AFRICAN DEVELOPMENT BANK GROUP



MAURITANIA

AGRICULTURAL TRANSFORMATION SUPPORT PROJECT (PATAM)

APPRAISAL REPORT

RDGN/AHAI

November 2018

Translated document

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Currency Equivalents

[July 2018]

Currency unit: Mauritanian Ouguiya (MRU)

[UA 1] = [MRU 50.6600] [UA 1] = [EUR 1.20653] [UA 1] = [USD 1.40657]

Fiscal Year

[1 January – 31 December]

Weights and Measures

1 metre (m) = 3.28 feet 1 millimetre (mm) = 0.03937 inch

1 kilometre (km) = 0.62 mile (= 1000 m)

1 square kilometre (km²) = $1,000,000 \text{ m}^2$ 1 acre (a) = 100 m^2

1 hectare (ha) = $2.471 \text{ acres } (= 10\ 000\ \text{m}^2)$

1 kilogram (kg) = 2.204 pounds 1 metric ton = 1,000 kg 1 metric ton = 2,204 pounds

Acronyms and Abbreviations

AFD French Development Agency
AfDB ASYCUDA Automated System for Customs Data
AUEA Agricultural Water Users' Association

BCM Central Bank of Mauritania
CAM Crédit Agricole de Mauritanie
CLC Local Consultative Council

CNCP National Project Coordination Committee
CRCP Regional Project Coordination Committee

DSCSE Directorate for Strategy, Cooperation and Monitoring/Evaluation

EIG Economic interest group

ESMP Environmental and Social Management Plan

EU European Union

FAO Food and Agricultural Organisation

FDG Guarantee Fund

FOREMI Microfinance Refinancing Fund GDP Gross domestic product GoM Government of Mauritania

IA Irrigation area

IBS Integrated backup system
IGF General Inspectorate of Finance
IMF International Monetary Fund
IOM Impact-Oriented Monitoring
IsDB Islamic Development Bank

IWRMIntegrated Water Resource ManagementJEAYoung Agricultural EntrepreneursLOLFOrganic Law on the Appropriations ActMDGsMillennium Development GoalsMEFMinistry of Economy and FinanceMRDMinistry of Rural Development

NA North Africa

NBM Nouvelle Banque Mauritanie

NTF Nigeria Trust Fund

ONS National Bureau of Statistics

PADEL Livestock Development Support Project PAFEJ Youth Training and Employment Project PAHABO Brakna-Ouest Irrigation Scheme Project

PAMPEJ Project to Support the Promotion of Micro-, Small- and Medium-sized Enterprises and Youth Employment

PAP Project Affected Persons

PAREDE Economic Reform and Diversification Support Programme

PBO Programme-Based Operations
PMF Female Vegetable Farming Area
PPP Public-Private Partnership

P2RS Multinational Programme to Boost Resilience to Food and Nutritional Insecurity in the Sahel

RP Resettlement Plan
RSF Risk Sharing Facility

SCAPP Accelerated Growth and Shared Prosperity Strategy SNIM National Industrial and Mining Company of Mauritania

SPI Made in Mauritania Initiative

TA Technical support

TAAT Technologies for African Agricultural Transformation

UA Unit of Account
UAA Usable Agricultural Area

VAT Value-added tax

WB World Bank

ZTAI Agri-food Processing Area

Project Information Sheet

Client Information

BORROWER: Islamic Republic of Mauritania

(Ministry of Economy and Finance - MEF)

EXECUTING AGENCY: Ministry of Rural Development - MRD

Financing Plan

Source	Amount	Instrument
ADF	UA 7.00 million.	Loan
NTF	UA 6.00 million.	Loan
Mauritanian government	UA 1.67 million.	Treasury/Own resources
TOTAL COST	UA 14.67 million.	

Key AfDB Financial Information

Item	ADF loan	NTF loan
Loan currency	Unit of Account (UA)	Unit of Account (UA)
Interest Type	1%	NA
Base rate	NA	NA
Service commission	0.75% per year of the disbursed loan amount not reimbursed	0.75% per year of the disbursed loan amount not reimbursed
Commitment fee	0.50% per year on the non-disbursed and non-reimbursed portion of the loan, effective 120 days after signature of the Loan Agreement	0.50% per year on the non-disbursed and non-reimbursed portion of the loan, effective 120 days after signature of the Loan Agreement
Other Fees	None	None
Maturity	30 years	20 years
Grace period	5 years	7 years

Timeframe – Main Milestones (expected)

Concept Note approval	July 2018
Project appraisal	July 2018
Loan negotiations (ADF & NTF)	8-9 November 2018
Project approval	12 December 2018
Loan effectiveness (ADF & NTF)	February 2019
Project completion	31 December 2023
Last disbursement	31 December 2024

Executive Summary

I. General Project Overview

- This project will support the upstream and downstream agricultural production subsectors in the Brakna-Ouest region. Its purpose is to improve food security and the living conditions of target communities through the inclusive and sustainable development of crop sectors. The Agricultural Transformation Support Project in Mauritania (PATAM) is fully consistent with the Accelerated Growth and Shared Prosperity Strategy (SCAPP) intended, among others, to consolidate the role of the agropastoral sector and transform it into a source of economic diversification and growth. It is fully aligned with the Bank's: (i) High 5s; (ii) the Ten-Year Strategy (2013-2022); (iii) the Feed Africa Strategy (2016-2025); (iv) CSP 2016-2020 for Mauritania (Pillar 1 - Support for agricultural transformation); and (v) the Bank's flagship initiatives: Technologies for African Agricultural Transformation (TAAT), Young Entrepreneurs (Enable Youth), Risk Sharing Facility (RSF), and Agro-industrial Processing Zones (APZ). The project will focus on the Brakna-Ouest region, considered a zone afflicted by extreme poverty (12 points higher than the national poverty rate), and will affect Trarza and Nouakchott regions when it is scaled up to promote: (a) value chains (support for the establishment of agroindustrial processing zones; (b) youth and women's entrepreneurship (support for the establishment of an incubation structure): and (c) the establishment of guarantee funds for agricultural sector financing.
- 1.2 The project will finance: (i) the establishment of the main irrigation infrastructure (vegetable farming areas for women on 200 ha and flood-recession farming areas on 3,300 ha); (ii) the promotion of value chains and of youth and women's entrepreneurship as well as the establishment of inclusive and innovative agricultural sector financing mechanisms (guarantee funds, agricultural insurance, etc.); and (iii) institutional capacity-building and project coordination. It will affect 6,700 households, with an estimated target population of 42,600 inhabitants (52% being women), with a predominance of smallholders considered to be the Bank's main target group. The project will cost MRU 743.37 million (i.e., new Ouguiya), equivalent to UA 14.67 million, over a five-year period (2019-2023) and will be financed by an ADF loan of UA 7 million and an NTF loan of UA 6 million. It is an excellent climate change adaptation project and constitutes support for the transition to inclusive and sustainable growth.

II. Needs Assessment

Efficient natural resource management has become an imperative in Mauritania, given the country's severe exposure to the effects of climate change. Consequently, economic diversification is necessary to: (i) get the country out of its undiversified and relatively fragile economy, which is dependent on extractive industries (particularly iron) that account for four-fifths of total exports on average and 30% of total budget revenue; and (ii) mitigate the risks associated with the reduction in iron prices and boost the competitiveness of the agro-pastoral sector through inclusive and sustainable development. The project was initiated based on the conclusions of the high-level "Feed Africa" conference held in Dakar in October 2015, which recommended that particular attention be paid to supporting agricultural transformation in African countries. The needs stem from the logic of consolidating and building on the significant achievements recorded by the West Brakna Irrigation Scheme Project (PAHABO) and strengthening the transformative dimension (promotion of value chains by focusing on two key sectors: rice cultivation and market gardening). It was designed through a concerted systemic method that involves stakeholders and emphasises a participatory and integrated approach (PIA).

¹ The National Youth Policy defines youth as the population of men and women aged 12 to 30 years. The beneficiaries are young people - (women and men aged 12 to 30 years), as well as women of any age.

III. Bank Value-added

Cognisant of the successful results of PAHABO, the Government considers the African Development Bank Group as a multilateral donor capable of addressing sector issues related to the development of irrigation and agricultural production, value chain promotion, and advancement of youth and women's entrepreneurship, in addition to assisting the country to rally other development partners. This project is an extension of PAHABO. Moreover, it builds on the reforms initiated under Phases 1 and 2 of the Economic Reform and Diversification Support Programme (PAREDE-1 & 2) and complements the PAFEJ and PAMPEJ projects. Lastly, PAHABO was awarded the High-5 Award (Feed Africa) at the Bank's annual meetings held in India in May 2017. The best practice developed under this programme will be replicated and the lessons learned have been factored into PATAM's design.

IV. Knowledge Management

The project will help to strengthen the Bank's innovative operations in the agricultural and rural sector. It will help to modernise irrigation systems, promote agricultural transformation and value chains, develop youth and women's entrepreneurship, set up innovative and inclusive financing, and disseminate the requisite technical and organisational knowledge (use of the various information systems to be set up, agricultural advisory, etc.) to its stakeholders. Hence, the contribution through the TAAT initiative will be highly useful. The dissemination of smart agricultural technologies and practices to adapt to climate change and the guidance of farmers to improve market access will equally be relevant. These operations will build the capacity of institutional stakeholders such as administrative entities as well as interprofessional and beneficiary organisations (water users' associations, rice cooperatives, women's vegetable farming cooperatives, EIGs, etc.). The knowledge generated will be disseminated to Mauritania and Bank structures through their respective websites, monitoring/evaluation, supervision, midterm review and completion reports, etc. Interactions with the African Digital Financial Inclusion (ADFI) have also been initiated to achieve innovative solutions aimed at promoting smart agriculture.

¹ The return of more than 1500 households to the project area is one of the key indicators of the project's success.

PRELIMINARY RESULTS-BASED LOGICAL FRAMEWORK

Country and Project Title: MAURITANIA - AGRICULTURAL TRANSFORMATION SUPPORT PROJECT (PATAM)

Project Goal: Contribute to the improvement of food security and the living conditions of the target communities through inclusive development and sustainable agricultural subsectors.

		PERFOR	MANCE INDICA	ATORS		
	RESULTS CHAIN Indicators Si		Baseline Situation (2017)	Target	MEANS OF VERIFICATION	RISKS/ MITIGATION MEASURES
IMPACT	Impact: Long-term Impacts Improved food security and living conditions of target communities	Improvement of the nutritional status Reduction of the poverty rate in the project area Reduction in imports of food products (cereals and vegetables) in tons	2,283 Kcal 43.3 % (EPCV, 2014) 712.850 (ASYCUDA, 2017)	Daily calorie intake per adult rises from 2,283 (2017) to 2,900 by 2030 Reduce the poverty rate in Brakna-Ouest to 40% in 2023 and to 35% by 2030 Reduce imports by 10% in 2023 and 20% by 2030	Statistical reports MEF, MY and ME reports	
OUTCOMES	2. Outcomes: Medium-Term Outcomes Incrased and enhanced agricultural output Additional jobs created Increased income per household	Contribution to the increase in the acreage of efficiently managed irrigation and flood-recession farming areas Cereal output from irrigation farming t/ha (rice & wheat) Flood-recession farming output t/ha (sorghum, maize) Vegetable farming output t/ha (sorghum, maize) Increased storage capacity for vegetable products Number of additional jobs created Improvement of annual income per household	4,000 ha 5,000 ha 4.3; 2.6 0.44; 0.5 12; 15 0 0 MRU 51,400	4,200 ha of irrigation farming areas and 8,300 ha of flood-recession farming areas effectively managed in 2023 Improve yields by 2023 by at least 30% 360 t/year of packaged vegetable products by 2023 2,200 jobs created in 2023 (40% for women). Improve the average income per household by at least 20% in 2023.	Statistical reports MEF, MY and ME reports	Risks: (i) Insufficient capacity for inter-sector coordination at the national level and consultation at the local level (ii) Recurrent climatic hazards and droughts Mitigation Measures: (i) Establishment of a strategic national steering committee and a local consultative committee (LCC) (ii) Dissemination of technologies and resilient seeds, and guidance of farmers to ensure that they factor climate information into the management of agricultural activities.
OUTPUTS	3. Outcomes: Short-Term Outputs 3.1.1 Construction works executed 3.1.2 Agro-pastoral ecosystem restored in the project area COMPONENT 2: Promotion of val	Construction of a dike track Construction of recessed water basins Vegetable farming areas for women (VFW) Number of ha of regenerated pastureland lue chains, youth and women's entrepreneurship	62 km degraded 0 0	62 km of dike tracks constructed in 2023 3,300 ha of basins developed in 2023 VFWs established on 200 ha of land in 2023 At least 600 ha of pastureland regenerated in 2023	Control Office's monitoring and works supervision reports Project progress reports	

	PERFOR	MANCE INDICA	ATORS		
RESULTS CHAIN	Indicators	Baseline Situation (2017)	Target	MEANS OF VERIFICATION	RISKS/ MITIGATION MEASURES
3.2.1. Agricultural value chains developed	Strengthening of the seed sector Strengthening of the Rural Farmers' Training Centre (CFPR)	0 120 participants	Equipped seed multiplication centre, control mechanism and approved multipliers in place in 2023 Intake capacity of the centre increased to 180 and the capacity of 12 trainers strengthened in 2023		Risks: (i) Limited institutional capacity of stakeholders (ii) Problem of financial inclusion and access to funding and credit (ii) Poor servicing and maintenance of irrigation schemes
	Strengthening of the vegetable products packaging centre and women's cooperatives	0	4 cold rooms equipped (capacity = 80 tons) and 90 women's cooperatives strengthened in 2023		(iv) Limited human and material resources at SONADER for project monitoring and implementation (v) Delays in procurement, launch of BDs and
	Development of irrigated cereal and vegetable farming clusters	0	Two irrigated cereal and vegetable farming clusters developed and the study on the establishment of the agro-industrial processing area in Rosso available in 2023	;	disbursements Mitigation Measures: (i) The programme provides for stakeholder capacity building
	Number of economic interest groups set up and supported Number of women's cooperatives supported	3 95	6 EIGs 135 women's cooperatives supported	Project progress report Specific reports	(ii) The project provides for: (i) a Guarantee Fund to improve financial inclusion; (ii) assistance in organising the beneficiaries to facilitate access to credit;
	Dissemination of smart farming technologies and practices to adapt to climate change and ensure increased market access	0	At least 10 thematic and practical demonstrations are organised for farmers (men and women).		and (iii) the promotion of agricultural insurance (iii) The project provides for: (i) a Servicing and Maintenance Fund (FEM); (ii) support to establish the said fund
3.2.2. Youth (boys and girls) and women's entrepreneurship developed	Implementation of a training programme for the youth (boys and girls) and women Establishment of an incubation structure for the youth (boys and girls) and women Number of agri-businesses created- YAE (by gender)	0 0	Training of 2000 young people (of which 40% girls) in 2023. Entrepreneurship incubation structure for the youth and women set up in 2023 in 2023 Training of 700 YAE (of which 40% girls) in 2023		(iv) The programme provides for stakeholder capacity building (v) Engage technical assistance, develop and implement the PPM, improve expenditure upstream (procurement monitoring) and downstream (disbursement planning and monitoring).
3.2.3. Inclusive financing developed	Establishment of a guarantee fund and farm insurance	0	Guarantee fund and agricultural insurance established in 2023		
COMPONENT 3: Institutional cap	pacity-building and project coordination				
3.3.1 Institutional capacity strengthened.3.3.2 Coordinating Unit set up	Creation of the Servicing and Maintenance Fund (SMF) M/E system for the project (gender-sensitive) Administrative/accounting procedures manual	0 0 0	Servicing and Maintenance Fund (SMF) created and operational in 2023 M/E system operational in 2019 Manual in use in 2019	Specific report on the SMF Project progress report	
-	gation schemes chains, youth and women's entrepreneurship ty-building and project coordination		Component 1: UA 8.5 million Component 2: UA 3.15 million Component 3: UA 2.00 million PPF advance: UA 0.63 million TOTAL: UA 14.67 million		Sources of Financing ADF: UA 7 million (PPF - UA 0.638 million) NTF: UA 6 million Government: UA 1.67 million Total: UA 14.67 million

Project Implementation Schedule (2018-2023)

	CHROGRAMME OF ACTIVITIES 2018 - 2023																										
	ACTIVITIES			2018				20	19			20	20	Ye			2021				20	22			20		
1	Onarter (O) Approval of ADF & NTF loans	Q1	Q2	O3	Q4	Q1	Q1	O2	O3	Q4	Q1	O2	O3	Q4	Q1	O2	O3	O4	Q1	Q1	Q2	O3	O4	Q1	O2	Q3	O4
2.	Installation of project staff																										$\overline{}$
3.	Entry into force of the ADF & NTF loans																										H
4.	Preparation/launch/signing of the works control and monitoring TA contract						<u> </u>																				
5.	Preparation/launch and allocation/signing of works contracts																										
6.	Consutancy services/studies over 200 ha vegetable farmland																										
7.	Launch of works																										
8.	Consolidation of the 62 km track dike																										
10.	Irrigation scheme works on 3300 ha of basins																										
	Upgrading of 200 ha of vegetable farmland																										
12.	Environmental and Social Procedures																										
13	Promotion of value chains																									'	
14	Promotion of youth and women's entrepreneurship																										
1.5	Development of inclusive funding																										
16	Capacity-building																										
13	Procurement audit																										
18	Financial audit of project																										
19	Project management																										
18	Mid-term review																										
19	Drafting of completion report																										

REPORT AND RECOMMENDATION OF MANAGEMENT OF THE AFRICAN DEVELOPMENT BANK GROUP TO THE BOARDS OF DIRECTORS REGARDING A PROPOSAL TO GRANT AN ADF LOAN AND AN NTF LOAN TO THE ISLAMIC REPUBLIC OF MAURITANIA TO FUND THE AGRICULTURAL TRANSFORMATION SUPPORT PROJECT (PATAM)

Management hereby submits this report and recommendations concerning a proposal to grant an ADF loan of UA 7 million and an NTF loan of UA 6 million to the Islamic Republic of Mauritania to finance the Agricultural Transformation Support Project (PATAM).

I. Strategic Thrust and Rationale

1.1 Project Linkage with Country Strategy and Objectives

- 1.1.1 PATAM reflects efforts by Mauritanian authorities to move from a rent economy to a diversified one driven by promising productive sectors, excluding extractive industries. In recent years and with a view to diversifying the national economy, the Mauritanian Government has taken measures to promote an institutional framework conducive to agricultural sector development. Thus in 2012, it adopted a Rural Sector Development Strategy (SDSR), accompanied by a Framework Law on Agriculture (LOA), an Institutional Review of the Agricultural and Livestock Sector (RISAP) and a National Livestock and Agriculture Development Plan (PNDEA). Furthermore, the Government adopted an investment code and an Accelerated Growth of Shared Prosperity Strategy by 2030 (SCAPP). The intention is to ensure that agricultural development, poverty reduction, food security and the improvement of community living conditions become top priorities. Hence, a National Agricultural Development Plan (PNDA) was drawn up based on the SDSR and the initial PNDEA. Approved by the Council of Ministers in October 2016, this PNDA is the main operational reference framework and reflects Government's desire to ensure better coordination of agricultural sector actions to promote modern, resilient and competitive agriculture by 2025 (see strategic framework in Annex 1).
- 1.1.2 To optimise the potential for agricultural and rural development, the Ministry of Agricultural and Rural Development defined its development policy in 2012, through the design and adoption of a Rural Sector Development Strategy (SDSR) and an Agro-pastoral Framework Law (LOA), in harmony with the Poverty Reduction Strategic Framework (PRSF 2011-2015) and the National Food Security Strategy (SNSA 2012). Five strategic areas have been defined by the SDSR, namely: (i) infrastructure; (ii) research; (iii) rural advisory services; (iv) funding; and (v) trade. SCAPP (2016-2030), which is the reference framework for Mauritania as regards development, poverty reduction and job creation, thus confirmed these orientations and adopted the following three pillars: (i) promotion of robust, inclusive and sustainable economic growth; (ii) human capital formation and access to basic services; and (iii) strengthening of governance in all its dimensions. The "*Produire en Mauritanie*" ("Made in Mauritania") Initiative (IPM), adopted by the Council of Ministers in October 2016, has consolidated the instruments established to diversify the Mauritanian economy, and reflects Government's desire to capture value added locally and to promote value chains. All these strategies highlight the considerable potential of the agricultural sector to reduce poverty, improve food security and create sustainable jobs.
- 1.1.3 The project is well aligned with the strategic guidelines presented above and is underpinned by the pillars and priorities set by the Government of Mauritania (see 1.1.2). It is an attempt to combine production support (support for the upstream agricultural subsector) with the enhancement of production value (support for the downstream agricultural subsector). The focus is on: (i) consolidating the significant impact of PAHABO; (ii) replicability and extension of recorded achievements; and (iii) targeted support

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¹ These efforts are reflected in the country's new strategic vision for development, which are intended to be sustainable, inclusive and fair, and which seek to achieve the Sustainable Development Goals (SDG 2015-2030).

to the transformative dimension that is compatible with available financing resources. The project as designed provides an opportunity to consolidate, extend and support transformation with a view to enhancing the linkages and continuity with PAHABO, and scaling up the pilot action. Therefore, it prepares a solid foundation for innovative and high value-added transformative agriculture in the second part of Mauritania's CSP that is consistent and fully compatible with the reform programme aimed at diversifying the economy and advocating support for the agro-pastoral sector. By adopting an inter-sector approach, the project strives to achieve complementarity and synergy with other sector strategies and initiatives, such as the *Produire en Mauritanie* Initiative (IPM); the National Employment Strategy; the Industrial Sector Development Strategy (2015-2019), especially for the agri-food and agro-industry component; the National Strategy for the Promotion of Micro- and Small-sized Enterprises (2015-2019), particularly the pillar relating to the integration of MSEs in sectors with high potential for value added and job creation; and the National Microfinance Strategy (2015-2019), with its fourth pillar related to the development of an inclusive supply of products.

- 1.1.4 The agro-pastoral sector is strategic in Mauritania and contributed 23.4% to national GDP formation in 2017. Agriculture has considerable potential: nearly 500,000 ha of arable land, including about: (i) 365,000 ha for rain-fed crops; (ii) 135,000 ha for irrigated crops; (iii) 19,700 ha planted with palm trees; and (iv) 22,500 ha under dam-irrigated farming. There is also an undervalued irrigable potential along the Senegal River, with 46,100 ha of developed land. Livestock is another strategic sector. It contributed on average 20% of GDP over the 2014-2017 period, and accounted for 85% of rural value-added and 78% of the national value added in the agricultural sector. Mauritania's livestock population is significant and estimated at 21.05 million sheep and goats, 1.95 million cattle and 1.47 million camels (ONS, 2016). The agro-pastoral sector is the largest employer, despite the many obstacles that limit its development (access to finance, vocational training, new technologies, etc.). It has great potential that remains untapped in terms of mobilisation (intensification, productivity improvement, preservation, etc.) and enhancement to promote agricultural sector value chains. The institutional development of agricultural research, advisory and service structures, the reorganisation of professional structures, the structuring of strategic sectors and the upgrading of value chains are all challenges to overcome.
- 1.1.5 The agro-pastoral sector is also a major employer in the country and accounts for 30% of the labour force. It provides income to approximately one (1) million inhabitants and plays a key role in food security and resilience. However, according to the latest ONS report on the poverty situation in Mauritania, households headed by persons working in the agriculture and livestock sectors are the poorest, with an incidence of 59.6% and 41.8%, respectively (2014).
- 1.1.6 The lack of value-added in the agro-pastoral sector limits the country's prospects for diversification and job creation. The sector has great potential that remains untapped in terms of mobilisation (intensification, productivity improvement, preservation, etc.) and enhancement to promote agricultural sector value chains. Hence, the institutional development of agricultural research, advisory and service structures, the reorganisation of professional structures, the structuring of strategic sectors and the upgrading of value chains are all constraints to be addressed to ensure that Mauritania fully enjoys the economic potential of its agro-pastoral sector.

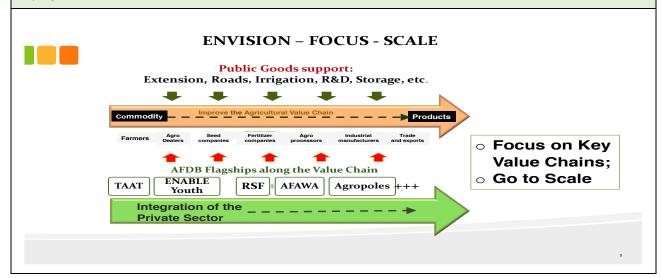
1.2 Rationale for Bank Involvement

1.2.1 The project needs stem from the logic of consolidating and extending the significant achievements of PAHABO and strengthening the transformative dimension (promotion of value chains by focusing on two key sectors that are crucial to the economy and to inclusive development, namely: rice farming and vegetable gardening). The project is consistent with the Bank's strategic guidelines and High 5s, including the priorities "Feed Africa" and "Improve quality of life for the people of Africa", food security enhancement and climate change adaptation measures. It is fully consistent with the Bank's: (i) Ten-Year Strategy 2013-2022 (objectives of inclusive growth and transition to green growth); (ii) Pillar I

of CSP 2016-2020 for Mauritania related to "Support for agricultural transformation"; (iii) agricultural strategy (Feed Africa [2016-2025]; (iv) Jobs for Youth in Africa Strategy (2016-2025) and (v) Investing in Gender Equality for Africa's Transformation (2014-2018), including Pillar II on "Economic Empowerment". PATAM's implementation requires significant investments and consistent technical support. Only the main multilateral donors, including the Bank, are considered by Mauritanian authorities as catalysts capable of helping to address such sector issues, and of involving other partners through their operations. The Bank has supported the agro-pastoral sector in the past and accumulated significant experience in the areas requested. In addition to its earlier funding of two agro-pastoral operations (PADEL and PAHABO) for UA 7.67 million and two phases of the Reform Support Programme (PAREDE), the Bank is currently engaged in a multinational agro-pastoral operation (P2RS), for which UA 11.5 million has already been allocated to Mauritania. It is also worth noting that Mauritania is engaged in transforming its economic model, which has so far been based on mining sector exports, into a sustainable dynamic economy characterised by diversification and job creation. In this regard, PATAM complements the reforms recommended by the PAREDE programme (1 & 2).

Box 1: Towards a holistic, participatory and integrated approach oriented towards value chains

The project is an attempt to adopt a holistic, participatory and integrated approach oriented towards the promotion of value chains. It is aimed at two levels of intervention: (i) upstream agricultural production to rationalise the use of natural resources (in particular water and soil), rehabilitate the natural environment and consolidate the socio-territorial unit; and (ii) downstream agricultural production to enhance the value of agricultural products (from farm to market) with particular emphasis on the promotion of public investments, improvement of the business environment, increase of the attractiveness of the private sector, promotion of PPPs, coresponsibility of stakeholders and complementary synergy with other partners. The project also attempts to leverage the Bank's flagship initiatives: TAAT, Enable Youth, RSF, ZTAI, etc.



1.2.2 Particular attention is paid to the synergy between various instruments adopted by the Bank in Mauritania, namely: investment support (PAHABO, PATAM), reform support (PAREDE 1 & 2) and technical support (PPF-PAHABO-2) to back reforms and investments, and increase their sustainability. In terms of comparative advantages, there are five basic arguments in favour of the AfDB Group's intervention in this project: (i) the Bank Group plays a strategic role in infrastructure development in Mauritania; (ii) the project builds on PAHABO and is in synergy with reform support (PAREDE-1 completed and PAREDE-2 in progress), thus contributing to the establishment of an institutional and regulatory framework for economic diversification and support for the agro-pastoral sector; (iii) the project will boost agricultural transformation, combat poverty, and improve the conditions of young people and women through the promotion of entrepreneurship and job creation; (iv) the project will contribute to the improvement of food security in view of the projected additional agricultural output; and (v) the project is one of the measures relevant to climate change adaptation and support for the MDGs (end poverty in all

its forms and everywhere; end hunger and achieve food security; improve nutrition and sustainable agriculture).

1.3 Aid Coordination

Sector development is ensured by the Government with the support of a number of bilateral and multilateral donors. The main partners in agricultural sector development are the World Bank (WB), the European Union (EU), the International Fund for Agricultural Development (IFAD), the Islamic Development Bank (IsDB), the Arab Fund for Economic and Social Development (AFESD), the African Development Bank (AfDB) and bilateral cooperation (Saudi Fund, AFD, GIZ, etc.). Coordination between the various donors is carried out through thematic groups, including the Agriculture Group chaired by the Directorate for Strategy, Planning and Monitoring and Evaluation (DSPSE) in the Ministry of Rural Development.

	Sector or Subsector*		Scope	
	Sector of Subsector	GDP	Exports	Jobs
	[Agriculture]	[23.4%] ⁽¹⁾	[0%]	[30%] ⁽¹⁾
		Stakeholders – Cumu	lative Public Expenditure	
	Government	Donors		[%]
SD	[USD 67.86 million]	[USD 461.96 million]	WB	[34.2%]
%	[13%]	87%]	EU IFAD	[20.4%] [17.9%]
			Saudi Fund	[7.4%]
			IsDB	[6.4%]
			AFESD	[4.7%]
			AFD	[2.9%]
			AfDB	[2.6 %]
			GIZ	[1.3 %]
		Aid Coord	dination Level	
]	Existence of thematic working grou	ps		[Yes]
]	Existence of a global sector prograr	nme		[Yes]
	AfDB role in aid coordination**			[M]***

^{*}the most appropriate ** for this sector or subsector ** L: Lead; M: Member (non-lead): None: No role

II. Project Description

- 2.1 **Project Objectives:** The project aims to achieve the inclusive and sustainable development of the agricultural sector. It will contribute to the improvement of food security and the living conditions of target communities. More specifically, it will support agricultural transformation in Mauritania by increasing the output and value of agricultural products.
- 2.2 **Project Components**: To achieve its objectives, the project has identified the following three components: (i) transformative irrigation schemes; (ii) promotion of value chains, youth and women's entrepreneurship; and (iii) capacity building and project coordination. The first component, reserved for the development of transformative infrastructure, accounts for more than 65% of the total project cost.

Table 2.2: Project Components

No.	Component Name	Cost Estimate	Description of Components
I	Transformative irrigation infrastructure	9.52 UA million (65.0%)	■ Establishment of transformative infrastructure for the irrigation of 200 ha of vegetable farms for women and 3,300 ha of flood-recession farming basins. Implementation of environmental and social measures
			 Support Measures: Monitoring and control of infrastructure construction works; including PPF for project preparation; implementation of ESMP through MEDD.
II	Promotion of value chains, youth and	3.15 UA million (21.5%)	 Agricultural Production Support: Technical support to farmers, research and development, training of farmers (men and women), agricultural advisory.

⁽¹⁾ Including livestock farming

	women's entrepreneurship		•	Support for value chain promotion: support the IPM (support for the establishment of an agro-industrial processing area); equipment of the packaging centre, sales and marketing support (certification process, PPP initiative).
			•	Support for the promotion of youth and women's entrepreneurship (YAE, Start-up, etc.) and establishment of an incubation structure for YAEs, support for innovation, etc.
			•	Support for the development of inclusive financing: support for the establishment of guarantee and risk-sharing funds, promotion of agricultural insurance, certification financing in the agricultural sector and agricultural entrepreneurship.
III	Capacity building	2.00	•	Institutional and stakeholder capacity building for the project
	and project coordination	UA million (13.5%)	•	Support for the establishment of a Servicing and Maintenance Fund (SMF)
			•	National and regional coordination of the project; socioeconomic monitoring/evaluation (gender disaggregated)
			•	Management of activities, physical and financial monitoring, internal and external audit.

- 2.2.1 **Transformative Irrigation Schemes**: The main achievements and activities planned under this component are: (i) Consolidation and rehabilitation of the dike track over a distance of 62 km: This will open up access to existing villages and farming areas, and speed up the development and operation of new areas included under the project. The dike will be consolidated by upgrading the technical characteristics of its dimensions (including structures) based on new hydraulic, geotechnical, pedological and topographical studies. The dike will also increase protection against floods and ensure steady water supply to the flood-recession areas to be developed (basins). Installation of equipment to regulate the N'Diorol backwaters and weir for the introduction of fish farming; (ii) Development of seven basins (3300 ha): recalibration of the backwaters and supply channels of the seven basins to ensure and develop floodrecession farming; (iii) Development of 200 ha of vegetable farms for women: Development and equipment of 200 ha of irrigated vegetable farming areas for women along the river; (iv) Implementation of environmental and social actions: environmental and social works (reforestation, dune fixation, etc.) to be undertaken to ensure the sustainability of the transformative structures to be built: (v) *Technical assistance*: all works on the transformative irrigation infrastructure will be executed by a contractor, and controlled and supervised by a consultancy firm and a works quality control laboratory. All the technical studies on the irrigation project carried out by the PPF are available.
- 2.2.2 **Promotion of value chains and of youth and women's entrepreneurship**: The main activities planned under this component are: (i) the promotion of value chains, mainly through equipment of the market gardening product packaging centre, support for the Rural Producers' Training Centre (CFPR), support to IPM (support to the market gardening and rice clusters, and support for the establishment of agro-industrial processing areas in Rosso), promotion of PPP initiatives and agricultural marketing, etc.; (ii) the promotion of agricultural and women's entrepreneurship, in particular through support for ANAPEJ to champion youth and women's entrepreneurship, and the establishment of start-ups to complement PAFEJ and PAMPEJ. In this regard, a regional ANAPEJ agency will be opened at Boghé to promote local services. (iii) the development of inclusive financing through support to BCM for the establishment of a Guarantee Fund, promotion of agricultural insurance and support for the certification and entrepreneurship mechanism, with the mobilisation and backing of CAM, NBM and the SNIM Foundation.
- 2.2.3 **Capacity-Building and Project Coordination**: The project will support capacity building for its staff (DSCSE, DDFCA, CNRADA, PCU, etc.) and beneficiaries as well as the establishment of a Servicing and Maintenance Fund (SMF) for irrigation infrastructure.

2.3 Technical Solution Adopted and Alternatives Explored

- 2.3.1 PATAM follows an integrated approach that links the upstream and downstream farming sectors to enhance value and promote value chains. It builds on PAHABO (2005-2014), which generated undeniable physical, human and institutional achievements that need to be consolidated and extended to surrounding areas. Consultation with stakeholders during project design missions made it possible to adopt the same technical solution implemented by PAHABO for transformative irrigation schemes. This technical solution has the advantage of: (i) setting up infrastructure to ensure adequate water collection and better use; (ii) opening up access to the area; and (iii) ensuring better optimisation of investment costs. The project will fund water supply right down to individual plots (farms). With regard to the promotion of value chains, two key sectors have been identified, namely rice cultivation and vegetable farming, which have tangible value margins and are aimed at differentiated target groups (male cooperatives for rice cultivation and female cooperatives for vegetable farming). Hence, PATAM seeks to build on these achievements by capturing value added at the local level and creating employment opportunities. It is also an appropriate solution for mitigating the effects of climate change.
- 2.3.2 The technical design of the project took into account: (i) lessons from PAHABO; (ii) the availability of water and soil resources; (iii) consultation with irrigation water users and their approval of technical solutions for the choice of proposed works; and (iv) farmers' capacity to master the techniques.

Table 2.3: Project Alternatives Explored and Reasons for their Rejection¹

ALTERNATIVE EXPLORED	BRIEF DESCRIPTION	REASONS FOR REJECTION
Development and irrigation of the basins	This entails building the necessary equipment to collect water for irrigation of the basins as well as land development to ensure sustainable irrigation.	High cost of the investments and the transition towards flood-recession farming.
Regulation of the channels supplying water to the basins	Regulation of the channels supplying water to the basins makes it possible to ensure flood- recession farming. The solution considered is to carry out such regulation naturally without acting on the system.	This option was abandoned because it does not guarantee proper regulation of flood recession. There are plans to install control structures to regulate the water level in the basin according to the flow rate of the backwaters that feed each basin.
Development of roads and bridges to open up access to the project area	To ensure access, it is proposed that access roads be developed in the project area.	Very high cost. Only the bridges for crossing the main backwaters have been retained and will be funded through an additional NTF loan.

2.4 Type of Project

This is a sector investment project that has the particularity of adopting a participatory and integrated approach to target investments and link up the upstream and downstream agricultural subsectors (see details in Technical Annex B.3, Volume 2).

2.5 Project Cost and Financing Mechanisms

2.5.1 The overall project cost, net of taxes and customs duties, is estimated at UA 14.67 million, equivalent to MRU 743.37 million. The foreign exchange share constitutes 73% of the total project cost. Customs duties and taxes will be defrayed by the State. Physical and financial contingencies, which total 11% of the base cost, have been calculated based on detailed estimates presented by the Borrower. The Government contributes UA 1.67 million, equivalent to MRU 81.56 million, representing about 11.3% of the total project cost. The detailed project costs are presented in the technical annexes (C9). The ADF and NTF loans are valued at UA 7 million and UA 6 million, respectively.

See detail of alternatives explored in Technical Annexes Volume 2 (Annex B.1).

2.5.2 The project costs are summarised in Tables 2.4 and 2.5 below.

Table 2.4: Cost Estimate by Component [in MRU and UA million]

	I	MRU million		1	%	%		
COMPONENTS	L.C.	F.E	Total	L.C.	F.C	Total	F.C.	Base cost
Transformative irrigation infrastructure	102.26	332.31	434.57	2.02	6,56	8,58	75	65
2. Promotion of value chains and entrepreneurship	36.74	107.75	144.41	0.73	2,13	2,85	75	22
3. Capacity building and project coordination	32.62	59.19	91.81	0.64	1,17	1,81	64	14
BASE COST	171.62	499.26	670.88	3.39	9, 86	13,24	74	100
Physical and financial contingencies	29.84	42.65	72.29	0.59	0,84	1,43	60	11
TOTAL PROJECT COST	201.46	541.90	743.37	3.98	10,70	14,67	73	111

The exchange rates used are indicated in the introduction to this report [page (i)].

Table 2.5: Financing Sources [in MRU million and UA million]

Financing Courses		MRU million			0/ T-4-1		
Financing Sources	M. Locale	Devises	Total	M. Locale	Devises	Total	% Total
ADF loan	85.48	272.07	357.56	1.63	5.37	7.00	47.7
NTF loan	82.16	222.09	304.25	1,62	4.38	6.00	41.0
Mauritanian governement	33.82	47.74	81.56	0.69	0.98	1.67	11.3
Total	201.47	541.90	743.37	3.94	10.73	14.67	100

2.5.3 The breakdown of financing by expenditure category and expenditure schedule are presented in Tables 2.6 to 2.7 below.

Table 2.6: Project Cost by Expenditure Category lin MRU and UA millionl

Tubic 2.0. Project Cost by Experimente Caregory for Mice and Off military								
		MRU Million			UA million			
EXPENDITURE CATEGORIES	L.C	F.C	Total	L.C.	F.C	Total	% F.C	Base cost
Investment	146.73	462.75	609.48	2.90	9.13	12.03	76	91
Works	93.99	275.69	369.68	1.85	5.44	7.30	75	55
Goods	8.17	23.95	32.12	0.16	0.47	0.63	75	5
Services	44.58	163.10	207.68	0.88	3.22	4.10	79	31
Operation	24.89	36.51	61.40	0.49	0.72	1,21	59	9
Base cost	17162	499. 26	670.88	3.39	9.86	13.24	74	100
Physical contingencies	8.80	25.82	34.63	0.17	0.51	0.68	75	5
Financial Contingencies	21.04	16.83	37.86	0.42	0.33	0.75	44	6
COÛT TOTAL DU PROJET	201.46	541.90	743.37	3.94	10.73	14.67	73	111

Table 2.7: Expenditure Schedule by Component (in UA million)

Components	2019	2020	2021	2022	2023	TOTAL
Transformative irrigation infrastructure	0.23	1.40	4.50	2.64	0.14	8.91
2. Promotion of value chains and entrepreneurship	0.59	1.57	0.49	0.29	0.22	3.16
3. Capacity-building and project coordination	0.61	0.37	0.3329	0.32	0.33	1.96
4. PPF Reimbursement	0.64	-	-	-	-	0.64
TOTAL	2.07	3.34	5.32	3.25	0,69	14.67

2.6 **Project Area and Beneficiaries**

The planned investments target historically poorly endowed areas where a large number of farmers are exposed to droughts and poverty and insecurity because they lack the resources to develop the existing potential (water and soil). These investments will promote shared prosperity and build the resilience of these target communities to future shocks, including those relating to climate change. The project will benefit a population of 42,600 (20,448 men, i.e. 48%, and 22,152 women, or 52%) from 6,700 households. The region is qualified because it is exposed to extreme poverty and is reputed for seasonal immigration; mainly men seeking informal employment. The main activities practised by the population and which constitute livelihoods within their local economy are (in descending

²⁰¹⁷ data from the Boghé Basic Health Center.

order): agriculture (43%), livestock (14.14%), trade (10.42%) and fishing (3.48%). Women are engaged in many activities: mainly agriculture (crops, vegetables), small livestock production, petty trading and handicraft. The project's support for job creation will be provided through ANAPEJ (promotion of YAE and innovative start-ups). Farmers in the rice and vegetable farming sectors and clusters are the main beneficiaries of IPM support.

2.7 Participatory Approach to Project Design and Implementation

- 2.7.1 PATAM was designed with the sustained involvement of the stakeholders concerned (various administrative entities, grassroots organisations, socio-professional structures, private operators, beneficiaries and development partners). The participatory approach was adopted prior to project design, from technical studies carried out under the PPF where the findings were submitted and validated with the relevant technical departments and representatives of the target communities. The process is fully participatory since the Local Consultation Council (LCC), the women's Economic Interest Group (EIG), representatives of women's cooperatives and user associations established since the implementation of PAHABO were involved in all the stages. As was the case in PAHABO-1, women's organisations, users' associations, the LCC and the EIG will also be involved in implementing this project.
- 2.7.2 Furthermore, the Bank's various design missions also held numerous consultation meetings with the administrative entities concerned, professional structures, private operators likely to be involved in the project and beneficiary representatives (cooperatives, etc.). Moreover, the implementation of various proposed activities will be based on a participatory approach actively involving the LCC, the CNP and the organisations, to improve their governance and increase their accountability.

2.8 Bank Group Experience and Lessons Reflected in Project Design

- The Bank's portfolio in Mauritania (mid-November 2018) comprises 15 operations worth 2.8.1 UA 239 million (see details in Annex 3). While the overall quality of the portfolio is deemed satisfactory, there are still some implementation problems, including: (i) start-up delays due to lack of project ownership on the Mauritanian side; (ii) procurement delays; and (iii) weak project implementation capacity. The measures designed to address these challenges include: (a) quality improvement at entry by setting up project management bodies prior to approval; (b) establishment of more rigorous procurement plans; and (c) assessment of implementation capacity problems and substantial capacity building. All these recommendations have been factored into PATAM. In particular, lessons from PAHABO are strategic guidelines that can further strengthen PATAM's design and implementation. These include the need to: (1) ensure the availability of implementation studies and the finalisation of project BDs prior to project approval; (2) ensure geographic concentration and a particular interest in development to maximise value added at the local level and ensure better stakeholder mobilisation and beneficiary ownership; (3) strengthen the project monitoring, evaluation and coordination function, which are crucial to project implementation quality; (4) appoint a procurement manager and support procurement and disbursement procedures (provide capacity-building measures); (5) raise awareness among the client and target population on the role of servicing and maintenance to ensure better operation and sustainability of the facilities; and (6) improve the environment and business climate to ensure better private sector involvement.
- 2.8.2 Based on these factors, project design focused on: (i) the availability of technical studies carried out under PPF-PAHABO-2 and which are highly useful for mobilising co-financing (IsDB, GCF, GEF, SF, EIB, etc.); (ii) the consolidation of results achieved, extension of PAHABO's

outcomes to other areas and consideration of an entire component for the promotion of value chains as well as women's and youth entrepreneurship that are central to the project's design and underpinned by a participatory and integrated process; (iii) measures to strengthen project monitoring, evaluation, steering and coordination have been planned to consolidate the quality of project implementation; (iv) crucial measures are planned to accelerate procurement: the appointment of a procurement officer from among the PCU staff, the use of advance contracting and the national system according to recommended thresholds, the implementation of capacity-building and support measures (support to the Public Procurement Regulatory Authority-ARMP), the conduct of procurement audits, the preparation of a procedures manual, the establishment of an accounting system for procurement, and the improvement of disbursements; (v) support for the establishment of a Servicing and Maintenance Fund (FEM), which will be provisioned from 2021 with a start-up allocation for more sustainable development; and (vi) innovative actions to strengthen the sustainability of the activities executed and private sector mobilisation: support for the establishment of a guarantee fund and a risk-sharing system, promotion of agricultural insurance, support for the establishment of an integrated logistics platform (agro-industrial processing area in Rosso in support of the "Produire en Mauritanie" Initiative (IPM), promotion of new concepts allowing the involvement of the private sector and the development of PPP initiatives (certification concept, agricultural entrepreneurship oriented towards high value-added services, supported and sponsored by the private sector: NBM, CAM, SNIM Foundation, etc. that have expressed interest in joining and backing these concepts). The Bank will seek technical support, through trust funds, to promote and ensure the implementation of these initiatives

- 2.8.3 PATAM has also benefited more from sector budget support (PAREDE-1 & 2) and technical support under PPF-PAHABO-2, which is still being implemented. One of the recorded achievements concerns the complementarity and synergy adopted between the Bank's three financing instruments (reform support, investment support and technical support) and the complementarity linkages with operations in a logic of convergence:
 - Bank Group: (i) PAREDE 1 & 2 (including support for PPPs and land reforms agricultural and rural land is at the heart of this reform process and after significant progress in the Rosso region, agricultural and rural land regularisation is expected to start in the Brakna region; support for the establishment of a service and maintenance fund for agricultural infrastructure and structures, support for the establishment of innovative and inclusive mechanisms for financing the agro-pastoral sector); (ii) PAFEJ (technical and institutional support for ANAPEJ, support for the opening of local offices, support for the integration of young people); (iii) PAMPEJ (establishment of the microfinance refinancing mechanism via the FOREMI fund hosted at the CDD); (iv) P2RS which intervenes partly in Brakna.
 - *TFPs in Mauritania*: The concentration on the agricultural sector is justified by the principle of complementarity with the operations of the World Bank (focused on core livestock sector projects such as the Regional Support Project for Pastoralism in the Sahel-PRAPS, USD 45 million), the EU (RIMRAP, RIMDIR and RIMFIL), GIZ (Promotion of Employment and Professional Integration in Rural Areas PELIMIR) and AFD (CAP-Insertion).

2.9 Key Performance Indicators

The key project performance indicators are: (i) the total length (in km) of track dikes constructed or consolidated; (ii) the surface area (in ha) of basins developed; (ii) the surface area (in ha) of vegetable

farming areas developed for women (FAW); (iii) the average yields obtained in basins and FAWs; (iv) additional agricultural output; (v) the number of farmers benefiting from the basins developed and the number of women farmers benefiting from FAWs; and (vi) the number of operational rice-farming cooperatives for men and vegetable farming cooperatives for women as well as the respective memberships of both. The main impact indicators are: (a) improvement of the agricultural income of target communities; (b) contribution to poverty reduction; (c) contribution to the improvement of the nutritional status; (d) contribution to the reduction of food imports (in tons of cereals and vegetables); and (e) contribution to the creation of decent and sustainable jobs. The main data sources for monitoring these indicators are the PCU, DSCSE, ONS, CSA, BCM and ASYCUDA. This data will be supplemented by field surveys and targeted analyses, with occasional support from technical assistance, if necessary. The relevant data will be collected, processed and the results disseminated through the results-based monitoring and evaluation system set up by the project.

III. Project Feasibility

3.1 Economic and Financial Performance

The transformative infrastructure to be constructed (irrigation schemes, access roads), the 3.1.1 structures to be built in the basins (recalibration, cleaning) and women's vegetable farming areas will provide the population with newly cleared plots of irrigated good soil conducive to the development of the available potential (water, soil and labour force). This new situation, long awaited by the target communities, will stimulate the execution of vital activities that will help them to achieve poverty reduction, self-reliance, permanent employment, decent income and self-development. This will help to increase the added value of the irrigated areas concerned and to generate positive impacts that would be social (creation of local jobs, poverty reduction, improved nutritional status, reduction of rural exodus, etc.), economic (increased agricultural output, better use of irrigation water, enhanced regional balance, etc.), environmental (mitigation of the negative effects of climate change, rational exploitation of river water, substitution of water pumping by flood spreading and use of renewable energies vegetable-farming areas, which will lead to a reduction in energy demand, etc.) and institutional (consolidation of cooperatives, EIGs and water users' associations, institutional capacity building, organisation of farmers to improve market access, funding and service provision, etc.). The main benefits generated by the project are assessed through the following key indicators:

Table 3.1: Project Economic and Financial Performance Indicators

Indicators	Per farm
Farmed surface area in the current situation (ha)	0.67
Farmed surface area in the future situation (ha)	1.5
Current net average income per farm in flood-recession areas (MRU)	18,923
Future net average income per farm in flood-recession areas (MRU)	70,409
Future net average income per hectare in flood-recession areas (MRU)	306,606
Indicators	Project total
Total output value per year of normal operation (MRU thousand)	295,084
Jobs created during the investment phase (WD) ⁽¹⁾	186,288
Jobs created from the year of normal operation ⁽²⁾	451,877

⁽¹⁾ Additional jobs created (in WD) during the construction phase in 2019-2023

(2) The year of full operation is the fifth year of the project

(Source: Feasibility and Field Studies, 2018)

3.1.2 Financial profitability analysis yielded a FIRR of 18.8% and the sensitivity tests showed that profitability remains around the threshold of the opportunity cost of capital, even when there is a 10% decrease in output value and a concurrent 20% increase in investment costs, with the FIRR then being 13%. Economic analysis was done based on the benchmark price method and comparison of the "no-project" and "project" situations. The economic and financial performance was assessed based on an

investment life of 30 years. The project costs relate to the investments made, including physical contingencies, repair and maintenance costs, production and renewal costs. The analysis focused on the seven basins (Afnia, Balla, Moi - Moi, Diayolé- Djoulé, Nevga, Regba), thanks to which the six creeks can be exploited (Lougué, Sidi Youkel, Koundi, Ngaleng, Ballabour, Regba) and a cluster of small vegetable farming areas developed along the river bank that will subsequently be allocated to women's cooperatives. The operation of this infrastructure will increase the average net income per farm in the flood-recession farming areas from MRU 18,923 in the current situation to nearly MRU 70,409 in future, representing an increase of more than 3.5 times (3.62). This income will directly benefit fragile rural households and contribute to poverty reduction among vulnerable groups (especially women and the youth).

3.1.3 The project's economic benefits stem from the increase in agricultural output during normal operation, with an additional annual output of 107,530 quintals of cereals produced from flood-recession farming (sorghum and maize), 8,320 tons of rice, 4,000 tons of vegetable products, 5,100 tons of fodder to be valued in terms of milk and meat, and value chain development for certain vegetable products (vegetable recycling and drying). Other project impacts such as opening up access to villages, facilitating access to farms, transporting products, developing marketing channels and improving access between farming areas, local (Boghé, Dar El Baraka, Ouled Biram, Dar El Avia, Aleg) and national markets (development of certification contracts and PPP initiatives) were not factored into the analysis.

ERR (base-case scenario): 18.4 % NPV (10%): MRU 462,125

3.1.4 The sensitivity tests conducted show the profitability of the project: a 10% increase in investment costs reduces the ERR to 16.9%; a 10% decrease in production reduces the ERR to 15.0%; a 10% increase in investment costs combined with a 10% reduction in production yields an ERR of 13.7%.

3.2 Environmental and Social Impact

Environment

- 3.2.1 Based on the Bank's Environmental and Social Assessment Procedures (ESAPs), the project was classified under Category 2 due to the limited scale of the irrigation schemes that only concern 200 ha, and the local and temporary scope of the expected impacts following the rehabilitation of the existing dike track. Decree No. 2007.105, which defines the content and procedure for conducting environmental impact assessment (EIA) and monitoring their implementation, classifies the project under the category of operations subject to an EIA. On this basis, an environmental impact assessment with an environmental and social management plan was prepared in accordance with the Bank's Integrated Safeguards System (ISS) and the national system. The study was validated and its summary submitted for publication for a period of 30 days prior to the Board of Directors' meeting. In accordance with Decree No. 2007.105, the consultation was organised with the target groups. The Decree stipulates and requires that any decision should be preceded by a public inquiry to seek public input and comment on the likely impacts of the project and the acceptability of alternative solutions or mitigation measures under consideration.
- 3.2.2 From an environmental standpoint, the project will mainly lead to: (i) better management of water and soil resources, and development of the irrigation potential; (ii) a better understanding of rational water use for agricultural purposes; (iii) water and soil conservation; and (iii) the creation of favourable conditions for restoring the biodiversity in the backwaters. The positive impacts of project

activities from the social standpoint essentially relate to: (i) improvement of agricultural production techniques and systems; (ii) improvement of income and marketing conditions; (iii) broadening of the product range and enhancement of output value through processing; and (iv) strengthening of the skills of the various agricultural sector stakeholders. In terms of impact on the community living environment, it will: contribute to food and nutritional security; famine control; and job creation. During the construction phase, the negative impacts will essentially be limited to the works area and generally be of low intensity. The ESMP prepared under this project includes a series of measures during the construction and operational phases aimed at mitigating negative impacts and ensuring the project's sustainability. In terms of job creation, the project provides technical guidance as well as innovative and inclusive financial support to the agricultural sector. Furthermore, with a view to promoting women's and youth entrepreneurship, the project seeks to combat women's and youth marginalisation by setting up an inclusion mechanism to reduce cultural barriers that negatively affect these groups, and support financing for granting specific microcredit to this category of investors.

Social

- 3.2.3 The "Systematic Country Diagnostic" report prepared by the World Bank in May 2017, concludes that "the main driver of poverty reduction in rural areas has been the increase in the welfare of agricultural and livestock producers". It also concludes that despite significant improvements, social indicators remain among the lowest in the world. Mauritania was ranked 153rd out of 186 countries in the Human Development Index in 2014. Despite the progress made in reducing poverty, it remains a widespread phenomenon, mainly in rural areas, and is associated with unequal access to social services and productive capital. The qualitative data in this report indicates that land is unevenly distributed, particularly in the fertile Senegal River Valley, where the majority of poor agro-pastoral producers operate. Women are particularly affected; only 18.7% of them have land in the country. The highest poverty rates are recorded in households headed by persons who are illiterate or have not completed primary education. The "40 per cent poorest" have the lowest access to other basic services, such as health, water and sanitation. Limited access to land in rural areas and high food prices in urban areas prevent the poorest from accumulating assets. Very few poor small farmers hold formal land rights in the Senegal River Valley, while most of them depend on informal customary rights. This situation has caused land insecurity for land users and investors as well as social tensions. The project responds to expressed needs and has taken into consideration the lessons from the previous PAHABO project. It addresses food shortages and malnutrition, inadequate access to agricultural inputs leading to low production, limited access to financial support and high youth (male and female) unemployment rates. All said, despite the relative socioeconomic progress, poverty remains high in Mauritania at 31% (EPCV, 2014) compared to 42% and 51% in 2008 and 2000, respectively. Poverty remains rural in nature (about one in two people in the rural areas is poor - 44.4%). Brakna is among the four willayas with a worrying poverty rate that exceeds the national poverty threshold (43.3% in Brakna compared to 31% at the national level, i.e. 12.3 points above the average). The illiteracy rate is 52.5% (59% for women). With regard to income, the data indicates that the average annual income is estimated at MRU 224,800 for a "typical" well-off household and MRU 159,000 for an average household, while poor to very poor households have MRU 89,000 and MRU 51,400, respectively.
- 3.2.4 The 2016 ONS data indicate that Brakna's population is relatively young (the 15 to 39 age group represents 35.2% of the total population). On the social level, the foreseeable negative impacts would affect farmers who are not project beneficiaries and whose competitiveness on the market would be relatively low, as well as rural women whose participation in project benefits remains limited due to cultural barriers. However, these impacts will be significantly reduced by the mitigation measures provided for in the ESMP, in particular the strengthening of women's participation in

cooperatives and associations, and measures to support and finance income-generating activities for women and the youth who constitute the vulnerable segment of the population.

Adaptation to Climate Change

3.2.5 In terms of vulnerability to climate change risks, the project is classified in Category 2, which reflects medium vulnerability that requires the implementation of climate adaptation measures and their integration into the design of facilities planned. The following measures were considered to strengthen ecosystem and community resilience: (i) development of irrigated areas and reduction of extensive farming; (ii) introduction of innovative technologies for the optimal management of natural resources, particularly water; (iii) promotion of climate-friendly smart farming practices; (iv) promotion of small livestock farming, in particular goats and sheep, which also helps to fertilise the soil, etc.; and (v) programming of reforestation actions that reduce bank erosion and have a beneficial effect on carbon sequestration. An entire component is reserved for climate financing, on which a concept note has been submitted by the Bank to the Green Fund.

Gender

- 3.2.6 In Mauritania, efforts must be made to promote gender-sensitive human development. Women are among the prominent development stakeholders in rural areas (representing over 52% of the rural population in Mauritania). Agriculture is also the main economic activity of rural women and employs more than 90% of working women. About 90% of vegetable farmers are women. Indeed, almost the entire female labour force is engaged in this activity. Apart from agricultural activities, rural women are involved in agricultural product processing and handicrafts, which is a key domain (weaving, wool processing, etc.). Furthermore, the agricultural model in Mauritania is based on cash crops and food crops farmed by men and women, respectively. Hence, farmers are organised into rice cooperatives (mainly men, with 30% women) and food crop cooperatives (mainly women). Two major challenges arise from this mode of organisation: access to land and financial assistance. Women's cooperatives specializing in food crops need small-sized farms and, consequently, the women cannot access financial assistance to increase their production. Furthermore, women have limited access to agricultural inputs because of their low level education and limited access to information. Since women also perform a triple function (childbearing, production and social responsibility), solutions must be found to reduce their workload.
- 3.2.7 The project is intended to support women's cooperatives through: (i) improvement of 200 hectares and expansion of the irrigation system of 90 women's cooperatives; (ii) increased access to financial support for women's cooperatives through the establishment of a gender-sensitive agricultural insurance guarantee fund (to reach 50% of women); (iii) development of a comprehensive training centre (incubation) equipped with the necessary demonstration equipment and a teaching model to improve agricultural products and agro-industry. Moreover, (iv) the operation of storage rooms and improved market access are expected to increase with the construction of the two bridges and the organisation of extension services.¹

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See details in the technical annexes (B.9 &10).

Forced Resettlement

3.2.8 The Project does not involve the displacement or resettlement of people from the project area.

IV. Project Implementation

4.1 Implementation Arrangements

- Executing Agency: The project is placed under the technical supervision of the Directorate 4.1.1 for Strategy, Cooperation and Monitoring/Evaluation (DSCSE) in the Ministry of Rural Development, which will entrust its management and coordination to an autonomous unit based in Boghé within the SONADER Regional Directorate. This will promote local supervision, the benefits of which were confirmed by PAHABO. The Project Coordination Unit (PCU) will comprise eight experienced managers, capable of executing the main project tasks: (i) construction of infrastructure and development of flood-recession farmlands, land enhancement, farmers' advisory, training, agricultural extension services, and support for project activities; (ii) project planning, programming, and administrative and financial management; and (iii) project coordination, monitoring/evaluation and control. Specifically, it will be responsible for the following tasks: (a) preparation and implementation of project work programmes and annual budgets (PTBAs); (b) preparation and monitoring of bidding documents, works execution, goods and services contracts and disbursement requests; (c) internal monitoring of the project; and (d) preparation of financial statements and progress reports. The PCU, the DSCSE and the SONADER regional management will work closely together to ensure the smooth implementation of project activities. Targeted technical assistance missions (monitoring/evaluation, environmental monitoring) and certain technical departments (DDFCA, CNRADA, ENFVA-CFPR, DAR, ANAPEJ, IPM, DPN-MEDD, etc.) will periodically support the PCU.
- Institutional Arrangements: Based on the recommendations of the Paris Declaration and the conclusive lessons from PAHABO, particularly in terms of institutional arrangements, the project will recommend a light coordination and management structure, and will build on the State's sustainable structures through the signing of a coordination charter (between Ministry of Rural Development stakeholders) and specific partnership agreements with partners involved in its implementation (apart from the Ministry of Rural Development: ANAPEJ, DPN-MEDD, etc.). (i) A National Steering Committee (CNP) will be set up at the start of the project to guide, orient and supervise its implementation. This committee will be chaired by the Secretary General of the Ministry of Agriculture and comprise representatives of stakeholders involved in the project: (MEF, DSCSE, DPN-MEDD, ANAPEJ), the PATAM Coordinator (Secretary) and two beneficiary representatives (including one woman). It will meet at least twice yearly to review the annual work and budget programme (AWBP), and assess project progress. (ii) A Local Consultation Committee (LCC), responsible for monitoring and organising activities within the area, will also be set up at project commencement. It will be chaired by the Hakem of Boghé, comprising representatives of NGOs and two representatives of beneficiaries per area (including one woman), and will meet at least four times a year. This Committee may be expanded as necessary to include other persons from the decentralised technical services and other structures present in the area (e.g. civil society, representatives of local authorities and beneficiaries). The project provides for the signing of a Project Coordination Charter (PCC), specific partnership agreements and performance contracts with members of the PCU team to ensure results-based management and promote a culture of performance.

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¹ The coordinator, agricultural engineer, agronomist, procurement expert, monitoring/evaluation expert, gender and communication expert, administrative and financial officer (AFO), accountant (see organisation chart and job profiles in Annex C1).

4.1.3 To preserve institutional integration, coherence and continuity, it was agreed to entrust the management of PATAM (ADF & NTF funding), the PATAM Project (IsDB funding) and the Climate Change Resilience Development Project (Green Fund financing) to the same coordination unit (PCU) by adopting the same implementation mechanism.

Procurement Arrangements (Works, Goods and Services)

- 4.1.4 Applicable Procurement Policy and Framework: All goods, works and services funded with Bank resources shall be procured in accordance with the Procurement Policy for Bank Group-funded Operations ("AfDB Procurement Policy") October 2015 edition, and the provisions set out in the financing agreement. Pursuant to this policy and following various assessments conducted, it was agreed that all works, with the exception of irrigation works, and all goods shall be procured in accordance with the Borrower's procurement system ("National System") embodied in Law No. 2010-044 of 22/07/2010 on the Public Procurement Code, its implementing decree No. 2017-216 and other statutory texts governing procurement in Mauritania, using national standard bidding documents as amended during the project negotiations.
- 4.1.5 Irrigation works and all consultancy services will be procured in accordance with the Bank's procurement system ("AfDB System") and the Bank's relevant standard bidding documents (BD). The Borrower is expected to submit to the Bank a request to use advance contracting (AC), as defined in Article 11.2 of the Bank's Procurement Policy of October 2015. The activities targeted by such ACs are essentially those related to irrigation scheme works and ancillary control services.

Special Conditions Stemming from Usage of the National System.

- 4.1.6. Eligibility: The Bank's resources for financing project activities come from the joint ADF and NTF financing. Procurement financed by the NTF resources administered by AfDB is subject to compliance with the rule of origin. Following the assessment of procurement risks and capacities, it was decided that the National Procurement System be used for part of this project. All activities of this project, whose implementation is planned according to the national public procurement system, are financed exclusively from ADF resources. Therefore, no restrictions on the rule of origin will be applied to these activities. The only procurement co-financed by the NTF and the ADF, namely the consolidation of the track dyke and the development of 7 basins, will be subject to the Bank's procurement system and the Bank's rule of origin will be applied.
- 4.1.7 Assessment of Procurement Risks and Capacity: Procurement provisions, including risk assessment, appropriate risk mitigation measures, procurement capabilities as well as procurement implementation details and associated control mechanisms are detailed in Annex B5.
- 4.1.8 Advance Contracting: Considering the scheduling constraints related to the Borrower's agenda, a number of procurements may, at the Borrower's request, be implemented through advance contracting in accordance with the provisions of Article 11.2 of the AfDB Policy. The procedures and methods used for such advance contracting shall be identical to those adopted for the project. A reasoned request listing the procurements concerned together with a procurement plan shall be submitted to and accepted by the Bank.
- 4.1.9 *Financial Management:* The financial management arrangements below are based on an assessment of the Executing Agency's financial management capabilities and fiduciary risks detailed in the technical annex. They will be redefined during the training to be provided when the project is launched. Responsibility for financial management shall rest with the Project Coordination Unit

(PCU). The PCU will be created by the Ministry of Rural Development and placed under the technical supervision of the Directorate for Strategy, Planning and Monitoring/Evaluation (DSPSE). The financial management staff will include: a Coordinator, an administrative and financial officer, and an accountant. Their recruitment and performance contracts shall be subject to the Bank's prior agreement. Before the beginning of each budget year, the PCU shall prepare an annual work programme and budget (AWPB) to be submitted to the Ministry of Rural Development for validation through the DSPSE, the Steering Committee and the Bank. It will produce the AWPB implementation reports that will serve as the basis for the analysis of variances between projections and actual figures (costs and timeframes), supplemented by corrective measures considered in the event of an unfavourable variance. These financial performance monitoring reports shall be annexed to the quarterly progress reports sent to the Bank latest 45 days after the end of the quarter. Although an administrative, financial and accounting procedures manual was prepared under the PPF, it will have to be revised and adapted to the final organisation chart of the PCU with a view to its harmonious integration within the Ministry of Rural Development, where it will collaborate with certain services. The internal control of the project will be based on this manual.

Project accounting will be kept using the "Success" software procured with an advance from the Project Preparation Fund (PPF). The accounting will include all project sources of financing (ADF loan, NTF loan and counterpart contributions). The "Success" software will be configured to cover all project components and expenditure categories. It should be able to produce quarterly financial reports and annual financial statements.

- 4.1.10 *Disbursement Arrangements*: The ADF and NTF loans will be disbursed in accordance with the rules and procedures of the Bank's Disbursement Manual, using the direct payment methods (ADF loan and NTF) and the special account method (ADF loan for expenses related to recurrent activities and operations). A special account will be opened for this purpose in a bank acceptable to AfDB.
- 4.1.11 Account Audit: project financial statements will be audited by an independent external auditor annually and at project completion in accordance with the terms of reference (TORs) for the audit of AfDB-funded projects. The first audit of the project will include an audit of the use of the Project Preparation Fund (PPF) advance in accordance with the Letter of Agreement. Project audit reports shall reach the Bank latest six months following the end of the audited fiscal year.

4.2 Monitoring and Evaluation

- 4.2.1 The project will adopt a results-based approach and impact-oriented monitoring (IOM). In this regard, a performance measurement framework (PMF) was prepared during the appraisal in consultation with the project team (see details in Appendix C.3 Volume 2). As regards this PMF, internal monitoring will be carried out by the M/E officer at the PCU level and will serve as a basis for evaluating project performance. Monitoring at the central level will be carried out jointly by the Directorate for Strategy, Cooperation and Monitoring/Evaluation (DSCSE) in the Ministry of Agriculture and MEF's General Directorate for Public Investments and Economic Cooperation (DG/IPCE).
- 4.2.2 Activities scheduled under the project are summed up in the table below. These activities will be conducted following the project implementation schedule presented on Page (vi).

Table 4.2: Schedule and Key Stages of the Project

Period	Stages	Monitoring Activities/Feedback Loop
September 2016	Application of advance contracting (AC)	Adoption of the national system
December 2018	Project approval	Approval by the AfDB Group Board of Directors
December 2018	Signature of the loan agreements	Letter of Invitation to the Borrower
February 2019	Project launching	Jointly organise the launch of the workshop with the Government (Bank's launch mission)
2019 – 2023	Award of contracts for the procurement of materials and equipment	Bid invitation and evaluation (PCU and associated partners); signing of contracts (PCU/Ministry of Rural Development): Involvement of ANAPEJ, IPM, ENFVA-CFPR, CNRADA, DDFCA etc.
	Works and services	Works execution (companies); works supervision and control; launch of DPs and bid evaluation; signing of TA contracts; TA coordination and supervision (transformative structure component); etc.
2019 – 2023	Project supervision	Loan administration; Supervision of project activities; Field supervision (two missions per year)
December 2023	Project completion	Completion report drafting meeting by ADF/NTF

4.3 Governance

- 4.3.1 The Mauritanian Government has made efforts over the past five years to increase transparency in public affairs management, adopt good governance practices and streamline public spending. Hence, it created the Monitoring Committee responsible for implementing the National Anti-Corruption Strategy (SNLC) to strengthen the powers and effectiveness of the supervisory authorities and the judiciary, and to enhance the key role of Parliament as an entity tasked with public expenditure control. This strategy gives civil society the opportunity to express itself, formulate opinions and take action with the authorities and the judiciary. The Government has also directed macroeconomic policy towards the elimination of extra-budgetary expenditure and budgetary financing by the Central Bank of Mauritania, as well as the reduction of recurrent expenditure. However, despite these efforts, governance reforms remain insufficient. In 2017, Mauritania was ranked 41st out of 54 African countries by the Ibrahim Index of African Governance (IIAG). According to the same report, the country's ranking deteriorated over the 2012-2016 period. Under Transparency International's Corruption Perceptions Index (CPI), Mauritania's score also deteriorated from 31/100 in 2015 to 28/100 in 2017, dropping 31 spots in world ranking (143rd in 2017 compared to 112th in 2015). Also, the 2016 Global Competitiveness Index identifies corruption as the third most problematic obstacle to doing business in Mauritania.
- 4.3.2 In recent years, the Mauritanian Government, with the support of its technical and financial partners (TFPs), has initiated a sustained reform programme to improve the national public procurement system. This resulted in the adoption of Public Procurement Code 2010-040, which incorporates best practice in transparency and competition. To build on this regulatory environment for implementation of the provisions of the Paris Declaration on the use of national procedures for the execution of AfDB-funded projects, the Bank conducted a detailed review of Mauritania's procurement system in 2017. The review, which is currently being validated, concluded that the criteria of economy, equity, transparency and integrity are generally met by Mauritania's country procurement system. In terms of reforms, and with a view to improving the fiduciary framework for public expenditure and procurement efficiency, Mauritania adopted a new decree (No. 126-2017) in November 2017 repealing all the implementing decrees of Public Procurement Code 2010-040. This new implementing instrument ensures better consistency between the regulations and the public procurement code. In the area of financial management, the Government recently introduced a public budgetary and accounting management system, called Rashad. State expenditure on projects is executed through this system.

4.4. Sustainability

- 4.4.1 In view of the high priority given by the Mauritanian authorities to the agricultural sector with a view to diversifying the national economy, major public expenditure has been planned to support the construction of the irrigation schemes. Therefore, this project will enjoy total ownership by government structures (MEF, Ministry of Rural Development, MEDD, etc.) that have the required qualifications in the field, and will receive adequate counterpart funding. Recurrent (additional) expenditure due to the project will be budgeted and borne by the (regular) operating budget of the Ministry of Rural Development, to which the Servicing and Maintenance Fund to be established will make a significant contribution mainly to cover the maintenance and servicing costs of the transformative irrigation schemes.
- 4.4.2 The project seeks to revive flood-recession farming in seven basins totalling 3,300 ha, develop vegetable farming areas totalling 200 ha for women, guarantee and ensure the availability of water for flood-recession farming, protect against floods and open up access to these areas. Thus, through the activities planned, PATAM will have a strong impact to stimulate the social and economic development of the project area. It will be recalled that one of the significant impacts of PAHABO is the reverse exodus phenomenon that has resulted in the resettlement of more than 1,500 households in the project area from the big cities (Nouakchott, Rosso, Nouadhibou, etc). Thus, farmers' involvement in ensuring project ownership and their participation in financing and executing works to rehabilitate the farming areas, as well as measures taken to train and organise beneficiaries to ensure proper infrastructure management and maintenance will increase project viability and sustainability.

4.5. Risk Management

- 4.5.1 The main risk factors that could compromise project implementation are: (i) insufficient interdepartmental coordination; (ii) climate hazards; (iii) limited stakeholder institutional capacity; (iv) lack of financial inclusion and insufficient access to finance and credit; (v) poor maintenance and servicing of the irrigation schemes that affects the sustainability of the system, crop production and profitability; and (vi) procurement delays and their impact on the disbursement rate.
- 4.5.2 The main risk factors and appropriate mitigation measures are summarised in the table below:

Potential Risks	Mitigation Measures	Level				
Insufficient capacity for inter-sector coordination at the national level and consultation at the local level	Establishment of an inter-sector National Steering Committee and a Local Consultative Committee.	++				
Recurrent climatic hazards/droughts	Dissemination of resilient technology and seeds.	++				
Limited stakeholder institutional capacity	The programme provides for stakeholder capacity building.	++				
Problem of financial inclusion and access to funding and credit	The project provides for: (i) a guarantee fund to improve financial inclusion; (ii) a partnership convention with <i>Crédit Agricole de Mauritanie</i> (CAM); (iii) assistance in the organisation of the beneficiaries to facilitate access to credit; and (iv) promotion of agricultural insurance.					
Poor servicing and maintenance of irrigation schemes	Support for the organisation of water usage, socio-professional associations (SPAs) and the establishment of a Servicing and Maintenance Fund.	+++				
Procurement delays and impact on bid invitations and on the disbursement rate	(i) Use of the national system (ref. applied thresholds); (ii) application of advance contracting (APA); (iii) development and implementation of necessary tools and capacity building: technical support in procurement, development and implementation of public procurement to improve upstream (procurement monitoring) and downstream expenditure (disbursement planning and monitoring).	+++				

Highly significant: +++; Significant: ++; Less significant: +; Not significant: -

4.6 Knowledge Building

PATAM's implementation will help to develop knowledge on new irrigation techniques, 4.6.1 yield enhancement, promotion of the rice and market gardening sectors, farming of high value-added crops, management and saving of water resources, and mitigation of the effects of climate change. The TAAT initiative will provide support and contribute to: (i) the optimal exploitation of water resources; (ii) the adoption of participatory management of the irrigation scheme; and (iii) the use of various information systems established (monitoring/evaluation, mapping, agricultural insurance, guarantee system, etc.). The training and information sessions envisaged by the project for the provision of agricultural advice on irrigation techniques and farming practices to beneficiaries and technicians will provide another channel for enhancing and disseminating knowledge. The project will also run the Research and Development Programme sub-component, in addition to supporting Young Agricultural Entrepreneurs and their involvement in the priority subsector value chains retained. The main knowledge gained and lessons learned will be reflected in the project's periodic reports and completion report, filed in the Bank's archiving system and published on the websites of the ministries concerned (MEF, Ministry of Rural Development, MEDD and ANAPEJ, etc.); (iv) design production value models, value chain development in project areas and market access; and (v) promote a contractual framework between the stakeholders involved in project implementation. The training and information sessions envisaged by the project to promote research and development, and support farmers to master irrigation techniques and farming practices constitutes an ideal channel for knowledge dissemination. Furthermore, the institution building provided to grassroots organisations (rice cooperatives, women's vegetable-farming cooperatives, EIGs, water users' organisations, etc.) will give these structures the necessary capacity to serve more effectively as an interface with the Ministry of Rural Development. This knowledge will be systematically captured and documented in best practice manuals, monitoring and evaluation reports, supervision missions and periodic reports that will be shared at country and Bank level. The main knowledge gained and lessons learned will be reflected in the project's periodic reports and completion report, filed in the Bank's archiving system and published on the websites of the Ministries and stakeholders concerned (MEF, Ministry of Agriculture, MEDD, ANAPEJ, IPM, BCM, CAM and NBM). The "African Digital Financial Inclusion (ADFI) initiative will be promoted for innovative solutions targeting smart agriculture.

V. Legal Framework

5.1 Legal Instrument

The financing instruments selected are: (i) a loan agreement between the ADF and the Islamic Republic of Mauritania; and (ii) a loan agreement between the AfDB acting as the administrator of the Nigeria Trust Fund (NTF) and the Islamic Republic of Mauritania.

5.2 Conditions Associated with the Bank's Intervention

- 5.2.1 <u>Conditions Precedent to Effectiveness</u>: The NTF and ADF loan agreements shall become effective subject to the Borrower's fulfilment, to the satisfaction of the ADF and the Bank, of the conditions provided for in Section 12.01 of the General Conditions for Loan Agreements and Guarantee Agreements of the ADF and the ADB respectively.
- 5.2.2 <u>Conditions Precedent to First Disbursement of the Loans</u>: Apart from effectiveness of the Loan Agreements, first disbursement of the ADF and NTF loan resources shall be subject to the Borrower's fulfilment of the following conditions, to the Bank's satisfaction:

- Provide evidence to the Bank (representing the NTF) and the ADF of the decision to create the Project Coordination Unit under the technical supervision of the Directorate for Strategy, Cooperation and Monitoring/Evaluation (DSCSE) within the Ministry of Rural Development;
- The submission of a certified copy of the Project Coordination Charter (PCC) signed between the Project Coordination Unit (PCU), the Directorate in charge of Strategy, Cooperation and Monitoring and Evaluation, Directorate in charge of the Development of Sub-sectors and Agriculture Board (DFCA), National Center for Agronomic Research and Agricultural Development (CNRADA), National School of Training and Agricultural Extension (ENFVA) and Rural Producers Training Center (CFPR), the National Agency for the Promotion of Youth Employment (ANAPEJ) and the Directorate of Environmental Protection (DPN), and approved by the Secretary General of the Ministry of Rural Development and the Minister of the Environment. Economy and Finance, the terms and conditions of which will have been satisfactory to the Fund;
- The submission of a certified copy of each of the Partnership Agreements signed between the Project Coordination Unit ("PCU") and (i) the Department in charge of the Development of Sub-sectors and the Agricultural Board (DFCA); (ii) the National Center for Agronomic Research and Agricultural Development (CNRADA); (iii) the National School of Training and Agricultural Extension (ENFVA) and the Rural Producers Training Center (CFPR); (iv) the National Youth Employment Agency (ANAPEJ); and (v) the Directorate of Environmental Protection (DPN), the terms and conditions of which have been deemed satisfactory by the Fund; and
- The submission of satisfactory evidence of the inclusion in the State budget for the 2019 year of the government's financial contribution and the opening of the annual budgetary appropriation relating thereto.

5.2.3 Other conditions: Furthermore, the Borrower shall:

- submit to the Fund within three months of the first disbursement, evidence of the recruitment of members of the PCU, namely: Project Coordinator, Administrative and Financial Manager, procurement expert, GR Engineer, Agronomist, Monitoring and Evaluation Specialist, Gender and Communication Specialist, and Accountant within the Project Coordination Unit (PCU) whose qualifications and terms of reference have been deemed acceptable by the Funds;
- submit to the Fund within three months of the first disbursement, evidence of the creation of: (i) a National Steering Committee (NSC) chaired by the Secretary-General of the Ministry of Rural Development and whose composition has been deemed satisfactory by the Fund; and (ii) a Local Consultative Committee (LCC) chaired by the Hakem of Moughatâa of Boghé and whose composition has been deemed satisfactory by the Fund;
- send to the Fund, before 31 December 2020, evidence of the establishment and opening of a regional agency of the National Agency for Youth Employment (ANAPEJ) in Boghé;
- set up, no later than 30 June 2019, a technical committee to support the Project Coordination Unit (PCU) in charge of the validation of studies planned for within the framework of the Project;

- submit to the Fund, no later than 31 December 2019, a summary note from the land reform study and prospects for agricultural land;
- send to the Fund, before 31 December 2020, evidence of the availability of the seed grant within the Maintenance and Operations Fund; and
- provide the Fund, by 31 January of each year, with evidence of the inclusion in the State budget for the year concerned of the Government's counterpart contribution and the opening of the related annual budgetary appropriation.

5.2.4 Commitments

- (i) The Borrower undertakes to comply with the project. In this regard, the Borrower shall implement the project and ensure that the Executing Agency, its contractors and/or agents implement it in accordance with the provisions of the Loan Agreements and Article IX (*Project Implementation Cooperation and Information*) of the General Conditions.
- (ii) <u>Institutional Provisions:</u> The Borrower undertakes to act as follows, to the Bank's satisfaction:
 - The main tasks of the Project Coordination Unit (PCU) will be to ensure (i) the construction of infrastructure and flood control structures, their development, animation, training, extension and support. Project activities; (ii) Planning, programming, and administrative and financial management of the Project; and (iii) Coordination, monitoring and evaluation and supervision of Project activities; and
 - The National Steering Committee (NSC) will be in charge of guiding, orientating and supervising the implementation of the Project, notably through the review of the annual work programme and budget submitted by the PCU and the assessment of the project implementation status.

(iii) Environmental and Social Safeguards

The Borrower shall undertake and ensure that the Executing Agency and each of its contractors, sub-contractors and workers also undertake to:

- (a) Implement the Project in accordance with the ESMP, the Fund's Safeguards Policy and applicable national legislation in a manner satisfactory to the Fund, in substance and form;
- (b) Prepare and submit to the Fund, as part of the Project Report, [semi-annual/quarterly reports] on the implementation of the ESMP, including identified shortcomings and corrective actions taken; and
- (c) Refrain from any action that would prevent or hinder the implementation of the ESMP, including any modification, suspension, waiver and/or cancellation of any provision related thereto, in whole or in part, without the prior written consent of the Fund; and
- (d) Cooperate fully with the Fund in the event that the implementation of the Project or any change in its scope results in unforeseen displacement and / or resettlement of populations; and undertake to commence works in the area affected by the

implementation of the Project only if all Project Affected Persons (PAPs) are compensated and / or resettled in accordance with the Resettlement Plan (RP) prepared.

- (iv) Other commitments: The Borrower undertakes, to the satisfaction of the Fund, to maintain the Project Coordination Unit (PCU) under the technical supervision of the Directorate for Strategy, Cooperation and Monitoring and Evaluation (DSCSE) within the Project Executing Agency up to completion of the Project.
- (v) <u>Integrity:</u> The Borrower shall implement the project, and ensure that the Executing Agency and each of its contractors and/or agents implements the project, in accordance with the provisions of the Anti-Corruption Policies.

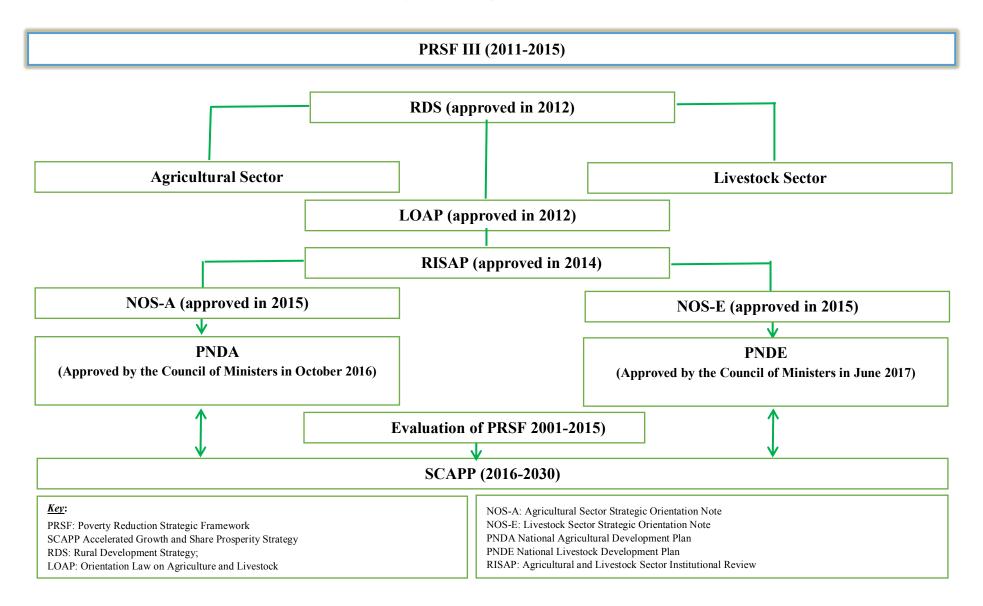
5.3 Compliance with Bank Group Policies

The project complies with all applicable Bank policies.

VI. RECOMMENDATION

Management recommends that the Boards of Directors approve: (i) the proposal to grant an **ADF loan** not exceeding **UA 7 million** to the Islamic Republic of Mauritania; (ii) the proposal to grant an **NTF loan** not exceeding **UA 6 million** to the Islamic Republic of Mauritania, to finance the Agricultural Transformation Support Project in Mauritania (PATAM) under the conditions set out in this report.

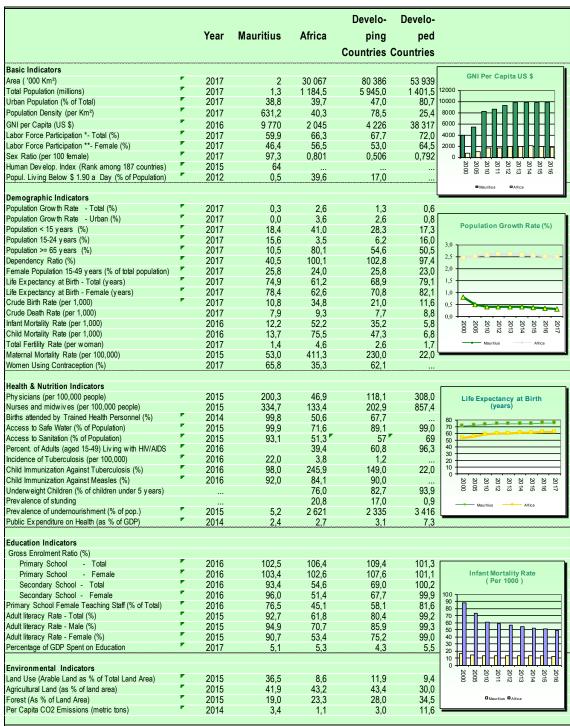
Project Strategic Framework



Country's Comparative Socioeconomic Indicators

Mauritius

COMPARATIVE SOCIO-ECONOMIC INDICATORS



 $Sources\ :\ AfDB\ Statistics\ Department\ Databases;\ World\ Bank:\ World\ Development\ Indicators;$

last update :

May 2018

UNAIDS; UNSD; WHO, UNICEF, UNDP; Country Reports.

Note: n.a.: Not Applicable; ...: Data Not Available. * Labor force participation rate, total (% of total population ages 15+)

^{**} Labor force participation rate, female (% of female population ages 15+)

Annex III.

MAURITANIA - PORTFOLIO OF CURRENT OPERATIONS FUNDED BY THE BANK GROUP AS OF 15 NOVEMBER 2018

	Status of the Bank's Active Portfolio in Mauritania – Mid November 2018									
Department	Project Title	Source of Financing	Approval Date	Signature	Completion Date	Amount Approved (UA)	Amount Disbursed (UA)	Disb. Rate		
	OPERATIONS WITHOUT SOVEREIGN GUARANTEE									
	Finance									
PIFD	Line of Credit - <i>Bank populaire de Mauritanie</i> - SME Programme	ADB	20-May-16	10 Nov-16	09 Nov-21	5,031,482.71	5,031,482.71	100.00%		
PIFD	Line of Credit - Banque pour le Commerce et l'Industrie	ADB	15-June-16	07-Dec -16	31-Dec -20	7,187,832.44	7,187,832.44	100.00%		
Industry and M	lining									
PISD	SNIM - GUELB II Extension Project	ADB - Non- sovereign	16-Sept-09	01-Dec -09	31-Dec -13	125,787,067.65	125,787,067.65	100.00%		
PISD	SNIM Dredging Project	ADB - Non- sovereign	22-Nov-17			35,330,000.00	0.00	0.00%		
TOTAL Private	e Sector and Non-sovereign					173,336,382.80	138,006,382.80	79.62%		
PUBLIC SECT	OR									
			Infrastructu	re						
PICU	ROSSO BRIDGE CONSTRUCTION PROJECT - SENEGAL	ADF/Multinational loan	09-Dec -16	12-March-17	31-Dec -19	25,000,000.00	65,000.00	0.26%		
			Agriculture	2						
AHFR	PPF-PAHABO II	ADF/grant	11 May -15	27-May -15	31-Dec -18	638,640.00	521,002.51	81.58%		
AHAI	Multinational Programme to Boost Resilience to Food and Nutritional Insecurity in the Sahel (P2RS)	ADF/Multinational loan	15-Oct14	11-Dec -14	30-June-20	11,500,000.00	3 217 700,00	27,98%		
			Social							
AHHD	Support Project for the Promotion of Micro and Small Enterprises	ADF/loan	21-Sept-16	04 Nov. 16	31-Dec -20	2,624,000.00	410,656.00	15.65%		
Аппр	(PAMPEJ)	ADF/grant	21-Sept-16	04 Nov. 16	31-Dec -20	521,360.00	12,043.42	2.31%		

AHHD	Youth Training and Employment Project (PAFEJ)	ADF/grant	28-Nov-14	11-Dec -14	31-Dec -18	2,000,000.00	1 077 600,00	53,88%	
Governance	Governance								
RDGN	Financial Infrastructure Modernisation Support Project	ADF 14 loan	15-Dec -17	11-Feb-18		3,600,000.00	71 640,00	1,99%	
ECGF	Economic Reforms and Economic Diversification Support Programme (PAREDE) - phase 2	ADF/loan	15-Dec -17	11-Feb-18		4,000,000.00	0.00	0.00%	
ECGF	Project to support the governance for inclusive growth (PAGOCI)	ADF/grant	17-Nov-14	11-Dec -14	31-Dec -19	2,000,000.00	1 134 200,00	56,71%	
	Water and Sanitation								
		ADF/loan	07-Dec -12	12-Feb-13	31-Dec -18	3,052,000.00	2 068 035,00	67,76%	
AHWS	National Integrated Rural Water Programme (PNISER)	ADF/grant	07-Dec -12	12-Feb-13	31-Dec -18	2,448,000.00	1 538 812,80	62,86%	
	Trogramme (TrusER)	RWSSI Grant	07-Dec -12	12-Feb-13	31-Dec -18	2,882,034.22	2 228 965,27	80,04%	
AHWS	National Integrated Rural Water Programme (PNISER II)	ADF/supplementary loan	18-Dec -13	10-April-14	31-Dec -18	920,000.00	838,672.00	91.16%	
AHWS	Project to Improve the Climate Resilience of Water Sector Investments	Global Environment Fund (GEF)/Grant	08-Jul-16	11-Oct16	31-Dec -20	4,564,273.60	67,551.25	1.48%	
15	TOTAL					239,086,690.62	151 336 076,17	63,30%	

2.8.1 The Bank's portfolio in Mauritania at mid November 2018 comprised 15 operations worth UA 239 million; 72.5% of Bank commitments are operations without a sovereign guarantee. There are 11 public sector operations, two of which are multinational (Programme to Build Resilience to Food and Nutrition Insecurity in the Sahel (P2RS - UA 11.5 million) and the Rosso Bridge Construction Project (UA 25 million)), for a total UA 66.4 million. The portfolio covers seven sectors of intervention: industry and mining (67%), transport (11%), water and sanitation (6%), finance (5%), agriculture (5%), governance (4%) and social (2%). The configuration of the active portfolio reflects a preponderance of the mining and transport sectors, which represent 77% of the Bank's commitment in Mauritania. Overall, the performance of the Bank's portfolio in Mauritania is deemed satisfactory. The overall score of the portfolio based on the most recent supervision ratings is 3 on a scale of 4, the average score for progress indicators is 3 and the average score for development objectives (DO) is 3, which means that the portfolio's performance is satisfactory overall. The detailed status of the portfolio is shown in the table above.

Major Constraints and Measures Considered

However, although the overall quality of the portfolio is deemed satisfactory, implementation problems persist: (i) start-up delays due to a lack of project ownership by the Mauritanian side; (ii) procurement delays; and (iii) weak project implementation capacity. Measures designed to address these challenges include: (i) quality improvement at entry by setting up project management bodies prior to approval; (ii) the establishment of more rigorous procurement plans; and (iii) the assessment of implementation capacity issues and substantial capacity building. All these recommendations were factored into PATAM.

Annex IV

<u>List of the Main Projects Funded by Development Partners in the Agricultural Sector</u>

Project Title	Cofinancer	Implementation	Loan amount	Comments
Poverty Control Programme in Aftout Sud and Karakoro (PASK II) (9000 ha)	IFAD	schedule 2012-2019	USD 34.91 million	Under way; closure end-2019; funding of a third phase has been accepted (PROGRESS)
	GEF	2012-2020	USD 3.5 million	Being implemented
Inclusive Sub-sectors Development Project - PRODEFI	IFAD	2018-2025	USD 48 million	Being implemented
Project for the Development of Resilience against Recurrent Food Insecurity in Mauritania (PDRIANSM)	IsDB	2016-2021	USD 17.05 million	Under way (sub-regional- CILSS/IsDB)
RIMRAP Program	EU	2016-2020	EUR 24 million	Midterm
RIMDIR Program	EU	2018-2022	EUR 35 million	Being launched
RIMFIL Program	EU	2019-2023	EUR 22 million	Being designed
Capacity Building to Combat Food Insecurity	IsDB	2015-2020	USD 17.52 million	Being implemented
Development R'Kiz Eastern Basin and Transition Area (3500 ha)	Saudi Fund	2016-2020	USD 34 million	Being implemented
Project for the Development of Basic Infrastructure in Arid Rural Areas, Oasis component	AFESD	2014-2019	USD 21.99 million	Expected closure in 2019
PPF - Brakna-Ouest Irrigation Scheme Project	AfDB	2015-2018	UA 0.64 million	Being implemented
Multinational Programme to Boost Resilience to Food and Nutritional Insecurity in the Sahel (P2RS)	AfDB	2015-2019	UA 11.5 million	Sub regional project under way (CILSS)
PGIRE Project - 2	World Bank	2014-2018	USD 73 million	Being implemented
Sahel Irrigation Initiative support Project -PARIIS	World Bank	2017-2021	USD 25 million	Being launched
Regional Sahel Pastoralism Support Project - PRAPS	World Bank	2016-2020	USD 45 million	Being implemented
Project to Develop and Rehabilitate Village Farming Areas in Gorgol and Guidimakha	AFD	2019 - 2024	EUR 11.5 million	Convention signed and studies conducted
Cleaning Project over 36 km of Koundi	IsDB	20192021	USD 5 million	At the launch stage
Ministry of Agriculture Lands Unit Support Project	AECID	2019-2020	EUR 0.4 million	At the launch stage
Support Project for Small Vegetable Farmers in Trarza	AECID	2019-2020	EUR 0.4 million	At the launch stage
Employment Promotion and Professional Integration in Rural Areas (PELIMIR)	GIZ	2017-2021	EUR 5.5 million	Launched in April 2017, the PELIMIR project, implemented in partnership with the Mauritanian Ministry of Employment (MEFPTIC), seeks to create 1000 jobs by 2022 in the Brakna and Assaba wilayas.
Women's Empowerment Programme - SWEDD	World Bank and United Nations Population Fund (UNFPA)	2016-2019	USD 14.84 million Mauritania component	Multinational programme: six countries, namely: Burkina Faso, Côte d'Ivoire, Mali, Mauritania, the Niger and Chad.

Annex V

Map of the Project Area

