the time of appraisal, citrus represented 31 percent of Morocco's fresh agri-food exports and generated approximately US\$350 million per year in foreign exchange revenues. Growth projections indicated that the production of citrus would increase by 50 percent between 2015 and 2020. The rapid increase in citrus production would need to be accompanied by the development of exports and export market diversification, as well as that of domestic consumption and processing. While Moroccan olive production costs were competitive, the low quality of Moroccan olive oil caused by the dominance of traditional milling techniques was misaligned with international market demand and thus constrained the growth of exports.
5. **Realizing the sector's growth potential required the development of a larger and stronger fabric of enterprises able to competitively add value to agriculture products and to meet the demand of domestic and export markets.** Dominated by some 2,050 small and medium-sized enterprises (SMEs), agro-industry was the second largest industrial sector representing 27 percent of industrial GDP and five percent of total GDP. However, its growth had been lower than that of the manufacturing sector and that of primary agriculture. Investments in the agri-food sector had remained limited and were concentrated with large players, in part because public support and incentives to investments were not adapted to SME needs. A diagnostic of the agri-food sector, carried out by MAPMDREF, found that producers and SMEs were lacking capacity to comply with stringent food safety, quality, traceability, labeling and environmental sustainability requirements imposed by high value export markets.
6. **The Program represented the next phase of the World Bank's support for the implementation of the PMV, building on the results of the PMV's mid-term review.** The latter recommended (a) to accelerate the implementation of reforms, and (b) to place greater emphasis on inclusive value-addition and value-chain development in the Moroccan agri-food sector. The World Bank was well positioned to support the Government in implementing these recommendations through (a) its extensive international experience in developing inclusive and resilient value chains and supporting agribusiness development, and (b) previous support to the PMV through a series of two development policy loans (DPLs) between 2011 and 2014 with a focus on institutional and regulatory measures to strengthen domestic market efficiency.
7. **A Program-for-Results (PforR) instrument was considered best suited to support the implementation of the second phase of the PMV.** First, the proposed operation would support the implementation of the existing Government program (PMV), while supporting adjustments to the PMV to accelerate progress and deliver desired outcomes; second, the proposed operation would support a mix of institutional strengthening activities, improvements in systems and processes for PMV implementation, and also finance selected sub-programs of the PMV; and third, the proposed operation would support MAPMDREF's increased focus on results under the PMV, thereby contributing to strengthening overall sector governance and informing the preparation of any successor program by strengthening existing monitoring and evaluation systems.
8. **In line with the PMV's approach to value chains, the Program was designed to strengthen the overall enabling environment for agri-food value chain development in Morocco with a special focus on the olive and citrus value chains.** Program activities aimed at addressing constraints that producers and agribusiness firms were facing in those two sub-sectors regarding value-addition, product quality and market access. Those two subsectors were selected by the Government based on: (a) their contribution to agricultural GDP growth and to the rural economy; (b) the potential for increase in production by 2021; and (c) their potential in terms of further value-addition and increased exports. Overall, the Program would contribute to the higher-level objectives of the Government program, i.e., to increase the added-value of the agriculture sector, create additional jobs, increase rural incomes, increase agri-food exports, and increase investments in the sector.



Theory of Change

9. The Theory of Change (ToC) for the Program has been developed for this Implementation Completion and Results Report (ICR) based on the Program description and results chain included in the Program Appraisal Document (PAD).

Figure 1: ToC Diagram



Critical assumptions

- Rising market demand for high quality and value-added production from both domestic and export markets
- Continued growth of primary production and sufficient water availability during program implementation
- Efficient coordination and sufficient buy-in from implementing entities across ministerial boundaries
- Favorable trade and business environment supporting private investments in the agri-food sector

Program Development Objective (PDO)

10. The Program Development Objective, as stated in the PAD and the loan agreement, was to increase the volume of added-value products commercialized in selected agri-food value chains in the Program area.

Key Expected Outcomes and Outcome Indicators

11. The **PDO results indicators** measure the volume of added value products commercialized, specifically: (a) volume of conditioned and exported citrus; (b) volume of conditioned and exported olives; (c) volume of high-quality olive oil commercialized.



Program Result Areas and DLIs

12. As shown in table 1, the Program invested in two Result Areas (RA) with four and three disbursement-linked indicators (DLIs), respectively. See figure 1 (ToC) on previous page for linkages of DLIs to key outputs and intermediate outcomes.

Table 1: Program Result Areas and DLIs

Result Area #	DLIs #
RA#1: Increased market efficiency and integration	#1 – Number of <i>Interprofessions</i>² with business plans approved and intra-branch agreements (<i>Accords Interprofessionnels</i>) adopted to ensure sustainability #2 – Amended Law no. 4-12 on Agricultural Aggregation dated 2012 is under implementation #3 – Number of new/upgraded conditioning, cold storage and/or processing units in selected agri-food value chains under operation #4 – At least one wholesale market operating and applying the new management model as defined in the Program Operations Manual (POM)
RA#2: Improved added-value of agri-food products ³	#5 – Number of small and/or medium size agri-food enterprises authorized by the national food safety agency (ONSSA - <i>Office National de Sécurité Sanitaire des produits Alimentaires</i>) #6 – The Borrower's center for the production of sterile <i>ceratitis</i> males providing farm treatment services to citrus producers #7 – Number of small and medium size producers and/or enterprises assisted by the Agri-food Innovation Centers (CIAs)
Crosscutting	#8 – Establishment of an integrated financial management system to improve Program Management

B. SIGNIFICANT CHANGES DURING IMPLEMENTATION

Other Changes and underlying rationale

13. In June 2023, the Program closing date was changed from September 30, 2023, to September 30, 2024, to enable the completion of delayed activities linked to DLIs #4, #6, and #7. The ToC remained unmodified.

II. OUTCOME

A. RELEVANCE

Relevance of PDO

14. **The relevance of the PDO is High.** The operation is congruent with objectives under Pillar I: Promoting Job Creation by the Private Sector of the World Bank Group Morocco Country Partnership Framework (CPF) FY19-25⁴. By supporting increased investments in agri-food processing and aggregation, improved market infrastructure management, and addressing constraints to SME development, the Program contributed to CPF Objective #2: Increase opportunities for private sector growth, with a focus on SMEs and youth employability. In addition, the Program also supported CPF

² *Interprofessions* are intra-branch organizations that are mandated by law to organize the operators at all levels of the value chain (production, processing, and marketing) around a concerted vision and objectives and to coordinate efforts for the development of the value chain in areas such as research, extension, transfer of technology, dissemination of information, product promotion and market development.

³ Under RA#2, it was initially planned to develop a competitive grant mechanism to finance innovations in parallel to the establishment of the CIAs. However, during implementation the PMU decided to drop this activity and support innovative projects through calls for projects managed by CIAs.

⁴ The CPF FY19-24 (Report # 131039-MA) was extended to FY2025 at the Program and Learning Review Report (PLR) stage on August 22, 2023.



Objective #11: Improve the efficiency of public spending, by revising the requirements and eligibility criteria for receiving support from the Agricultural Development Fund (FDA - *Fonds de développement Agricole*), and the establishment of an integrated financial management system to improve monitoring and efficiency of public spending. In addition, the PDO is aligned with the Green Generation Strategy (GGs) 2020 – 2030, the government's successor program to the PMV. The Program directly supported three intervention areas (IAs) of the GGS, including IA#5: Consolidation of agriculture value chains, IA#6: Modern and efficient distribution chains, and IA#7: Quality, Innovation and Green-Tech.

Relevance of DLIs

15. Table 2 below provides an assessment of the Relevance of the Program's DLIs⁵.

Table 2: Assessment of relevance of DLIs

Assessment of relevance	Rating
DLI#1 – Number of <i>Interprofessions</i> with business plans approved and intra-branch agreements (<i>Accords Interprofessionnels</i>) adopted to ensure sustainability	
- Well defined DLI with clear methodology for verification, ambitious yet realistic target. - Directly related to the Results Framework (RF) and PDO as <i>interprofessions</i> play a key role in enabling producers in selected value-chains to increase commercialization. DLI mirrored by intermediate results indicator (IRI) 1.1⁶. - DLI provided an adequate trigger for improved institutional performance and sustainability by requiring <i>interprofessions</i> to raise own revenues as part of the adoption of intra-branch agreements.	High
DLI#2 – Amended Law no. 4-12 on Agricultural Aggregation dated 2012 is under implementation	
- Well defined DLI with clear methodology for verification; ambitious given that the DLI requires the consent of multiple government stakeholders for related legal changes. - Substantially linked to PDO and RF. While the DLI is not primarily focused on the selected value chains, a significant share of aggregation projects covers citrus and olives (see IRI 1.4), wherefore the new law facilitates these products' commercialization. DLI mirrored by IRI 1.3. - Allocated amount (US\$10 M) was sufficient to promote implementation of the related activity.	Substantial
DLI#3 – Number of new/upgraded conditioning, cold storage and/or processing units in selected agri-food value chains under operation	
- Well defined and structured DLI with clear methodology for verification; the DLI's scalability provided the necessary funds to advance implementation. - Directly related to the RF and PDO given the need for upgrading downstream processing/conditioning facilities for increased commercialization. The related IRI 1.2 measures total value of private investments. - DLI linked to improvements in institutional performance, given more effective allocation of public support due to the revisions to FDA subsidy eligibility criteria; the allocated amount (US\$70 M) provided a strong incentive for investments in food processing/cold storage/conditioning units.	High
DLI#4 – At least one wholesale market operating and applying the new management model as defined in the POM	
- Although highly relevant to domestic market efficiency, DLI was only moderately related to the PDO as the wholesale market reform was focused on the domestic commercialization of fruit and vegetables rather than the export-oriented value chains selected under the Program. DLI mirrored by IRI 1.5. - Well defined and structured DLI with a clear methodology for verification; very ambitious; Disbursement-Linked Results (DLRs) set adequate milestones to allow for sufficient flow of funds. - DLI explicitly aimed at increasing market efficiency by linking a partial disbursement (DLR 4.1) to the	Modest

⁵ See annex 7 for a detailed timeline of DLI disbursements during Program implementation.

⁶ See annex 8 for an overview of IRI abbreviations.



- creation of a public company (SDL/SDR - <i>Société de développement local/régional</i>⁷), a key prerequisite for the adoption of a modern wholesale market management model. - The significant allocation (US\$34.5 M) provided adequate incentives for advancing implementation and were commensurate with the DLI's complexity.	
DLI#5 – Number of small and/or medium size agri-food enterprises authorized by ONSSA	
- Well defined and structured DLI with clear methodology for verification. - DLI strongly related to the PDO, as food safety authorizations are key prerequisites for value-addition and commercialization in olive and citrus value-chains. DLI mirrored in RF by IRI 2.1. - The allocated amount (US\$30 M) provided sufficient incentives for promoting agri-food enterprises' authorization through ONSSA.	High
DLI#6 – The Borrower's center for the production of sterile <i>ceratitis</i> males providing farm treatment services to citrus producers	
- Well defined DLI with a clear methodology for verification; very ambitious, given the technical complexity of the related activity. - DLI strongly related to the PDO, as successful operation of the <i>ceratitis</i> center facilitates producers' access to citrus export markets by preventing citrus orchards' infestation with the Mediterranean fruit fly. - DLI strongly linked to RF with IRI 2.2 setting target for total area to be treated through the new center. - The allocated amount (US\$15 M) provided adequate incentive to advance implementation.	High
DLI#7 – Number of small and medium size producers and/or enterprises assisted by Agri-food Innovation Centers (CIAs)	
- Well defined and structured DLI with a clear methodology for verification explained in the POM. - Substantial alignment with PDO. The DLI was focused on the entire agri-food sector beyond the selected value chains. However, the center in Meknès provided services for the selected value chains. DLI mirrored by IRI 2.5. - Adequate allocations were in place for activity implementation; however, the triggers focused primarily on infrastructure and equipment and could have included the establishment of viable institutional arrangements more explicitly.	Substantial
DLI#8 – Establishment of an integrated financial management system to improve Program Management	
- Well defined and structured DLI with a clear methodology for verification explained in the POM. - DLI focused on building institutional capacity (improve Program management and efficiency of public spending) and addressing weaknesses identified during Fiduciary Systems Assessment (FSA).	High

16. **The relevance of the Program DLIs is rated Substantial.** The DLIs were generally clearly defined and appropriate to address the factors underlying low value addition and limited market efficiency, both in the selected value chains as well as across the entire sector. As shown in table 2 above, five DLIs are rated High, two DLIs are rated Substantial, and one DLI is rated Modest.

Rating of Overall Relevance

17. Based on the discussion above and the ratings of the relevance of the PDO as High and the relevance of the DLIs as Substantial, the Program's relevance is rated Substantial.

B. ACHIEVEMENT OF PDOs (EFFICACY)

18. The **PDO** was to increase the volume of added-value products commercialized in selected agri-food value chains in the Program area.

⁷ The SDL/SDR constitutes an autonomous entity capable of reinvesting revenues, accessing loans, and recruiting staff.



19. As shown in the ToC diagram (see section I.A), the Program relied on two RAs to achieve the PDO. The assessment of achievement of the PDO is based on a brief overview of the evolution of progress towards the PDO followed by a detailed analysis of the Program results and institutional strengthening achieved under the two RAs. The assessment draws on qualitative and quantitative evidence gathered during the Program's implementation and during ICR development.
20. The PDO was measured through three PDO indicators: PDO#1: Volume of conditioned and exported citrus (in tons (t)); PDO#2: Volume of conditioned and exported olives (in tons); PDO#3: Volume of high-quality olive oil commercialized (in tons). PDO#1 and #2 were measured by the two *interprofessions* Maroc Citrus and Interprolive, responsible for representing and coordinating stakeholders in the citrus and olive value chains, and by Morocco's export authority (*Foodex*). PDO#3 was measured by the Directorate of Strategy and Statistics (DSS - *Direction de la Stratégie et des Statistiques*).
21. Table 3 illustrates the PDO indicators, their baselines, end targets, and achievement at closing date.

Table 3: Achievement of PDO Indicator Targets⁸

#	PDO Indicators	Baseline (2017)	Target (2023)	Achievement in 2022	Achieved at Completion (September 2024)
1	Volume of conditioned and exported citrus (in t)	556,800	750,000	765,000 (102 percent of target)	456,939 (59.7 percent of target)
2	Volume of conditioned and exported table olives (in t)	73,129	98,000	114,064 (116 percent of target)	69,155 (58.6 percent of target)
3	Volume of high-quality olive oil commercialized (in t)	10,000	20,000	16,100 (80.5 percent of target)	9,650 (48.5 percent of target)

22. **Overview of PDO evolution.** Supported by the Program's contributions to increased capacity for commercialization in the selected value chains (especially through DLIs #1, #3 and #5, all of which were substantially achieved by 2021), two in three PDO indicator targets were met in 2022. However, from 2023 onwards, the impacts of multiple consecutive years of unprecedented drought led to a significant decline in primary agricultural production in the selected value-chains, resulting in a reversal of progress (see section III.B(b) and annex 6 for details). Consequently, the PDO was not achieved at Program closure.
23. It is expected that PDO metrics will improve in the near to medium term given that (i) the Program has, as demonstrated below, laid the required infrastructural and institutional foundations for increased commercialization of value-added products in and beyond the citrus and olive value chains, and (ii) ongoing investments into water infrastructure and water use efficiency⁹ to secure irrigation water supplies (see annex 6 for details) as well as continued government support to strengthen the selected value chains¹⁰. Concerning PDO#1, the USDA Foreign Service projects total citrus exports to reach close to 600,000 t (80 percent of PDO#1 target) for the 2024/2025 season following higher levels of rainfall and increased adoption of drought mitigation measures¹¹. Olive and olive oil production are not expected to recover before 2025/2026.
24. **Assessment of achievements under RA#1: Increased market efficiency and integration**
25. **Increased capacity for processing and market integration.** Prior to the Program, producers in the selected value chains were frequently compelled to sell surplus production at excessively low prices during periods of oversupply due to the

⁸ Annex 6 includes a detailed overview of the evolution of annual PDO indicators during Program implementation (2018-2024).

⁹ Investments include the Resilient and Sustainable Water in Agriculture (RESWAG) Project (P175747, implementation period: 2022-2028)

¹⁰ The commercialization of high-quality olive oil will continue to be promoted under the Morocco Transforming Agri-Food Systems Pfor (P181587, 2025 -2030), including through increased investment support for modernizing olive crushing units and their authorization through ONSSA.

¹¹ [USDA Foreign Agricultural Service 2024](#). See also annex 5 for additional references.



absence of sufficient conditioning, storage, and processing facilities, which hindered their access to more lucrative markets. Under DLI#3, the Program supported the establishment of 139 new or upgraded valorization units in the selected value chains (198 percent of the DLI#3 target), including 17 citrus conditioning units; 76 cold storage units (with benefits across the selected value chains), and 46 crushing units (for producing high-quality olive oil). The investments were facilitated by the FDA¹² which supported producers and agri-food SME investing in valorization units with up to 30 percent of total investment costs through cost-sharing arrangements. 66 percent and 84 percent of the relevant FDA-supported investments in valorization units linked to DLI#3 were realized by 2020 and 2021, respectively, directly contributing to the achievement of PDO outcome indicators in 2022. In 2023 and 2024, drought-induced decreases in the supply of citrus and olives led to declines in product volumes commercialized.

26. **An impact evaluation conducted in 2022 covering agri-food operators who benefitted from Program interventions under DLI#3 and DLI#5 in 2018/2019 underlines the positive impacts of investments in valorization facilities.** It found that the upgrading and establishment of citrus conditioning units enabled producers to increase capacity for value-addition by 80 percent and more than doubled value-addition/production from 1,400 t to 2,800 t per unit, facilitating access to export markets and increasing revenues. Olive oil producers benefitting from Program support increased average production capacity by approximately 10 percent from 1,160 t to 1,300 t per olive crushing unit, which led to a doubling in the concerned units' revenues. Program-supported cold storage units registered increases in average production from 2061 t to 2543 t, i.e., by 23 percent.
27. **The Program contributed to increasing (i) the effectiveness of public support provided through the FDA and (ii) the level of environmental and social compliance by agri-food operators.** The Program supported adjustments to the modalities governing the appraisal and eligibility of project proposals submitted by farmers/agri-businesses to the FDA support scheme. The objective was to increase (i) the FDA scheme's efficiency and transparency, and (ii) enhance investment projects' socio-economic impact and environmental sustainability. Adjustments included making FDA support conditional on project proposals demonstrating an internal rate of return of at least 6 percent, based on prior economic analysis. In addition, FDA support applicants were required to meet Environmental and Social (E&S) eligibility criteria¹³, including by legally committing to comply with relevant environmental and social regulations, and, in the case of olive crushing units, by providing an environmental acceptability certificate based on the results of a prior environmental impact assessment.
28. **Increased market access through increased institutional capacity of *interprofessions* and aggregation projects.** The Program strengthened the institutional capacity of *Maroc Citrus* and *Interprolive* through technical assistance (TA) and enhancing technical and human resources. As a result, they were able to develop and adopt business plans and interbranch agreements¹⁴ in 2020 and 2021, respectively (DLI#1). The intra-branch agreement of *Maroc Citrus* subsequently served as a model for strengthening *interprofessions* of other value chains. Under the Program, *Maroc Citrus* and *Interprolive* supported producers in the selected value chains by providing agronomic advisory (e.g., on sowing dates, water management and pest control techniques) and capacity building on optimal storing and conditioning practices. In addition, *Interprolive* carried out regular consumer awareness campaigns to develop domestic demand for high-quality olive oil. The Program also supported aggregation projects managed by the Agricultural Development Agency (ADA)¹⁵. Between 2017 and 2022, a total of 193 olive and 554 citrus producers

¹² The FDA is the government's principal support scheme to support the formation of fixed capital in the agricultural sector through cost-sharing arrangements. Between 2020 and 2024, the FDA has channeled on average around US\$ 400 million in public support per year to farmers and agri-businesses.

¹³ See PAP for related action item. E&S criteria are outlined in the guide on E&S best practices developed and disseminated by the PMU through TA.

¹⁴ Inter-branch agreements specify olive/citrus producers' yearly financial contributions based on their production/export volumes/processing capacity. Inter-branch agreements thus ensure *interprofessions'* financial sustainability by reducing their dependence on public funding.

¹⁵ Aggregation projects are aimed at bringing together farmers to achieve economies of scale related to production, value-addition, and commercialization. They involve contractual agreements between a buyer (exporters, agri-business enterprises) and a group of producers with financial support from MAPMFREF according to the stipulations of Law 04-12 on aggregation.



cultivating a total of 32,000 ha were aggregated, contributing to rising exports of citrus and table olives (with PDO#1 and PDO#2 reaching 102 percent and 116 percent of their targets in 2022, respectively). Following 2022, however, drought effects and delays in implementing the amendments of law 4-12 on agricultural aggregation (DLI#2) prevented the Program from achieving overall aggregation targets (IRI 1.4).

Assessment of achievements under RA#2: Improved added-value of agri-food products

29. **Increased capacity of producers and operators to comply with food safety and phytosanitary requirements.** The Program enabled a large number of producers and agri-food SME to comply with food safety standards, which is a sine-qua-non for increasing commercialization of citrus and olives in both export and high-value domestic markets. Under DLI#5, 169 fruit and vegetable conditioning units and 221 processors of edible oils and fats received food safety authorization from ONSSA. This directly contributed to progress towards the PDO. According to the results of the impact evaluation on DLI#3 and DLI#5 mentioned before, 87 percent of the agri-food businesses benefitting from the food safety authorization reported increased production and 36 percent increased market access. In addition, the Program supported the adoption of an input register by 3,874 fruit and vegetable producers in the Souss-Massa region, of which 1,566 were citrus producers (IRI 2.3). By providing farmers with decision-support to optimize and track pesticide usage in line with best practice, the register facilitated compliance with phytosanitary requirements regarding limits for pesticide residues and the use of approved pesticides.
30. One key Program activity to promote citrus exports was to prevent the infestation of citrus plantations with the Mediterranean fruit fly by treating them with sterilized male fruit flies (*ceratitis*) produced by a new center to be established under the Program (DLI#6). The center became operational with delay in October 2024, which limited the area it was able to treat by the end of 2024 to 1,000 ha against a Program target of 20,000 ha (IRI 2.2). However, the delay did not affect progress towards the PDO, as the Program ensured adequate treatment of citrus plantations in the interim by importing sterile males from Spain in combination with the use of pesticides. Marking a significant achievement given the complexity of this activity and the country's limited prior experience with the sterile insect technique, the center is expected to treat 30,000 hectares of citrus plantations by the end of 2025, thereby reducing the need for environmentally harmful pesticides.
31. **The Program bolstered the institutional and technical capacity of ONSSA.** Playing a key role in the achievement of DLI #5, DLI#6, IRI 2.2 and IRI 2.3, ONSSA was instrumental in facilitating progress towards the PDO. First, ONSSA provided food safety authorizations for a total of 1,103 agri-food establishments across the whole sector (110 percent of the DLI#5 target)¹⁶. Second, ONSSA received capacity-building and training from IAEA and INRA on nuclear security protocols in relation to DLI#6. This enabled the agency to obtain the necessary permits for the import and operationalization of the irradiator required for sterilizing male *ceratitis* flies as well as to issue the center's sanitary authorization. Last, the Program also enhanced ONSSA's technical capacity by training staff in sanitary and phytosanitary risk assessment and management and upgrading four laboratories with modern equipment required for advanced plant health monitoring.
32. **Strengthened business development services and access to higher-value markets through increased product distinctiveness and CIA.** The Program supported producers and operators to register products under the Distinctive Signs of Origin and Quality (DSOQ) scheme¹⁷ (IRI 2.4) by providing technical and financial support for certification. Between 2018 and 2023, on average 22 products were certified each year. In 2023 alone, the Program enabled 10 producers in the selected value chains (9 olive oil producers and 1 citrus producer) to obtain DSOQ certification. Additionally, the Program established CIA in Meknès and Berkane to support agri-food operators in developing and

¹⁶ Building on this achievement, the Green Generation PforR (P170419, 2020-2027) has continued supporting ONSSA's work to increase compliance with food safety regulations. As part of this PforR, another 1,500 agri-food SME received food safety authorization by September 2024.

¹⁷ DSOQ schemes such as organic certification, protected geographical indications and appellations of origin can enable producers to access growth opportunities in value added markets, while enhancing producer incomes, generating employment, and building sector competitiveness.



testing value-added products across agri-food value chains. In 2023, the CIA in Mèknes provided pesticide testing services to five citrus producers and one olive producer, facilitating commercialization and access to export markets in support of the PDO.

Strengthening of Program Systems

33. **The development and operationalization of a new integrated and digitalized financial planning, management, and reporting system “MISAGRI” by MAPMDREF (DLI#8) represents a significant Program achievement.** MISAGRI includes three modules (i) Budget programming (operational since 2019); (ii) Credit management (operational since 2021); and (iii) Budget execution monitoring (operational since 2022). By enabling systematic, centralized, and transparent budget planning, execution, and monitoring across MAPMDREF including its regional directorates, MISAGRI has significantly improved financial management capacity. For example, the digitalization of financial management processes through this unified platform has reduced the number of meetings and interactions required for budget validation and monitoring, while facilitating data exchange between the central and decentralized levels¹⁸.
34. **With 15 of the 16 Program Action Plan (PAP) actions implemented, the Program has successfully strengthened the capacity of implementing agencies.** The PAP effectively addressed the identified risks and weaknesses related to inter-agency coordination and Program Monitoring and Evaluation (through the mobilization of TA); fiduciary systems (through the operationalization of MISAGRI); and social and environmental management (see E&S section for more details).

Rating of Overall Efficacy

35. **Overall efficacy is rated Modest.** Despite substantial implementation progress contributing to full achievement of two PDO Indicators during implementation, and significant improvements in institutional capacity and Program Systems, overall efficacy is rated Modest due to modest levels of achievement of the PDO and outcome indicators at Program closing.

C. JUSTIFICATION OF OVERALL OUTCOME RATING

36. Based on the sub-ratings for relevance and efficacy, the overall outcome of the Program is rated Moderately Unsatisfactory.

D. OTHER OUTCOMES AND IMPACTS

37. **Gender.** The Program supported a few activities aimed at reducing the gender gap. For example, it piloted the Productive Alliances approach. Through this activity, 296 women producers (40 percent of total beneficiaries) in 16 producer groups were supported to enter into clearly defined commercial agreements with buyers (such as the supermarket chain *Marjane*), benefiting from technical capacity building and access to higher value markets. In addition, seven percent of the producers benefiting from the olive aggregation projects (IRI 1.4) were women, contributing to improved market access.
38. **Poverty Reduction and Shared Prosperity.** Based on the results of the aforementioned impact evaluation conducted in 2022, it can be assumed that the Program contributed to the creation of around 6,240 formal jobs and improved working conditions in the supported agri-food establishments (see section II.B on the revision of the FDA support scheme and section IV.B on Environmental and Social Compliance)¹⁹. Compared to the pre-Program baseline, the agri-food establishments that benefited from FDA support employed, on average, one additional person in the case of olive crushing units (six instead of five) and two more in the case of the cold storage units (eight instead of six). The effect

¹⁸ MISAGRI is also used in the context of the Bank-supported ‘Green Generation PforR (P170419).

¹⁹ This estimate is derived by extrapolating the results the impact evaluation (which was based on a representative sample of units benefitting from the Program in 2018/2019) to the entirety of agri-food establishments supported during implementation.



was most marked for new citrus conditioning units, which employed 31 persons more (36 instead of 5) compared to existing units. Activities related to DLI #5 (agri-food enterprises with food safety authorization from ONSSA) resulted in the creation of an additional five jobs in the concerned enterprises (14 instead of 9).

39. **Mobilization of US\$ 250 million in private sector financing.** As mentioned in section II.B, the FDA incentivized private investments in modernizing or establishing conditioning, cold storage, and olive crushing units. Between 2018 and 2024, the Program was able to mobilize over US\$ 250 million in private finance. This corresponds to a target achievement rate of 350 percent (IRI 1.2). According to government data, one US dollar in public support leveraged almost five US dollars in private capital. A key success factor underlying this achievement consisted in the decentralized and highly effective management of the FDA scheme through the 54 provincial agriculture directorates (*DPAs – Directions Provinciales de l'Agriculture*). Each DPA oversees an FDA one-stop shop with dedicated staff tasked with evaluating applications for FDA support and providing producers/operators with support and guidance for preparing applications and meeting related eligibility requirements.
40. **The experience gained from the construction of the new wholesale market in Rabat (DLI#4) has facilitated the scale-up of wholesale market reform to other wholesale markets.** A key Program objective under RA#1 was to construct and operationalize at least one wholesale market with a modernized management model to address (i) outdated, decaying infrastructure, poor sanitary conditions and weak services, as well as (ii) low efficiency and high transaction costs depressing producer revenues due to an inefficient management model. While the wholesale market is not yet operational due to the delayed completion of its construction, the Program has enabled the involved government stakeholders to gain experience and capacity in developing institutional arrangements linked to the wholesale market reform agenda. This has resulted in government commitment to establish four additional wholesale markets under modernized management in Meknès, Agadir, Berkane, and Marrakesh, which is supported by the ongoing Green Generation Strategy PforR (P170419).

III. KEY FACTORS AFFECTED IMPLEMENTATION AND OUTCOME

A. KEY FACTORS DURING PREPARATION

41. **The Program design built on the results of two DPLs in support of the PMV between 2011 and 2014 (P116557 and P127822) and was complementary to operations focused on the modernization of water management.** The DPLs supported the development of a new, modern, wholesale management and ownership model and reconciled the divergent positions of the involved stakeholders (MAPMDREF, Ministry of the Interior, municipalities) in support of the management reform. The Program design built on the momentum on the wholesale market reform by including a DLI on the construction and operationalization of at least one new wholesale market with the new management model. Further, the Program design built on the DPL achievement of establishing a legal and institutional food safety framework in line with international standards by (i) incentivizing an increase in the number of agri-food establishments complying with food safety standards, and (ii) enabling ONSSA to continue its transition from a control-based approach to a risk management-based approach to monitoring food safety and phytosanitary hazards through technical capacity-building. The Program intended to further deepen the research agenda promoted by the DPLs to enhance the competitiveness of the agricultural innovation system through the establishment of the CIAs. In addition, the Program was designed to complement ongoing operations focused on securing primary production by modernizing water management for agriculture (i.e. the US\$70 million Modernization of Irrigated Agriculture in Oum Er Rbia Basin Project, 2010-2017 (P093719); and the US\$150 million Large Scale Irrigation Modernization Project, 2015-2022 (P150930)).
42. **Key Program activities aimed at enhancing crosscutting value-creation and market efficiency beyond the limited number of value chains were not sufficiently reflected by the PDO and outcome indicators.** Around 50 percent of the DLIs were linked to interventions with crosscutting benefits (especially DLIs #2, #4, #5 and #7). However, the PDO was



explicitly focused on the olive and citrus value chains. DLI #4 (Construction and operationalization of a wholesale market under new management model), which accounted for 17 percent of disbursement, was only modestly related to the PDO indicators. To better capture the Program's impacts on market efficiency and value-addition beyond the selected value chains, the design of the results framework could have benefitted from a more broadly framed PDO and outcome indicators (e.g., with coverage of the entire fruit and vegetable sub-sector).

43. **Well-designed DLI Verification Protocol.** The DLI verification protocol was well defined in the Program documents with clear targets and a cogent mix of scalable DLIs for more straightforward interventions targeting a large number of individual beneficiaries (e.g., DLI#3, #5, #7) and non-scalable, step-level DLIs (DLI#1, #2, #4, #6, #8) aimed at incentivizing completion of innovative, technically or institutionally demanding activities with significant positive impacts once completed. The verification process, including data sources, reporting methods, and selection of responsible entities, was sound, clear, and effective.
44. **The impact of key external factors was not included in the Program's risk assessment.** The potential impacts of drought risks on primary production and the PDO were not considered during preparation, as 2015/2016 had been the only recent season during the period 2008-2018 when a drought was declared by the government. The government expected citrus production to double between 2015 and 2020 based on widespread citrus and olive plantings supported by the PMV. In addition, trends of irrigation water allocation in key basins for the Program (i.e., the Sous-Massa, Gharb, Oriental, Tadla and Haouz perimeters) were stable and satisfactory, and producers' access to more efficient irrigation equipment (e.g., drip irrigation) for producers was strongly expanded. Water scarcity was therefore not included as a specific risk to the Program despite the sector's vulnerability to weather fluctuations. As a result, the PDO and the related PDO indicators were heavily focused on agri-food products' total volumes despite the sector's known climate vulnerabilities.
45. **Program Management Unit (PMU) capacity for implementation at appraisal.** The PMU embedded in the Directorate for the Development of Value Chains (DDFP - *Direction du Développement des Filières de Production*) had substantial experience and technical capacity in implementing complex programs with multiple stakeholders, including a project funded by the Millenium Challenge Corporation.

B. KEY FACTORS DURING IMPLEMENTATION

(a) In control of implementing agencies

46. **Satisfactory PMU performance during Program implementation.** This operation was the first Pfor coordinated by the DDFP, and one of the first Pfor in the country implemented by a technical directorate under a line ministry. Nevertheless, the PMU performed at a high level throughout project implementation. By the mid-term review, nine of the sixteen actions in the PAP were completed, and by Program closure, fifteen activities were completed. In addition, the PMU was able to compensate for low-performing TA, which was mobilized at Program outset in line with the PAP to address known constraints in staff resources and monitoring systems. The PMU also adapted well to the disruptions caused by the global pandemic by shifting to a virtual modus operandi.
47. **Repeated site changes for the establishment of the modern wholesale market in Rabat delayed activity completion.** The government decision to change the location of the new wholesale market for the Rabat region twice (in 2018 and 2019) required (i) the development of a new partnership agreement between the Wilaya, MAPMDREF, the Ministry of the Interior and the concerned municipalities; (ii) a new social and environmental impact assessment and a new Resettlement and Social Support Action Plan (RSAP) linked to the closure of the existing market; (iii) new technical studies on the land allocated for market development; and (iv) modifying the initially envisioned market design. The development of the new partnership agreement was complex, given the initial resistance from the involved



municipalities and high construction costs²⁰. The staff hired by the newly established public company (“SDL”), which was created to professionally manage the wholesale market, lacked experience and technical capacity, which further delayed activity completion and required the mobilization of additional TA. In addition, the Wilaya and the public developer tasked with building and operationalizing the new market had limited familiarity with World Bank environmental and social safeguards, requiring significant capacity-building. Construction works concluded in 2024, but the market was not yet operational at Program closing, leading to partial achievement of the related DLI (#4).

48. **E&S implementation challenges related to wholesale market modernization.** This activity posed significant environmental and social risks due to the construction of the new wholesale market and the closure of the existing markets, which required transferring the operators of the existing wholesale markets to the new market and providing alternative livelihood options to those who could not be transferred. Technical and human resource constraints of the RRA (*Rabat Région Aménagement*), a state-owned enterprise responsible for the construction of the Rabat wholesale market, led to significant delays in the completion of the Environmental and Social Impact Assessment. In addition, the RSAP detailing social support measures for the resettlement and transfer of the people affected by this activity was submitted to the Bank with considerable delay²¹.
49. **The prioritization of the completion of works over governance and operationalization aspects contributed to the delays in the achievement of several DLIs.** Progress on technically complex and innovative activities was hampered by the absence of functioning governance arrangements, viable business plans and a lack of adequate technical and financial capacity of designated implementing partners. This concerned particularly the creation of the Center for the production of sterile Ceratitis (DLI#6) and the operationalization of the CIAs in Meknes and Berkane (DLI#7). Works of the related physical structures were launched without clarity on governance, financing and operational arrangements related to staffing, maintenance of equipment, cost of utilities etc. The establishment of the center to produce sterile ceratitis provides a case in point. Efforts to develop detailed financial modalities related to the center's operation only began after its construction was completed in 2020. The then developed draft business plan did not sufficiently consider the technical and financial capacity of Maroc Citrus, the designated implementation entity. More clarity on financial and operational arrangements earlier on during Program implementation could have led to an earlier/complete achievement of the concerned DLIs.
50. **Government-imposed ban on the exports of olives.** Between October 2023 and December 2024, the government imposed a ban on the exports of olives and olive oil²² in response to significant rises in the prices of olives and olive oil on the domestic market, following a sharp decline in domestic olive production. While the prolonged and severe drought was the critical factor (and itself the trigger for the ban) behind the observed decline in the volume of table olive exports (PDO#2) observed from 2023, the government's ban on olive exports is also likely to have contributed to the reduction in the volume table olive exports.

(b) Factors subject to the control of the World Bank

51. **The World Bank task team provided effective support on tackling issues and bottlenecks affecting the Program's most complex activities.** The task team modified implementation roadmaps when required and proactively mobilized the required technical assistance through timely recruitment and adequate supervision of both international and national experts in coordination with the relevant entities. TA was mobilized related to (i) the establishment of a modern wholesale market (DLI#4); (ii) the creation of the CIA in Meknès; (iii) the operationalization of the center for

²⁰ The negotiation of this agreement was complex as the intended change in management model is to abolish the previous fixed transaction tax of 7 percent of which 5.5 percent were flowing to municipalities in favor of a price model based on services/areas used, with revenues first flowing to the SDL. As compensation for the loss in revenue from transaction taxes, it was agreed that municipalities would receive annual dividends paid by the SDL and recover the land allocated to the previous wholesale market.

²¹ The RSAP was submitted to the Bank in March 2025 and was under review by the time of ICR completion.

²² Under the ban, the government made the export of olives and olive oil subject to prior obtention of an export license, in accordance with the provisions of law 13-89 relating to foreign trade.



the production of sterile ceratitis; and (iv) the conceptualization and implementation of a pilot on productive alliances. The TA enabled achievement of DLI #6 and substantial achievement of DLI#4 and #7. In 2023, the task team supported the Program's extension to complete delayed activities given their importance and based on its assessment that remaining implementation hurdles could be resolved. The task team also supported the DSS to develop an alternative approach to estimate PDO#3 in response to unexpected data collection challenges.

52. **Changes in the Task Team composition.** There were four changes in the ADM TTL from the start of the preparation until the closing date. Institutional memory was preserved and transmitted effectively as key team members, including the co-TTL, accompanied the Program throughout implementation. The task team ensured adequate documentation of ISMs, technical discussions with implementing agencies, and the outputs linked to technical assistance.

(c) Factors outside the control of government and/or implementing agencies

53. **COVID-19 pandemic.** Implementation entities adapted well to the disruptions caused by the COVID-19 pandemic by shifting coordination activities into the virtual space. However, activities requiring in-person meetings or field visits as well as training activities were delayed, e.g., the signature of the Memorandum of Understanding for the establishment of the new wholesale market in Rabat. Mobility restrictions also prevented the General Assembly of *Interprolive* from convening, delaying the adoption of its business plan until 2021. In addition, the pandemic also affected olive and citrus exports in 2020 and 2021 owing to increased shipping and packaging costs (though the exact impact is hard to determine) and slowed achievement of DLI#8, as the operationalization of the third module of the financial management system MISAGRI was put on hold. Last, the pandemic also contributed to the delay in the construction of the CIA in Berkane and led to increased construction costs of the new wholesale market in Rabat.
54. **Unprecedented drought.** The country has constantly experienced drought conditions since 2019. According to the Moroccan General Directorate of Meteorology (DGM), the agricultural seasons 2021/2022 and 2022/2023 were among the driest seasons on record with, at the national level, negative deviations from the 1981–2010 average by 46 percent (33 percent in the Sous-Massa region, the main citrus growing area) and by 29 percent (28 percent in the Sous-Massa region), respectively. This unprecedented series of consecutive drought years resulted in historically low dam fill rates (23 percent nationally) and most of the water being allocated to drinking water at the expense of irrigation water (see annex 6 for more details). It should be noted, however, that drought impacts affected PDO indicators with a time lag (the maximum volume of exported citrus was recorded in 2022). During the 2021/2022 season, the main citrus growing regions still had sufficient access to irrigation water from the country's dam infrastructure and groundwater pumps, which compensated for low rainfall and allowed production to be maintained at relatively high levels. In addition, a substantial share of late citrus varieties harvested at the end of the 2020/2021 season was accounted for in the export statistics of the 2021/2022 season. From 2022 onwards, the supply to irrigation schemes most relevant to citrus and olive cultivation in the Sous-Massa, Moulouya, Tadla, and Haouz regions dropped sharply. In addition, heatwaves, especially in 2023, affected plant growth during critical stages. This caused a strong decline in citrus production in the 2022/2023 and 2023/2024 seasons. Olive production was similarly affected by drought conditions and heat stress, with primary olive production falling across the country.

IV. BANK PERFORMANCE, COMPLIANCE ISSUES, AND RISK TO DEVELOPMENT OUTCOME

A. QUALITY OF MONITORING AND EVALUATION (M&E)

M&E Design

55. **The ToC had several weaknesses despite specific, measurable, and relevant PDO and intermediate results indicators.** Achievement of the PDO and the three PDO indicators was dependent on the volume of primary production which, with few exceptions, was not targeted by Program interventions. This complicated assessing the impact of Program



interventions given the impacts of unprecedented drought. Selecting a capacity-focused, systemic PDO statement and incorporating alternative outcome indicators measuring relative changes/improvements in value addition/market efficiency, such as the share of value-added agri-food products commercialized in total primary production or the capacity for processing of primary production could have contributed to a more comprehensive and robust measurement of Program achievements. In addition, all PDO indicators were measured annually. Adding one cumulative PDO indicator would have decreased risks of unsatisfactory outcomes due to the influence of external factors. Last, considering sector-wide benefits of a substantial share of Program interventions, the inclusion of a cross-cutting PDO indicator beyond the olive and citrus value-chains could have, as mentioned in section III.A, would have allowed for better capturing the breadth of Program benefits. However, the design of most IRI was relevant to the PDO, with each indicator directly related to one of the two RAs.

56. **DLIs were generally aligned with the PDO.** As discussed in the section II.A, five DLIs were directly related to the PDO. The DLI verification methodology and protocols were clearly defined in the MOP (see also section III.A).
57. **M&E data was to be compiled by MAPMDREF through the DDFP for consolidated reporting at the RF-level.** The M&E system at the Program level relied on combining information sourced from existing data collection tools and M&E subsystems used by the relevant implementing agencies as part of their workflows. For some activities, more sophisticated, information-technology based tools were used. For instance, investments linked to DLI#5 were recorded through a Microsoft-based database. Due to the variety of activities and implementation entities, the subsystems generally had limited interoperability. As part of the PAP, the Program strengthened DDFP M&E capacity by developing a M&E module allowing the integration of M&E data from the different implementation agencies to facilitate integrated data management and reporting on the RF. The M&E module was plugged into MAPMDREF's new electronic financial planning, management, and reporting platform (MISAGRI).

M&E Implementation

58. **The PMU reported on the status of the RF indicators at regular intervals, either annually or semi-annually.** For the most part, the PMU and the implementing agencies communicated RF data in a timely and reliable manner prior to implementation support missions (ISMs). However, as annual data collection cycles related PDO indicators were not aligned with the timing of ISMs, indicator values recorded in the RF after ISM completion frequently differed from final values (for a given year) provided by the PMU in its annual reports (see comments in annex 1 for details).
59. **DLI verification protocols proved effective.** The General Inspectorate of Agriculture (IGA - *Inspection Générale de l'Agriculture*) was the designated independent verification agency. It verified DLI achievement through a total of 24 field missions in a timely and reliable manner upon notification by the PMU. To verify scalable DLIs (#3 and #5) with many benefitting entities, IGA employed cost-effective methods by conducting verification missions based on random samples.
60. **Data collection challenges related to PDO#3.** Except for 2019 when a survey covering the 2018/2019 agricultural campaign to establish a Program baseline was carried out, the initially agreed data collection method for this indicator (i.e. surveys based on a sample of olive oil producers) was not applied due to methodological, administrative and budgetary constraints encountered by the DSS. In 2020, the surveys were not carried out as the call for tenders proved unsuccessful. Since 2020, the implementation of government-funded surveys requires prior approval by the Head of Government according to the provisions of the Head of Government's Circular N°14/2020 (issued in the context of the pandemic and cost concerns). The approvals could not be obtained in time in 2021 and 2022. In 2023, a survey was conducted but the results proved unrepresentative as a significant number of olive crushing units suspended operations due to drought impacts. An alternative statistical approach to roughly estimate PDO#3 was used between 2020 and 2024. In addition, gender-disaggregated data for intermediary results indicators was not systematically collected.



61. **Impact evaluation related to DLIs#3 and DLI#5.** The impact evaluation conducted in 2022 (referred to in section II.B) relied on a combination of field visits and telephone surveys of a sample of agri-food businesses that benefitted from the Program. It should be noted that the results of the impact assessment reflect the situation in 2022, when the impacts of the drought had not fully yet materialized.
62. **Program Ratings.** The ratings for “progress towards the PDO” could have been downgraded more decisively to reflect the magnitude and persistence of the negative trends towards the achievement of the PDO indicator targets. Although these fell below the baseline levels in 2023, the rating was downgraded to ‘Moderately Satisfactory’ only while a rating of Moderately Unsatisfactory at Program closure would have been appropriate.

M&E Utilization

63. **M&E data was used to track implementation progress and to facilitate the course correction of activities whose implementation was delayed.** The progress updates provided through the M&E system effectively enabled the PMU and the task team to review slow-moving activities during Program implementation, identify obstacles, and guide the corresponding mobilization of TA to advance implementation and provide concerned implementation agencies with targeted capacity-building. World Bank TA was instrumental in supporting (i) the operationalization of the CIA in Mèknes (DLI#7), (ii) the creation of the public company responsible for managing the new wholesale market in Rabat and the design of the market (DLI#4), and (iii) the development a viable business plan for the center for the production of sterilized ceratitis, which contributed to the center’s successful operationalization before Program closure (DLI#6).
64. **One-year Program extension.** Evidence from the M&E system supported the rationale underlying the one-year Program extension in June 2023 to complete key activities related to the DLIs #4, #6, #7. In 2024, the World Bank proposed a second extension to complete outstanding activities linked to wholesale market operationalization and support of agri-food operators through the CIAs. However, the government did not express interest in a second extension.

Justification of Overall Rating of M&E Quality

65. Due to the weaknesses in RF design which remained unaddressed during implementation, and data collection challenges related to PDO#3, overall M&E quality is rated Modest.

B. ENVIRONMENTAL, SOCIAL, AND FIDUCIARY COMPLIANCE

Environmental and Social

66. **The Program's performance on E&S aspects was moderately satisfactory.** Environmental and social compliance was highly satisfactory for most program activities; however, there were significant delays in meeting E&S requirements for the establishment of the new wholesale market in Rabat (see also section III.B(a)).
67. **The Program achieved most of the specific E&S actions outlined in the PAP.** These included, amongst others, the hiring of an environmental and social specialist as part of the TA to the PMU; the development of a manual on good environmental and social management practices (including on E&S eligibility criteria linked to the FDA scheme, see also Section II.B) and its dissemination and related training activities for all implementing agencies (DRAs, *interprofessions*, etc.); and the exclusion of involuntary land acquisition. The E&S manual developed by the PMU serves as an example of effective E&S mainstreaming in Program activities for other PforRs in Morocco. The Program also facilitated an agreement by the Ministry of Sustainable Development and MAPMDREF to jointly conduct inspections of olive crushing units established or modernized under the Program to verify their compliance with relevant environmental regulations. In addition, a framework agreement was signed between the MAPMDREF and the Ministry of Sustainable Development and the Ministry of Water, the Ministry of the Interior and *Interprolive* for projects between 2020-2024 related to the collection, treatment, and/or recycling of waste from the olive sector. These agreements represent innovative models for effective inter-ministerial cooperation on cross-cutting issues. The



publication of a decree on the modalities of spreading liquid residues from olive crushing units on agricultural land was the only PAP E&S action still pending at Program closure (expected in the upcoming few months).

Fiduciary

68. **Building on the results of a previous Public Expenditure and Financial Accountability diagnostic, the FSA helped identify fiduciary risks and appropriate mitigation measures.** The rating for fiduciary risks was Substantial, which is appropriate. The PAP included four fiduciary actions, all of which were completed.
69. **The Program's financial management performance was satisfactory.** This is primarily due to (i) the overall performance in terms of commitments and payments, both within the Program's overall expenditure framework and the activities financed by the program; (ii) compliance with Bank financial reporting and external audit report submission requirements in a timely manner with unqualified audit opinions; (iii) accuracy of the Program's financial statements; (iv) increased financial management capacity through the development and operationalization of MISAGRI (DLI#8, see also section II.B), and (iv) the completion of most activities, including construction works for the Rabat wholesale market by Program closure.
70. **The Program performed generally well regarding procurement monitoring.** With support from TA mobilized as part of the PAP, the PMU kept adequately track of procurements under the Program. The Bank's Guidelines on Preventing and Combating Fraud and Corruption in PforR Financing were generally observed with no cases of fraud or corruption linked to procurement reported or identified during Program implementation.
71. **Fiduciary capacity constraints linked to RRA's supervision of wholesale market construction contributed to the observed construction delays.** These included low involvement of the management board in project supervision and high turnover of project coordinators. Other noteworthy fiduciary issues include an unsuccessful tender related to the construction of the CIA in Berkane caused by unforeseen cost increases for construction materials due to the global supply chain disruptions in the wake of the pandemic (see also section III.B(c)).
72. **Going forward, there is a need to further increase the utilization of the financial management system MISAGRI, particularly its third module.** This would help address remaining weaknesses highlighted by the latest Program audit (2023), including accounting gaps, discrepancies between activity reports and financial statements, non-compliance with financial statement templates, and inaccuracies in financial information. In addition, the Program audit observed some deficiencies in tender management and compliance with national procurement regulations.

C. BANK PERFORMANCE

Quality at Entry

73. **The World Bank supported MAPMDREF in preparing a comprehensive and ambitious operation that was aligned with the Government program.** The Program was anchored in the findings and recommendations of the mid-term review of the PMV and built on the results of two previous DPLs and complemented irrigation-focused projects, which ensured its strategic relevance. The choice of the PforR instrument was appropriate, given MAPDREF's focus on achieving results through the PMV and its technical capacity. The World Bank conducted the required assessments: the technical assessment; the FSA; and the Environmental and Social Systems Assessment. It developed a robust PAP with measures to address the areas requiring strengthening that were identified by these assessments during Program preparation. The World Bank supported MAPMDREF in identifying Program activities and developing the MOP.
74. **There were shortcomings in the design of the M&E framework and the risk assessment.** As discussed in section III.A, the Program could have benefitted from incorporating a more systemic capacity-oriented PDO and alternative PDO indicators to (i) allow for a more nuanced and robust measurement of Program outcomes considering the sector's exposure to climate risks and (ii) to better capture the substantial proportion of Program activities designed to benefit



the sector beyond the selected value chains. The risk assessment was broadly appropriate, except that climate risks were not included despite the known vulnerability of the sector to rainfall variability²³.

Quality of Supervision

75. **World Bank implementation support was thorough, consistent, and responsive.** The World Bank conducted 15 implementation support missions, including a Mid-Term Review (MTR) mission in October 2020. The key issues, potential risks, and actions plans to mitigate the risks were adequately articulated in the Aides Memoire, Implementation Status and Results Reports, and Management Letters. The World Bank followed up consistently and promptly with the PMU and the implementing agencies on pending Program issues, with a particular attention to delayed and politically complex activities, and ensured due diligence related to fiduciary and E&S aspects beyond Program closure. To assist the PMU with advancing delayed activities, the World Bank repeatedly mobilized and supervised TA with international expertise, which proved effective in addressing bottlenecks and enhancing the technical capacity of the implementation agencies (see also section IV.A). In addition, the Bank supported extending the Program for one year to allow for the completion of activities deemed critical for increasing sector competitiveness and potential for value-addition. Regarding M&E, the task team commissioned an impact evaluation (see section II.B) to assess the impacts of key Program investments in agri-food processing and the sanitary authorization of agri-food SME.
76. **Rationale for non-adjustment of PDO/PDO indicators during implementation.** During the MTR in 2020, the observed weaknesses in the RF/PDO design were not deemed a sufficiently strong rationale for Program restructuring given overall satisfactory Program implementation progress and the expectation that the achievement rate of PDO indicators would improve. When cumulative drought impacts led to a sharp decline in PDO indicators in 2023, restructuring or revising PDO targets was no longer a viable option as (i) the bulk of Program activities was already fully implemented (with a disbursement rate of 73 percent), and (ii) as it would not have been acceptable to revise indicators or indicator targets within the last months of implementation.
77. **For most of the Program implementation period, the ISR ratings reflected Program performance, including on the E&S and fiduciary dimensions.** However, the magnitude and persistence of the negative trends in the PDO indicators in 2023 and 2024 could have been better reflected in the overall ISR ratings.

Justification of Overall Rating of Bank Performance

78. Based on the above discussion of Bank performance in ensuring quality at entry and quality of supervision, overall performance is rated Moderately Satisfactory (MS).

D. RISK TO DEVELOPMENT OUTCOME

79. **Sustainability of Program innovations.** The successful operationalization of the CIAs represents an important Program achievement given their potential to foster SME-driven innovation and value-addition in Morocco's agri-food sector and, more generally, their role in advancing Morocco's agriculture innovation ecosystem. While the equipment required to operate the centers is in place, operational modalities in terms of service design and delivery as well as cost recovery arrangements are not yet sufficiently mature and need to be strengthened. While the existing agreements between MAPMDREF and the implementing entity ('AGRINOVA') guarantee financing through 2025, medium-term sustainability of the centers requires a commitment to identify and consolidate viable operating models. Sustainability risks also apply to a lesser degree to the center for the production of sterilized male ceratitis, whose financing is secured until 2030. Sustained low levels of citrus production would undermine the rationale underlying the center's creation.

²³ See for instance [World Bank 2018](#).



80. **Maintenance of investments into agri-processing in the Program value chains.** The unprecedented series of droughts in the country has caused a decline in primary production of both olives and citrus in 2023 and 2024. Unless primary production rebounds over the upcoming agricultural seasons (which is projected to be the case for citrus), a significant number of agri-food processing units built under the Program could become economically unviable, impacting the long-term potential for the sector to contribute to income generation and employment. This risk is mitigated by ongoing investments in water security, such as dams, water transfer infrastructure and desalination plants (see annex 6 for details). In addition, efforts are under way to increase water use efficiency through the RESWAG Project (P175747, 2022-2028). These efforts should contribute to securing a base supply of irrigation water in the coming years in the major citrus and olive growing regions and enable a rebound in the commercialization of citrus, table olives, and high-quality olive oil.
81. **Risks related to the new wholesale market of Rabat.** The timeline for the opening of the new wholesale market in Rabat was not yet known at ICR completion. In addition, the closure of the old wholesale markets entail substantial E&S risks linked to the transfer/resettlement of the current operators.

V. LESSONS AND RECOMMENDATIONS

82. **For activities requiring coordination and agreement among multiple stakeholders, the underlying institutional and implementation arrangements should be based on prior technical studies at Program outset.** Several of the Program's technically innovative activities involving the construction of infrastructure and the operationalization of new services/management models (establishment of the CIA, construction of the wholesale market, and the Ceratitis center) were delayed as the related governance agreements between the designated implementing entities were put in place without the prior agreement of the involved parties on specific operational aspects and sufficient grounding in technical studies. Efforts to develop financing and operational arrangements were not started until advanced construction stages. Technical studies clarifying operational and financial aspects studies should be completed prior to the initiation of the construction phase and be based on realistic assessments of the involved entities' financial and technical capacity. The Bank can help support robust operational arrangements from the outset through appropriate covenants or DLIs.
83. **Framing the PDO as a systemic, capacity-oriented development objective, rather than as a narrow outcome indicator with strong dependence on external factors, facilitates more holistic and robust M&E of Program outcomes.** The PDO and PDO indicators' narrow focus on total quantities/volumes reduced the resilience of Program outcomes to external factors. The selection of systemic, capacity-oriented PDOs and more diverse outcome metrics (e.g., increased share of value-added production in total production or increased capacity for value-added production) can facilitate a more nuanced assessment of Program outcomes at a more systemic level²⁴. Similarly, as part of MTRs, programs should initiate restructuring if weaknesses in the RF/PDO design are observed, independent of implementation progress. This would allow for timely RF adjustment and thus increase the likelihood of better outcome ratings at Program completion.
84. **Adequate technical assistance, both at Program management and technical levels, can be instrumental to advance implementation of complex programs.** TA critically supported the PMU in overcoming human resource constraints, considering the diversity of Program activities, the coordination of numerous implementing agencies, and the multiple parallel responsibilities of PMU staff embedded in the DDFP. Additionally, the Program benefited from the mobilization of international TA in response to emerging needs linked to technically and politically complex activities. Programs can benefit from ensuring flexibility and sufficient resources to enable the mobilization of TA at short notice to advance implementation and strengthen the technical capacity of implementing agencies.

²⁴ This lesson has been incorporated in the Transforming Agri-Food Systems in Morocco Program (P181587).



85. **Programs should ensure sufficient resources are allocated upfront for data collection linked to key program indicators.** As outlined in Section IV.A, the entity responsible for data collection for PDO #3 encountered budgetary and administrative constraints that hindered the execution of surveys, complicating the monitoring of Program progress and the assessment of the effectiveness of Program interventions. It is essential that Programs ensure during preparation that the methodology proposed for the collection of data on key results indicators is sufficiently robust and supported by the necessary financial and technical resources for the entire duration of the Program.
86. **By making public support conditional on compliance with good environmental and social practices, Programs can contribute to improved social and environmental outcomes.** Under the Program, MAPMDREF's public support scheme to support the agriculture sector (*FDA*) was revised to include eligibility criteria requiring SME applying for public investment support to adhere to social and environmental regulations. This made it possible to raise environmental and social standards in downstream value chain segments of the agri-food sector.
87. **The time between completion and operationalization of facilities with sensitive equipment such as the center for the production of sterilized ceratitis should be minimal.** Ensuring a seamless transition between the installation of equipment (e.g., air conditioning, filtering and ventilation systems or other equipment with high maintenance needs) and its operationalization can prevent deterioration and subsequent need for costly refitting and repairs. Related to the rearing of insects for biological pest control, it is key to ensure careful calibration and stress testing of the air conditioning system to ensure sufficiently stable and conducive conditions for breeding activities.



ANNEX 1. RESULTS FRAMEWORK, DISBURSEMENT LINKED INDICATORS, AND PROGRAM ACTION PLAN

A. RESULTS FRAMEWORK

PDO Indicators by PDO Outcomes

To increase the vol of added-value products commercialized in selected agfood VC in the program area								
Indicator Name	Baseline		Closing Period (Original)		Closing Period (Current)		Actual Achieved at Completion	
	Result	Month/Year	Result	Month/Year	Result	Month/Year	Result	Month/Year
Volume of conditioned and exported citrus (Tones/year)	556,800.00	Nov/2017			750,000.00	Sep/2024	456,939	Aug/2024
	Comments on achieving targets		Annual indicator. Indicator measures total citrus exports during the citrus agricultural campaign, which runs from 1 September year n to 31 August of year n+1. As the timing ISMs was not aligned with the data collection cycle, indicator values recorded in results framework after ISMs frequently differed slightly from final values reported in annual progress reports (see annex 6 for overview of final indicator values). The indicator depends heavily on the availability of irrigation water. With the support of the Program's interventions, the indicator exceeded its target during the 2021/2022 season, reaching 765,661 t. However, due to unprecedented drought and the ensuing irrigation water shortages, primary production declined significantly. As a result, indicator values dropped below their baseline in the season 2022/2023 until Program closure.					
Volume of conditioned and exported olives (Tones/year)	73,129.00	Nov/2017			98,000.00	Sep/2024	69,155	Sep/2024
	Comments on achieving targets		Annual indicator. Annual values measure total volume of table olive exports from 1 January to 31 December of a given year. Final value for 2024 corresponds to total exports registered from January - September 2024. As the timing ISMs were not aligned with the data collection cycle, indicator values recorded in results framework after ISMs frequently differed from final values reported in annual progress reports (see annex 6 for overview of final indicator values). The indicator depends heavily on the availability of rainfall and irrigation water. During the 2020/2021 and 2021/2022 seasons, the indicator surpassed the Program targets. However, due to unprecedented drought and the ensuing irrigation water shortages, primary production declined significantly. As a result, indicator values fell significantly starting 2023 with the final indicator value below its baseline in September 2024.					



Volume of high quality olive oil commercialized (i.e. quality is higher than lampante) (Tones/year)	10,000.00	Nov/2017			20,000.00	Sep/2024	9,650.00	Sep/2024
	Comments on achieving targets		Annual indicator. Contrary to the initially planned data collection methodology consisting of annual surveys, values related to this PDO indicator were mainly estimated through an alternative statistical approach agreed between the PMU and the World Bank agreed in June 2022 (with the exception of 2018/2019 when a survey was conducted). In 2022/2023 MAPMDREF conducted a survey, which, however, proved unrepresentative due to drought impacts. The values recorded in results framework after ISMs frequently differed from final values reported in annual progress reports, including due to methodological challenges and mismatch between ISM timing and data collection cycles (see also explanation under PDO#1 and PDO#2). The Program did not achieve the target due to low olive oil production in the 2022/2023 and the 2023/2024 agricultural seasons. However, according to annual progress reports, the final indicator values for 2019 and 2022 reached 18,660 t and 16,100 t, respectively.					

Intermediate Results Indicators by Result Areas

Increased market efficiency and integration								
Indicator Name	Baseline		Closing Period (Original)		Closing Period (Current)		Actual Achieved at Completion	
	Result	Month/Year	Result	Month/Year	Result	Month/Year	Result	Month/Year
Interprofessions with business plans approved and intra-branch agreements adopted to ensure sust. (Number)	0.00	Nov/2017			2.00	Dec/2022	2.00	Jun/2024
	Comments on achieving targets		The Program indicator was achieved in December 2021. The interprofessions Interprolive/Maroc Citrus were instrumental in supporting producers to commercialize citrus/olives/high-quality olive oil including through capacity-building and advisory (e.g., related to export requirements and related marketing, agronomic practices, conditioning etc.).					
Private investments in conditioning, cold storage and/or processing units (olive, citrus) generated (Number)	0.00	Nov/2017			70.00	Dec/2022	70.00	Jun/2024
	Comments on achieving targets		It should be noted that this indicator has not been correctly reflected by the operations portal. As per the PAD, the unit of this indicator is "Value in MDM (Million Dirham)" and the target value should be "700". The indicator captures the value of private investment in conditioning, cold storage and/or processing units for projects receiving incentives from the FDA (olive, citrus) under adjusted modalities for appraisal and monitoring by MAPMDREF. The Program mobilized a total of DHM 2.6 bn in private capital until closure, exceeding the target by more than 300%.					
	No	Nov/2017			Yes	Sep/2024	Yes	Jun/2024



Amended Law no. 4-12 on agricultural aggregation dated 2012 is under implementation (Yes/No)	Comments on achieving targets		The Law on aggregation has been amended to allow direct sales of products from aggregation projects to supermarkets and other modern commercial entities. The corresponding implementation Decree and related arrêté were published in the Official Bulletin in October 2024.					
Additional producers aggregated (olives, citrus) (Number)	0.00	Nov/2017			1,500.00	Sep/2024	878.00	Jun/2024
	Comments on achieving targets		The Program did not achieve the target (achievement 59%) due to (i) the delay in implementation of the amended law 04-12 and (ii) the impacts of prolonged drought. However, under the government's Green Generation Strategy 2020-2030 (the current sectoral strategy following the PMV), additional aggregation projects for olive (28 projects) and citrus producers (20 projects) have been identified.					
At least one wholesale market is operating and applying the new management model (Yes/No)	No	Nov/2017			Yes	Sep/2024	No	Jun/2024
	Comments on achieving targets		The wholesale market of Rabat has been built but is not yet operational.					
Use of market information services for mobile phones and of the application Publi-Asaar (Number)	100,000.00	Nov/2017			200,000.00	Sep/2024	N/A	Jun/2024
	Comments on achieving targets		Under the Program, the Asaar website (which serves as the basis for Publi-Asaar) was developed and launched. It provides information on prices and market conditions related to the agriculture sector. The website currently registers around 500 users per day. However, the Program did not achieve the related indicator target as the new mobile application for the Asaar information system is not yet operational and the required data related to this indicator is unavailable (# of additional SMS sent to users (target = 160,000 SMS) and # of downloads (target = 40,000 downloads) of mobile application by Program closing). A Beta version of the mobile application is now available and the development and its launch is expected over the next few months.					
At least one public consultation on the Program carried out each year by MAMPDREF (Yes/No)	No	Nov/2017			Yes	Sep/2024	Yes	Jun/2024
	Comments on achieving targets		A total of three consultations were conducted during Program implementation (in 2019, 2021 and 2022). In 2020, the consultation did not take place due to the COVID-19 Pandemic.					
Improved added-value of agri-food products								
Indicator Name	Baseline		Closing Period (Original)		Closing Period (Current)		Actual Achieved at Completion	
	Result	Month/Year	Result	Month/Year	Result	Month/Year	Result	Month/Year
Small and/or medium enterprises agri-food authorized by ONSSA (Number)	5,000.00	Nov/2017			6,000.00	Dec/2022	6,000.00	Sep/2024
	Comments on achieving targets		This indicator refers to the number of additional SME in the agri-food sector authorized by ONSSA, reflecting their compliance with food safety regulations. The indicator target was exceeded substantially (The total number of ONSSA-authorized SME reached 1103 of which 1000 were verified through the IGA under DLI#5).					
Area treated for Mediterranean fruit fly through the new Center (Hectare(Ha))	0.00	Nov/2017			20,000.00	Sep/2024	1,200.00	Dec/2024
	Comments on achieving targets		The Program failed to achieve the indicator target as the center for the production of sterilized ceratitis was operationalized only in September 2024. Until completion, the Program repeatedly imported sterilized ceratitis					



			flies from Spain to treat a more limited area (5800 ha). The center is currently in the process of ramping up capacity.					
Producers with an input register in the Souss-Massa region (Number)	0.00	Nov/2017			2,000.00	Sep/2024	6,077.00	Jun/2024
	Comments on achieving targets		This Program exceeded its target related to the number of agricultural producers who are using an input register in the Souss-Massa region (achievement rate 194%). The adoption of the register by 1566 citrus producers strengthened their capacity to meet export requirements related to phytosanitary standards and, therefore, supported progress towards the PDO.					
SDOQ Products certified by the OCC (Number)	8.00	Nov/2017			28.00	Dec/2022	28.00	Jun/2024
	Comments on achieving targets		The Program fully achieved the target of the number of new products registered under the Distinctive Signs of Origin and Quality (DSOQ) scheme.					
Small- and/or medium-size producers and/or enterprises assisted by the Agri-food Innovation Center (Number)	0.00	Nov/2017			50.00	Sep/2024	28	Jun/2024
	Comments on achieving targets		Small- and/or medium-size producers and enterprises with value-addition projects that have requested and benefitted from at least one of the services offered by the Agri-Food Innovation Centers (CIA). Services include technical support services; management support services; knowledge and market access support services; incubation support services, and networking services). The CIA in Meknès (CENAM) provided pesticide testing services to 5 citrus producers and 1 olive producer, facilitating market access and commercialization/export. The Program failed to achieve its target due to the late operationalization of the CIA in Berkane (September 2024).					
Projects using green practices and technologies implemented by beneficiaries of the Program (Number)	0.00	Nov/2017			10.00	Sep/2024	4.00	Sep/2024
	Comments on achieving targets		The indicator aggregates all projects adopting green practices and technologies, including those to treat olive crushing residues and enhance climate adaptation and mitigation, either as a result of the support provided by the CIAs or within the scope of FDA's financial support.					

Disbursement Linked Indicators (DLI)

Period	Period Definition
Period 1	December 27, 2017 to Sep 30, 2024

	Baseline	Period 1
1: Number of Interprofessions with business plans approved and intra-branch agreements (Accords Interprofessionnels) adopted to	Achievement Level: Achieved	



ensure sustainability (Number)		
Original/Revised Value	0.00	2.00
Allocated Amount	0.00	10,000,000.00
Actual Value		2.00
Actual Amount		10,000,000.00
2:Amended Law no. 4-12 on Agricultural Aggregation dated 2012 is under implementation: 2.1) Adoption by the Council of Government; 2.2) Amended Law published; 2.3) Implementation Decree and arrêté publ (Yes/No)	Achievement Level: Achieved	
Original/Revised Value	No	Yes
Allocated Amount	0.00	10,000,000.00
Actual Value		Yes
Actual Amount		10,000,000.00
3:Number of new/upgraded conditioning, cold storage and/or processing units in selected agri-food value chains under operation (Number)	Achievement Level: Achieved	
Original/Revised Value	0.00	70.00
Allocated Amount	0.00	70,000,000.00
Actual Value		70.00
Actual Amount		70,000,000.00
4:At least one wholesale market operating and applying the new management model as defined in the POM: 4.1 SDL/SDR established and registered; 4.2 Wholesale market constructed and fully equipped; 4.3 Ne (Yes/No)	Achievement Level: Partially achieved	
Original/Revised Value	No	Yes
Allocated Amount	0.00	34,500,000.00
Actual Value		DLR 4.1 and 4.2 achieved
Actual Amount		22,500,000.00
5:Number of small- and/or medium-size agri-food enterprises authorized by ONSSA (Number)	Achievement Level: Achieved	
Original/Revised Value	5,000.00	6,000.00
Allocated Amount	0.00	30,000,000.00
Actual Value		6,000



Actual Amount		30,000,000.00
6:Agreement between the Borrower and IAEA duly signed for the provision of equipment and relevant training for the center for the production of sterile ceratitis males, under terms and conditions set in the POM ()	Achievement Level: Achieved	
Original/Revised Value	No	Yes
Allocated Amount	0.00	15,000,000.00
Actual Value		Yes
Actual Amount		15,000,000.00
7:Number of small- and/or medium-size enterprises assisted by the Agri-food Innovation Centers (CIAs): 7.1 Two Agri-food Innovation Centers (CIAs) constructed/rehabilitated and fully equipped, and are o (Number)	Achievement Level: Partially achieved	
Original/Revised Value	0.00	50.00
Allocated Amount	0.00	20,000,000.00
Actual Value		27
Actual Amount		13,100,000.00
8:Deployment of the integrated financial management system ()	Achievement Level: Achieved	
Original/Revised Value	No	Yes
Allocated Amount	0.00	10,000,000.00
Actual Value		Yes
Actual Amount		10,000,000.00

1. PROGRAM ACTION PLAN

Action	Timing	Timing Value	Achieved?	Completion Measurement
Recruitment of TA to strengthen PMU capacities	Due Date	30-Apr-2018	Yes	-
Comments	TA was hired on January 13, 2020, and its contract ended on September 2023, No budget was planned to maintain it following program extension. The TA's objective of supporting the PMU in implementing the project was achieved during this period.			



(i) Program Operational Manual (POM) approved by the Bank, and (ii) instructions issued for its use by Program implementing entities	Due Date	30-Mar-2018	Yes	POM
Comments	The POM was approved by the WB on 20 December 2017 and shared with the implementing entities on 6 February 2018. The POM was revised in March 2019, April 2022 and June 2024 and approved by the WB.			
Deployment of the integrated financial management system	Due Date	31-Dec-2019	Yes	System designed and implemented
Comments	The Ministry of Agriculture has developed the integrated financial management system, MISAGRI, in-house. The three main modules have been developed and tested and the integrated system is operational.			
Strengthen technical staff with dedicated technician, for managing the construction of the wholesale market	Due Date	29-Jun-2018	Yes	Report
Comments	Rabat Region Amenagement (RRA) has recruited a technician for supervising the construction of the wholesale market.			
Periodic reporting on the construction of the wholesale market (physical and financial progress), including technical and fiduciary performance aspects	Recurrent	Yearly	Yes	Architectural studies completed, bidding documents prepared.
Comments	The RRA company has received authorization to build and land transactions were finalized. The construction of the project is completed.			
Prepare, on a quarterly basis, consolidated periodic reports on the wholesale market construction and equipment contract execution with a performance analysis	Recurrent	Continuous	Yes	Report sent to the World Bank.
Comments	Periodic reports were sent in a timely manner and were overall satisfactory. The Task Team reviewed the reports and provided advice to the PIU to improve quality of the reports (detail on substance of some activities, summary tables etc.).			



Preparation of a technical guide and tools for environmental and social management practices and Dissemination/training of all parties involved in Program implementation	Due Date	29-Jun-2018	Yes	Technical guide has been shared with the Bank for approval.
Comments	The guide was transmitted to the World Bank on January 14, 2019 and subsequently approved. Training for the use of the Guide was organized on December 24, 2019. An updated version was submitted and approved by the Bank at the end of May 2022.			
Recruitment of Environmental and Social Focal Points (E&S specialists) within PMU	Due Date	30-Apr-2018	Yes	-
Comments	An environmental specialist and a social specialist were recruited as part of the Technical Assistance of the PMU.			
Implementation of all procedures and tools defined in the technical manual including M&E	Due Date	31-Dec-2018	Yes	Reports
Comments	E&S focal point with the support of the new TA E&S specialist carried out training sessions (on E&S technical guide) for the benefit of Program stakeholders.			
Exclusion of involuntary land acquisition under the Program, ensure prior land acquisitions complies with national regulations and WB policy core principles	Due Date	29-Jun-2018	Yes	Report
Comments	There was no involuntary land acquisition for the construction of the whole sale market on the retained site as all land owners are public entities.			
Improvement in targeted agricultural production and processing sectors regarding compliance with existing environment and labor laws and regulations, including child labor and social security	Due Date	31-Dec-2018	Yes	-
Comments	Part of the Technical Assistance.			
Consultations undertaken with stakeholders of the existing wholesale market and current land users to	Due Date	31-Dec-2019	Yes	Report



ensure that the transfer of wholesale market activities is undertaken in a socially sustainable manner and loss of livelihood is mitigated				
Comments	RRA successfully conducted stakeholder consultations. The RRA also developed the corresponding Resettlement and Social Action Plan, which has been shared in March 2025.			
Agreement between the Borrower and IAEA duly signed for the provision of equipment and relevant training for the center for the production of sterile ceratitis males, under terms and conditions set in the POM	Due Date	31-Dec-2019	Yes	Signature of the agreement between Morocco and IAAE.
Comments	The agreement between ONSSA and IAAE was signed on November 14, 2019 and the construction of the center was completed in February 2020.			
Signature of partnership agreement and preparation of legal framework and implementation decrees relative to the conditions and modalities of spreading of liquid residues from the crushing units of olives on agricultural land	Due Date	31-Dec-2020	No	Publication in the official gazette.
Comments	The draft decree on the spreading of liquid residues of olive crushing units on agricultural land has been approved by all relevant parties and is pending official signature for publication in the official gazette.			
Establishment of a simple integrated M&E system for Program implementation	Due Date	31-Dec-2018	Yes	Report
Comments	An functional M&E system was established.			
Conduct of mid-term evaluation and end-of-Program implementation evaluation of results and impacts	Due Date	30-Jun-2020	Yes	MTR mission
Comments	MTR mission carried out in October 2020			





ANNEX 2. BANK LENDING AND IMPLEMENTATION SUPPORT/SUPERVISION

A. TASK TEAM MEMBERS

Name	Role
Nabila Gourroum	Team Leader
Hind Kadiri	Team Leader
Laila Moudden	Financial Management Specialist
Mohamed El Hafedh Hendah	Procurement Specialist
Walid Dhouibi	Procurement Specialist
Sultana Ajem	Environmental Specialist
Houcine Gabi	Social Specialist
Remi Charles Andre Trier	Team Member
Volana Andriamasinoro	Team Member
Sebastian Raphael Heinz	Team Member
Khaled Mohamed Ben Brahim	Team Member
Marianne Grosclaude	Team Member

B. STAFF TIME & COST

Stage of Project Cycle	Staff Time & Cost	
	No. of Staff Weeks	US\$ (including travel and consultant costs)
Preparation		
FY16	13.340	63,895.10
FY17	52.216	305,051.12
FY18	39.086	329,824.79
FY19	0.000	2,475.82
Total	104.64	701,246.83
Supervision/ICR		



FY17	0.000	.00
FY18	19.660	95,793.77
FY19	35.362	183,050.99
FY20	19.904	93,553.97
FY21	33.272	164,913.03
FY22	25.562	145,506.61
FY23	24.535	129,482.70
FY24	14.339	81,484.05
FY25	17.285	93,087.66
Total	189.92	986,872.78

ANNEX 3. PROGRAM EXPENDITURE SUMMARY

Source of Program Financing	Type of Co-Financing	Estimates at Appraisal (US\$ million)	Actual Expenditures (Disbursement)		
			Actual (US\$ million)	Expected percentage at appraisal	Actual percentage at program closing
World Bank	-	200	181.1	44	42
Borrower	-	250	248.5	56	58
Other Partners	-	-	-	-	-
Total	-	450	429.6		



ANNEX 4. BORROWER'S COMMENTS

The ICR was submitted to the Government of the Kingdom of Morocco, specifically to the PMU, for review. The review did not give rise to any specific comments or observations.

ANNEX 5. SUPPORTING DOCUMENTS

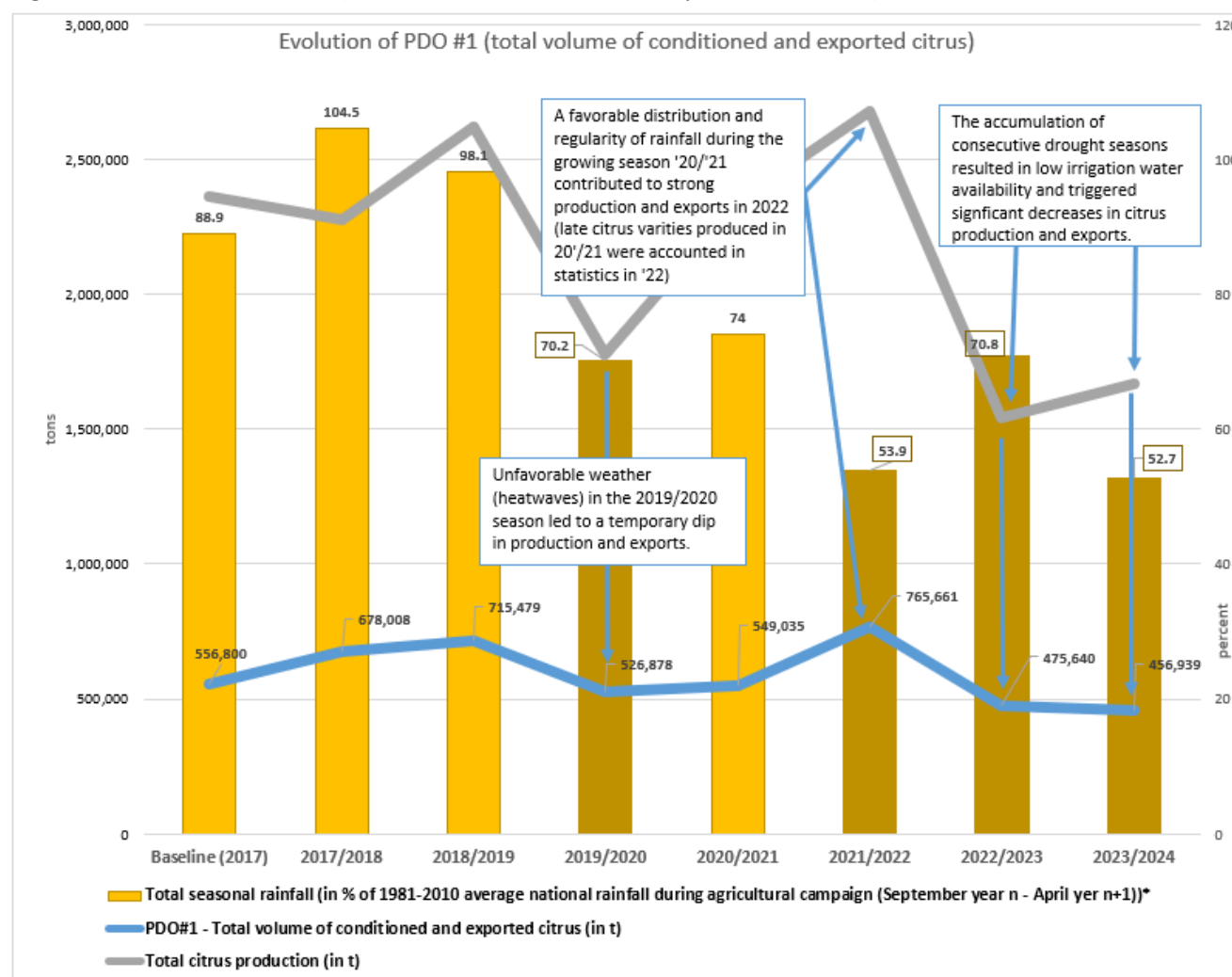
1. World Bank 2017. Strengthening Agri-Food Value Chains Program-for-Results Project Appraisal Document.
2. World Bank 2017. Strengthening Agri-Food Value Chains Program-for-Results Loan Agreement.
4. Project supervision documents, Aide Memoires, and ISRs.
5. Borrowers' Annual Reports.
6. Borrowers' Program Completion Report (2024).
7. World Bank 2022. Impact assessment of DLI #3 (FDA Support) and ILD 5 (ONSSA authorizations of establishments operating in the agri-food sector (unpublished).
8. Direction Générale de la Météorologie 2023. [Morocco – State of the Climate in 2023](#). Accessed 01-30-2025.
9. Direction Générale de la Météorologie 2023. [Morocco – State of the Climate in 2022](#). Accessed 01-30-2025.
10. USDA Foreign Agricultural Service 2024. [Citrus Annual Morocco](#). Accessed 01-30-2025.
11. Morocco World News 2025. [Morocco expects over 192,000 tons of citrus as exports expand](#). Accessed 01-30-2025.
12. Ecoactu 2025. [Campagne Agricole marocaine 2024-2025 : Un démarrage prometteur](#). Accessed 01-30-2025.
13. World Bank 2018. [Climate variability, drought, and drought management in Morocco's agricultural sector](#). Accessed 01-30-2025.



ANNEX 6. EVOLUTION OF PDO INDICATORS

Evolution of PDO#1

Figure 1: Evolution of PDO#1 (Volume of conditioned and exported citrus in t)



Source: Prepared with data provided by MAPMDREF and DGM.

*More darkly shaded columns denote years with drought conditions during the agricultural campaign (calendar-year precipitation totals have been substantially below the 1981-2010 average since 2019, leading to a gradual decrease in irrigation water resources and dam fill rates).

N.B.: PDO#1 Values correspond to total citrus exports during the citrus season (from September 1 year n to August 31 of year n+1).

1. From 2017 to 2019, PDO#1 reached 71,000 t, followed by a temporary decline to 526,000 t in 2020 due to drought impacts and the disruptions caused by the pandemic (increased shipping and packaging costs). After a favorable



agricultural season 2020/2021 and exports of conditioned citrus improved slightly (by four percent) while still being impacted by the pandemic. In the 2021/2022 season, the volume of conditioned and exported citrus increased to 765,000 t²⁵ after strong production, surpassing the final Program target by 15,000 t despite severe drought. Resilience in production and exports during this season was attributable to still sufficient availability of irrigation water from irrigation perimeters in main production areas and the fact that a substantial share of late citrus varieties, which benefitted from more favorable weather conditions in the preceding season (2020/2021), was accounted for in the production and export statistics of the 2021/2022 season. The agricultural campaigns 2022/2023²⁶ and 2023/2024 were marked by production decreases by more than 30 percent, resulting in the volume of conditioned and exported citrus falling below baseline levels. Production decreases were mainly caused by worsening drought impacts leading to a collapse in irrigation water availability in combination with heatwaves (In 2023, five heatwaves during critical phenological stages have been observed, e.g., during flowering in April²⁷).

²⁵ It should be noted that ‘alternance’ or ‘alternate bearing,’ which refers to the phenomenon where fruit trees produce a heavy crop one year (on-year) followed by a light or no crop the next year (off-year) was considered when setting PDO targets. However, it was expected that the impact of strong production growth due to large-scale citrus and olive plantings under the PMV combined with good agronomic practices (e.g., thinning, pruning adequate fertilization) would override effects of natural variation in production cycles, with the amplitude known before 2017.

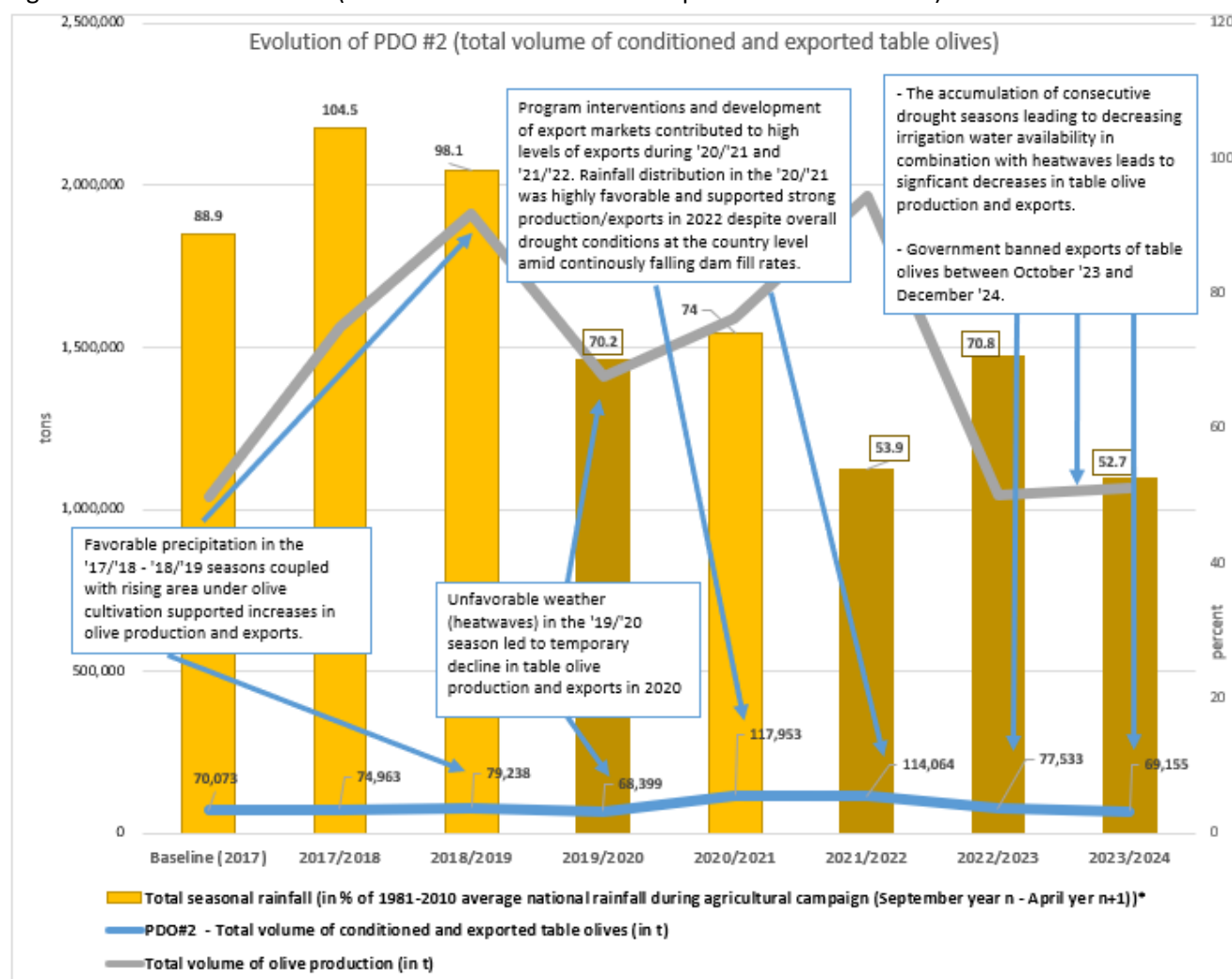
²⁶ Another contributing factor for low production in the ‘22/’23 season lies in temporary increases in input prices (especially n-fertilizer, see e.g., <https://medias24.com/2022/06/02/la-campagne-agricole-affectee-par-la-hausse-des-prix-des-engrais-azotes/>; or Morocco Citrus Annual 2022 (USDA Foreign Agricultural Service 2022)

²⁷ Direction Générale de la Météorologie (2023)



Evolution of PDO#2

Figure 2: Evolution of PDO#2 (Volume of conditioned and exported table olives in t)



Source: Prepared with data provided by MAPMDREF and DGM.

*More darkly shaded columns denote years with drought conditions during the agricultural campaign (calendar-year precipitation totals have been substantially below the 1981-2010 average since 2019, leading to a gradual decrease in irrigation water resources and dam fill rates).

NB: PDO#2 Values reflect total table olive exports during from January to December of a given year.

- As shown in figure 2, the evolution of this PDO indicator follows a similar trajectory as PDO#1. After fluctuating between 68,000 and 80,000t/year between 2018 and 2020, the amount of conditioned and exported table olives surpassed the target of 98,000t both in 2021 and 2022, reaching 117,900 t and 114,064 t, respectively. The growth trend in production between 2017 and 2022 in production reflects the strong increase in the area under olive farming, rising from close to 1 million hectares in 2017 to 1.2 million hectares in 2022. The exports of conditioned and exported table olives declined



below their baseline in 2023 and 2024 due to the impact of consecutive droughts (in combination with heat waves disrupting plant phenology, e.g., in April 2023) on national olive production and the resulting supply gaps.

Drought impacts on irrigation water availability

3. **Irrigation water availability declined over the Program period due to the impacts of unprecedented drought.** The agricultural seasons 2021/2022 – 2023/24 (spanning September year n-1 to April year n) were characterized by precipitation deficits of 30 percent or more. Meteorological statistics covering the entire calendar year (spanning January - December) illustrate the full extent and magnitude of the drought. Yearly precipitation totals have been substantially below average in every year since 2019. According to the Moroccan General Directorate of Meteorology (DGM), the period between 2019 and 2022 was the driest one since 1960. In addition, 2023 was marked by five heatwaves disrupting plant phenology at critical stages. Six years of consecutive drought have caused a steep decrease in the water supply for irrigation from dams. Continuously low water inflows resulted in historically low filling rates of dams of 23 percent in 2023, which led to the allocation of water resources to drinking water at the expense of irrigation. Between the season 2018-2019 – and 2023/2024, water allocations to key irrigation perimeters for citrus (irrigation perimeters Sous Massa and Moulouya) and olive cultivation (Tadla, Haouz) decreased gradually by around 86 percent from 1403m³ to 194m³ leading to significant water rationing. From 2022/2023 to 2023/2024, the amount of water allocated by hectare was so low that it just managed to safeguard citrus groves but did not allow for high levels of fruit production.
4. **Efforts are underway to secure water availability for agriculture in the concerned perimeters going forward.** Under the National Program for Water Supply and Irrigation 2020-2027²⁸, the government aims to address water scarcity risks by accelerating the implementation of several measures. First, the government is constructing a desalination plant in Casablanca, which is expected to become operational in 2025. With a total capacity of 300 million cubic meters per year, this desalination plant will make it possible to disconnect the water supply system of the Greater Casablanca region from the Oum Er Rbia hydraulic system and thereby free up a total volume of 120 million m³/year from the Al Massira dam. This additional water will benefit water allocations to the *Tadla* perimeter. Second, the water transfer project Sebou-Bouregreg-Oum Er Rbia-Tensift (2023 - 2027) will allow the transfer of 500 million m³/year from Sebou, providing additional water for irrigation to the *Tadla*, *Doukkala*, and *Haouz* perimeters. Finally, the construction of 20 large additional dams by 2027 is expected to increase total dam capacity by 5.38 billion cubic meters (BCM)²⁹. The government expects that the implementation of these measures will free up sufficient water resources to restore irrigation allocations to pre-drought levels.

²⁸ Ministry of Equipment and Water – National Program for Water Supply and Irrigation 2020-2027 (2020) / *Programme National pour l'Approvisionnement en Eau Potable et l'Irrigation*

²⁹ As of 2019, total dam capacity was estimated at around 19 BCM. In the long term (by 2050), according to the National Water Plan, the total capacity of the dams will be increased by a further 5 BCM, which would help to regularize 3 BCM of water per year.



ANNEX 7. DETAILED DISBURSEMENT AND ADVANCE RECOVERY TIMELINE

Date (mm/yyyy)	DLI	Result achieved	Disbursements (US\$ million)	Disbursements allocated to advance recovery (US\$ million)
12/2017	Signature of Loan Agreement	Front-end Fee	0.5	-
		Advance (25% of the loan amount)	50	-
Total 2017 disbursements			50.5	0
07/2018	DLI 5	243 processing units authorized/approved by the ONSSA	7.29	-
12/2018	DLI 3	18 valorization units subsidized within the framework of the FDA	18	-
Total 2018 disbursements			25.29	0
04/2019	DLI 5	589 processing units authorized/approved by the ONSSA	17.67	-
06/2019	DLI 3	23 valorization units subsidized within the framework of the FDA	23	-
Total 2019 disbursements			40.67	0
02/2020	DLI 5	168 processing units authorized/approved by the ONSSA	5.04	-
03/2020	DLI 6	Signature of the agreement between ONSSA and AIEA	5	-
06/2020	DLI 3	5 valorization units subsidized within the framework of the FDA	5	-
06/2020	DLR 8.1	Design of the MISAGRI system	-	3
12/2020	DLI 1	Adoption of the Business Plan and the Intra-Branch agreement of Maroc Citrus	-	5
Total 2020 disbursements			15.04	8
06/2021	DLI 3	8 valorization units subsidized within the framework of the FDA	-	8
07/2021	DLR 2.1	Adoption of the draft law on aggregation by the Government Council	-	2
09/2021	DLI 1	Adoption of the Business Plan and the Intra-branch agreement of Interprolive	-	5
09/2021	DLI 3	5 valorization units subsidized within the framework of the FDA	-	5
10/2021	DLR 2.2	Publication of the law on aggregation	-	5
Total disbursements of 2021			-	25
03/2022	DLI 3	6 valorization units subsidized within the framework of the FDA	-	6
04/2022	DLI 3	5 valorization units subsidized within the framework of the FDA	-	5
Total disbursements of 2022			-	11
01/2023	DLR 7.1	Agri-food Innovation Center (CIA) established (in Mèknes)	2.5	-
	DLR 8.2	Integrated financial management system deployed and operational	1	6
02/2023	DLR 4.1	SDL that will manage the wholesale market is established and registered	10	
Total disbursements of 2023			13.5	6
03/2024	DLR 7.2	Number of Small- and/or medium-size producers and/or enterprises assisted by the CIAs	8.1	
07/2024	DLR 7.1	Agri-food Innovation Center (CIA) established (in Berkane)	2.5	
10/2024	DLR 2.3	Implementation Decree and arrêté published	3	
10/2024	DLR 6.2	The center has been constructed and fully equipped, and has launched its activities	10	
11/2024	DLR 4.2	Wholesale market constructed and fully equipped	12.5	
Total disbursements of 2024			36.1	
Total			181.1	50
Comments			Corresponds to 90.55% of the loan amount	The advance was 100% repaid.

Outstanding DLRs at Program Closure	Value (US\$ million)	Status
DLR 7.2 (Number of small- and medium-size producers and enterprises assisted by the Agrifood Innovation Centers (CIAs))	6.9	27/50 SME producers/enterprises assisted by CIA
DLR 4.3 (New wholesale market is fully operational as described in the POM)	12	Wholesale market built and equipped but not yet operational
Total Volume of undisbursed funds linked to DLIs that were not completed at Program closure	18.9 (9.45% of loan amount)	

**ANNEX 8. OVERVIEW OF INTERMEDIATE RESULTS INDICATORS**

Result Area #1 - Increased market efficiency and integration		
<i>Abbreviation</i>	<i>Indicator Name (unit of measurement in parentheses)</i>	<i>Corresponding/associated DLI</i>
IRI 1.1	Interprofessions with business plans approved and intra-branch agreements adopted to ensure sustainability (Number)	DLI#1
IRI 1.2	Private investments in conditioning, cold storage and/or processing units generated through FDA incentives (olive, citrus) generated (Value)	DLI#3 (Number of new/upgraded conditioning, cold storage and/or processing units in selected agri-food value chains under operation)
IRI 1.3	Amended Law no. 4-12 on agricultural aggregation dated 2012 is under implementation	DLI#2
IRI 1.4	Additional producers aggregated (olives, citrus) (Number)	-
IRI 1.5	At least one wholesale market is operating and applying the new management model as defined in the POM (Yes/No)	DLI#4
IRI 1.6	Use of market information services for mobile phones and of the application Publi-Asaar (Number)	-
IRI 1.7	At least one public consultation on the Program carried out each year by MAMPDREF (Yes/No)	-
Result Area #2 - Improved added-value of agri-food products		
IRI 2.1	Small and/or medium agri-food enterprises authorized by ONSSA (Number)	DLI#5
IRI 2.2	Area treated for Mediterranean fruit fly through the new Center (Hectare(Ha))	DLI#6 (The Borrower's center for the production of sterile ceratitis males providing farm treatment services to citrus producers)
IRI 2.3	Producers with an input register in the Souss-Massa region (Number)	-
IRI 2.4	SDOQ Products certified by the OCC (Number)	-
IRI 2.5	Small- and/or medium-size producers and/or enterprises assisted by the Agri-food Innovation Centers (Number)	DLI#7
IRI 2.6	Projects using green practices and technologies implemented by beneficiaries of the Program (Number)	-