

COMPLETION REPORT (RAP) FOR PUBLIC SECTOR OPERATIONS



AFRICAN DEVELOPMENT
BANK GROUP

I Basic data

A Report data

Report dated	Report dated:	April 2023	
	Date of the mission (<i>in case of field mission</i>)	From : April 2023	To: April 2023

B Project managers within the Bank

Duties	Upon approval	Upon completion
Regional Director	F. PERRAULT	M.L. AKIN-OLUGBADE
Head of National Office	MR. H'MIDOUCHE	A. AMOUMOUN (OIC)
Sector Director	A. BEILEH	M. FREGENE
Responsible sectoriel	D. KEITA	M. TARHOUNI
Activity Coordinator	X. BOULENGER	H. FELLAH
Alternate Activity Coordinator	M.A. KANE	S. KITANE
RAP Team Leader		H. FELLAH
Members of the HBP Team		S. KITANE, environmentalist J. HEDHLI, Portfolio Analyst S.D. SARR, Disbursement Officer X. BOULENGER, GR consultant

C Project data

Project name: Project to Support Food Security in Louga, Matam and Kaffrine Regions (PASA-LMK)		
Project Code: P-SN-A00-005	Number(s) of financing instrument(s): Don GAFSP N° 5570155000201 ADF loan No. 2100150028943	
Project Type: Investment Project	Sector: Agricultural	
Country: Republic of Senegal	Environmental categorization (1-3): 2	
Processing steps – Only for financing approved by the Bank (add/delete lines depending on the number of sources of financing)	Important events (Only for financing approved by the Bank)	Disbursements and closing dates (Only for Bank-approved financing)
Source/Funding Instrument 1: GAFSP Grant	Source/Funding Instrument 1: GAFSP Grant	Source/Funding Instrument 1: GAFSP Grant
Date of approval: 26/04/2013	Amounts cancelled: approximately UA 5 million (forthcoming, estimate)	Disbursement time: 68 months
Date of signature : 20/06/2013	Top-up funding : 0	Initial closing date: 31/12/2018

Effective Date: 20/06/2013	Restructuring (<i>specify date and amount concerned</i>): no	Revised disbursement timeline (<i>if applicable</i>): 80 months		
Effective date of first disbursement: 30/12/2013	Extensions (<i>specify dates</i>): 01 January to 31 December 2019	Revised closing date (<i>if applicable</i>): 31/12/2019		
Actual date of first disbursement: 24/01/2014				
Source/Financing Instrument 2: ADF Loan	Source/Financing Instrument 2: ADF Loan	Source/Financing Instrument 2: ADF Loan		
Date of approval: 26/04/2013	Amounts cancelled : xxx (forthcoming, estimate)	Disbursement time: 68 months		
Date of signature : 20/06/2013	Additional funding:	Initial closing date : 31/12/2018		
Effective Date: 26/08/2013	Restructuring (<i>specify date and amount concerned</i>): no	Revised disbursement time (<i>if applicable</i>): 80 months		
Effective date of first disbursement: 30/12/2013	Extensions (<i>specify dates</i>): 01 January to 31 December 2019	Revised closing date (<i>if applicable</i>): 31/12/2019		
Actual date of first disbursement: 05/09/2014				
Source of funding 1: GAFSP Grant - 5570155000201 Date of approval: 26/04/2013 Date of signature : 20/06/2013 Effective Date: 20/06/2013 Date of entry of the 1st disbursement : 30/12/2013 Date of first disbursement: 24/01/2014	Source of funding 1: GAFSP Grant - 5570155000201 Amounts cancelled: 0 Additional funding: 0 Restructuring: 0 Extensions: Yes:	Source/Funding Instrument 1: GAFSP Grant - 5570155000201 Initial disbursement date: 01/09/2013 Initial closing date: 31/12/2018 Revised disbursement time: Yes. Revised closing date: 31/03/2022		
Source/Financing Instrument 2: ADF Loan – 2100150028943. Date of approval: 26/04/2013. Date of signature: 20/06/2013. Effective Date: 26/08/2013 Date of entry of the 1st disbursement : 30/12/2013 Date of first disbursement: 05/01/2014	Source of Financing 1: ADF Loan - 2100150028943 Amounts cancelled: 0. Additional funding: 0. Restructuring: 1. Prorogations: Yes.	. Source/Financing Instrument 1: ADF Loan - 2100150028943 Initial disbursement deadline: expected 01/09/2013. Workforce: March 2014 Initial closing date: 31/12/2018 Revised disbursement deadline: March 31. 2022 Revised closing date: 31/03/2022		
Source of funding 3: GAFSP Grant Add – 557 Date of approval: 24/09/2020 Signature date: November 2022 Effective Date: November 2022 Date of entry of the 1st disbursement: 25/11/2022 Date of first disbursement: 3/4/2023	Source of funding 1: GAFSP Add Grant – 557 Amounts cancelled: 0 Additional funding: 0 Restructuring: 0 Extensions: Yes:	Source/Funding Instrument 1: GAFSP Add Grant – 557 Initial disbursement date: 01/09/2013 Initial closing date: 31/12/2018 Revised disbursement time: Revised closing date: 31/03/2023		
Source of Funding (CU):	Amount disbursed (amount, UA):	Percentage disbursed (%):	Undisbursed amount (UA):	Undisbursed percentage (%):

Source/Funding Instrument 1: GAFSP donation (40 MUSD or 2 6.06 MUC during the evaluation)	30 912 745,36	99,17%	257 138,51	0,83
Source/Funding Instrument 2: ADF loan (2 m.a.)	1 683 491,38	84,17	316 508,62	15,83
Government (3.80 m.u.a.):	316 508,62	166,74	0	0
Beneficiaries (0.46 m.u.a):	460 000	100	0	59,1
Other (e.g. co-financiers). <i>If necessary, add more lines:</i>				
TOTAL (32.32 m.u.a. at evaluation and approximately 35.3 m.u.a. at runtime)				0
Source of Funding (CU):	Amount committed (UA):	Percentage committed (%):	Uncommitted amount (UA):	Percentage not committed (%):
Source/Funding Instrument 1: Don GAFSP	30 912 745,36	99,1	257138,51	0,83
Source/Funding Instrument 2: ADF Loan	1 782 080	85	217920	12
Government:	3 799 000	100	0	0
Bénéficiaires :	460 000	100		
Other (e.g. co-financiers). <i>If necessary, add other lines:</i>				
TOTAL	xxx			
Co-financiers and other external partners: NEANT				
Executing and implementing agency(ies): Ministry of Agriculture, Rural Equipment and Food Sovereignty (MAERSA)				

D Management Review and Comments

Report reviewed by	Name	Reviewed on	Feedback
Head of National Office	A. AMOUMOUN (OIC)		
Head of Sector Division	M. TARHOUNI		
Regional Director (as President of the Country Team)	M.L. AKIN-OLUGBADE		
Sector Director	M. FREGENE		

II Evaluation of project performance

A Relevance

1. Relevance of the project's development objective

Notation*	Descriptive report (250 words maximum)
4	The reference strategic document was the National Strategy for Economic and Social Development (SNDES 2013-2017), with which Senegal's 2010-2015 CSP was aligned, revised at mid-term. The SNDES aimed in particular through its first axis, the creation of economic opportunities and wealth for the promotion of productive jobs and the structural transformation of the economy. The development of agriculture, livestock and the rural economy had emerged as priority options because of strong growth potential (irrigation, agro-processing, farm modernization, etc.). At the sectoral level, the intervention of PASA/Lou-Ma-Kaf is part of the strategic orientations of the Agro-sylvo-pastoral orientation law (LOASP) developed in 2004 (food security, resilience to climate risks, access to infrastructure, water control, etc.). It

was in line with the priorities of the National Agricultural Investment Plan (NAIP), developed in 2010 in conjunction with the ECOWAS Common Agricultural Policy. The NAIP targeted specific interventions in water control, erosion control, market access, activities taken into account in the framework of this project. The PASA-LMK also aligns with the Bank's Agriculture Sector Strategy (SSAg 2010-2014) by targeting agricultural infrastructure as well as with the Bank's long-term strategy (2013-2022) by developing an inclusive approach specifically for women and youth. The development objectives of the ASAP-LMK were therefore fully aligned with those of the various strategic guidance documents.

* For all ratings, use the following scale: 4 (Highly satisfactory), 3 (Satisfactory), 2 (Unsatisfactory), 1 (Very unsatisfactory)

2. Appropriateness of the project design

Notation*	Descriptive report (250 words maximum)
4	<p>The Bank was requested in July 2010 by the Government of Senegal to assist it in examining the request for this project to the Global Agriculture and Food Security Programme (GAFSP). This choice was justified by the fact that the Bank has a long history of collaboration with Senegal in the rural sector in general, and in particular in the sub-sectors of livestock and the intensification of agricultural production through irrigation. In particular, from 1992 to 2009, it financed two livestock support projects (PAPEL I and II) which, among other results, enabled the sector to begin to be modernised and pastoral infrastructure to develop (establishment of pastoral units, support for borehole management, genetic improvement, etc.), and also to better reflect the strategic thinking of the livestock subsector. In the agricultural production sector, from 1999 to 2007 the Bank financed the Agricultural Modernization and Intensification Project (PMIA), which promoted the emergence of modern farms with irrigated schemes from groundwater. It was also involved at the time of the appraisal of the project in the southern half of the country through two operations, the Local Small-scale Irrigation Support Project (PAPIL) and the Rural Development Support Project in Casamance (PADERCA), both of which develop activities aimed at better water management, based on small-scale hydro-agricultural schemes, and the preservation of productive capital with a view to increasing food security and fostering the emergence of production poles. The results of PAPIL, considered in the country and at the Bank level as a "successful project" and a model of resilience to climate risks, contributed to the development of the national vision for the valorization of surface waters. These achievements of the Bank, in the fields of livestock and water management, and in terms of operational execution, have been largely used for the design of the PASA-LMK.</p>

3. Lessons learned on relevance

Key questions (5 maximum, if necessary, add more lines)	Lessons learned	Target audience
1- Lessons from the past	1- It is important to take advantage of the lessons of the past, the achievements of ongoing and closed projects, both in terms of the technical solutions proposed and the operating methods adopted. This avoids some mistakes by capitalizing on good practices. The design of the ASAP-LMK has largely capitalized on previous AfDB operations in the rural sector, also incorporating the successful experiences and innovations of other partners.	Government Bank
2- Availability of technical studies	2- For rural projects involving large-scale work activities, it is essential to have technical studies and acquisition files available quickly, and if possible at the start of the projects. This is not always easy to apply for agricultural development projects where sites are often numerous and dispersed, and selected after an inclusive and time-consuming approach. It is then at least desirable to have a steering wheel of activities already identified and studied that could be used to anchor the project and its cruising, by progressive capitalization.	Government Implementing body
3- Involvement of technical departments	3- The involvement of national technical directorates is essential both for the formulation of the project and during its execution. This is all the more important for projects with multisectoral activities. This inclusive approach promotes ownership and coherence of interventions. This involvement must also be effective during planning, monitoring and evaluation.	Government Implementing body
4- Indicators of the effects of the logical framework	4- When drawing up the logical framework, it is necessary to be attentive and realistic about the choice of indicators and target values chosen, especially for the overall effects, as they will serve as a dashboard throughout the project. The data mentioned should be supported by a good knowledge of the basic	Bank Government Implementing body

situation and relate to the intervention areas. The updating of the baseline situation, carried out at the start of the project, may also make it possible, if necessary, to refine the indicators selected.

B Efficiency

1. Progress towards the project development objective (purpose of the project)

Feedback

Provide a brief description of the project (components) and the context in which it was designed and implemented. Indicate the development objective of the project (usually the purpose of the project, as indicated in the CLAR)) and evaluate the progress made. Unintended effects should also be taken into account, as well as a specific reference to gender equality in the project. Indicative maximum length: 400 words.

The five-year review project took place over a six-year period and affected the regions of Louga, Matam and Kaffrine. It was structured around three main components: (A) **Development of agricultural and livestock infrastructure** : The activities integrated into this component have made it possible to develop, in a participatory manner, agricultural and livestock infrastructures designed to promote the security, increase, storage, marketing and consumption of plant and livestock products. Targeted interventions have been carried out in particular in the field of agricultural hydraulics (2.575 ha lowlands, 390 ha irrigated perimeters around boreholes, 60 ha of market gardening, etc.) and pastoral (15 pastoral boreholes, 8 ponds, etc.), as well as for the opening up by the construction of rural roads (127 km). (B) **Development support and capacity-building**: This component focused on strengthening extension systems, advisory support at the level of developed sites, job creation for young people at the level of 34 farms, producer organization (farmers and breeders), processing and marketing of products. Women have been taken into account in all activities (rice cultivation, market gardening, small-scale livestock, milk, etc.), which has led to a significant increase in their empowerment and income. It also sought to strengthen the capacities of public, private and community institutions in the agricultural sector to ensure efficient and sustainable management of the infrastructure and production chains concerned, and also by integrating awareness into resilient practices. and (C) **Project management** : This component includes all project coordination and monitoring activities, including procurement, administrative and financial management, monitoring and evaluation and communication. It ensured the efficient management of the Project, with the aim of accountability and capitalisation.

2. Reporting on effects

The indicators selected are those derived from the logical framework of the project established during the evaluation. They were slightly adjusted following the update of the reference situation carried out in 2014 and were reduced to zonal level (3 intervention regions). The values in parentheses correspond to the initial values in the evaluation report that have been adjusted.

-Indicators of effects (according to CLAR; if necessary, add more rows)	Base value (year) (A)	Most recent value (B)	Target (C) (expected value at project completion)	Progress towards target (% achieved) [(B-A)/(C-A)]	Descriptive report (maximum indicative length: 50 words per effect)	Core sectoral indicator (Yes/No)
Effect 1: Increase in agricultural and animal production						
Increase in cereal production (tonnes/year)	34,487 tons 0.99 T/HA	38,987 tonnes 2.7 T/Ha	43,987 tonnes 3.9 T/HA	112% 134%	E1-1: Rice production at zonal level (SAI) (2013): 34,487 tonnes E1-2: Average yield of rice production	
Increase in vegetable production (tonnes/year)	0 0	38 769 Tonnes (i.e. 12600 T/year from 2015 to 20 21) : 5%	775,000 Tons (13.000 T/an)	970% 50%	E1-3: Vegetable production at zonal level (SAI) (ND in 2013)	

			10% per year		E1-4: Rate of increase in vegetable production in the ASAP zone: 0% (2013)	
Increase in meat production (tonnes)	201,558 tons 6.081.000	201 558	211,858 tonnes 6 781 337	0% :9,6%	E1-5: Domestic meat production and offal (2013): E1-6: Number of heads of small ruminants (sheep) (2013):	
Increase in the production of milk collected	217 million litres, of which 87 million litres are in the Project area	222,648,000 litres	1.04 million liters	19,44%	National milk production collected	
Effect 2: Increased incomes						Yes
Lowland producers (FCFA/year)	75,000 FCFA	80 .000 FCFA	325,000 FCFA	50%	Incomes of lowland producers	
Women in market gardens (FCFA/an)	40.000 FCFA/an	100,000 FCFA	160,000 FCFA	62%	Income of garden women:	
Women and youth on farms	0	135,000 FCFA	CFAF 1.9 to 2.1 million (CFAF 1.9 to 3.1 million)	0%	Incomes of women and youth on new farms	
Scoring (see ERA methodology)*	Descriptive report					
3	<p>The expected effects of the project in terms of increased production and increased employment have been broadly achieved. The various surveys conducted during the implementation and at the end of the project all showed a very significant improvement in the availability of agricultural and livestock products, and an increase in the income of the populations thanks to the dynamization of the production areas around the developed areas. The 22 lowlands developed in the Kaffrine region have notably allowed a cumulative production of more than 9,000 tons in 2022 for 15,000 rice farmers. Lowland rice cultivation has contributed to the improvement of living conditions by reducing expenses related to the purchase of rice. Winter lowland rice production covers food needs on average over 7 months, for average households of 6 to 9 people. The 34 groundwater farms enabled 1,045 producers to pack 373 ha for a production of 6,800 tonnes. Milk production has increased at the level of cooperatives supported, from an average of 20 litres per day in 2014 to 70 litres per day in 20-22. The various forms of support provided for the development of the dairy sector (stables, insemination, motor mowers, small equipment, etc.) have enabled beneficiaries, most of whom are women, to obtain monthly incomes ranging from 75,000 to 225,000 CFA francs. At the level of the new sheepfolds, surveys have shown that incomes vary between 50,000 and 350,000 CFA francs per year and per beneficiary. It can therefore be said that the project has contributed satisfactorily to the increase in production and incomes, and to the creation of jobs.</p>					

3. Product Report

Product indicators (as indicated in CLAR; add additional lines, if necessary)	Most recent value (A)	Target (B) (expected value at completion)	Progress towards target (% achieved) (A/B)	Descriptive report (maximum indicative length: 50 words per product)	Core sectoral indicator (Yes/No)
Component A: Development of agricultural and livestock infrastructure					
Agricultural infrastructure					

Managed rice-growing lowlands (ha)	2575	1.600	154	Concerns the Kaffrine region. Revitalization of rice cultivation.
Land treated by ESC/DRS techniques	527	300	176	Protection of lowlands in the Kaffrine region, in connection with the IREF.
Built consolidation centers	5	5	100	
Landscaped women's market gardens	60	60	100	
Farms 5 ha with excess flow (90 ha)	70	90	78	Delays due to termination of certain contracts.
Farms 20 ha with new drillings (360 ha)	320	360	89	Appropriation of farms to be strengthened.
Rural roads and ramps completed	41	60	68	
Livestock infrastructure				
Dark pastoral boreholes	10	10	100	Last projects completed in 2019.
Existing pastoral boreholes rehabilitated	8	8	100	
Landscaped ponds	8	7	114	
Vaccination parks built	60	30	150	
Livestock feed outlets built	13	12	108	Initial allocation of 840 tonnes of feed.
Forage storage sheds built	25	25	100	Additional infrastructure of the 18 mowers set up.
Improved firewall trails (km)	1938	500	387	Success of the operation thanks to the collaboration with the DEFCCS
Rural tracks completed	125	120	100	Opening up Dolly's ranch and improving exchanges between the silvopastoral zone and the groundnut basin.
Improved goat houses/sheepfolds	121	120	101	Actual exploitation. Last chicken coops (23) and sheepfolds (33) received in September 2019
Installed chicken coops	100	60	167	
Ss-total Component A				
Component B. Development support and capacity-building				
Agriculture				
Hydro-agricultural infrastructure management committees formed	217 Of which 25% are women	125 of which 25% are women.	174	Support provided by local operators (cabinet) and by ANIDA for farms.
Farmers with technical support and advice	17.000	10,500 including 5,600 women.	162	
Small processing units set up	180	64	281	
Breeding		-		

ASUFOR set up and energized	11	25	44		
UP in silvopastoral zone accompanied	25	25	100	UP set up by the CSE and links established with FAO and AVSF projects.	
Trained poultry vaccination relays	1.500	1.500	100		
E breeders who have received advisory support	36.908	19.700	187	Follow-up and advisory support provided by DIREL officers who were supported.	
Supported feed supplementation (tonnes)	205	840	24		
Mini-dairies supported	2	2	100	The initial target indicator (10) had been revised downwards (2) at the start of the project.	
Ss-total Component B					
Scoring (see ERA methodology)*	Descriptive report				
4	<p>Despite some delays at start-up, the PASA-LMK achieved at its closure a completion rate of more than 99% compared to the initial objectives, and most of the activities of the various strands were able to be completed, in a context of sometimes difficult remoteness and also marked by the difficulty for some companies to meet the deadlines. The performance of the project is therefore very satisfactory. However, particular attention must always be paid to the sustainability of the infrastructure built and to the implementation of the necessary accompanying measures.</p> <p>The project is running well. The impact indicators have been largely exceeded, emphasis will be placed on valuing achievements and strengthening the capacities of beneficiaries for the sustainability of achievements</p>				

4. Development Goal (SDG) Rating

OD rating (from the updated ERA)*	Descriptive report (maximum indicative length: 250 words)
3	<p>The sectoral objective of the project was to contribute to food security and poverty reduction. Its specific objective was to contribute to the sustainable increase of crop and animal production, as well as to the improvement of the incomes of small producers and women in particular, in the regions of Louga, Matam and Kaffrine. At the end of the project, it can be said that these objectives have been achieved at the level of the three intervention areas. Food security is better ensured, thanks in particular to production enhanced by better availability and control of surface and groundwater. Some areas have been opened up, thanks to the construction of 125 kilometers of tracks. Development poles have emerged thanks to the infrastructure put in place and the promotion of associated value chains. The various missions (Gvt, AfDB, GAFSP, etc.) and surveys carried out in the field have all noted the overall satisfaction of beneficiaries and the improvement of their living conditions. The project has contributed significantly to the achievement of its development objectives.</p> <p>The PASA/Lou-Ma-Kaf carries out the activities of the 3 components, and has carried out most of the activities planned by the main donation. Performances shall be recorded to the satisfaction of beneficiaries, partners and the local and administrative authorities concerned. The main quantitative objectives of the project are met or exceeded. The savings made on certain budget lines or on foreign exchange have made it possible to reinforce certain results (agribusiness, lowlands, farms).</p>

5. Beneficiaries (if necessary, add more rows)

Real (A)	Planned (B)	Progress towards target (% completed A/B)	% Women	Category (e.g. farmers, students)
19,700 affected producers distributed in the development of farms, lowlands and market gardening perimeters	30,000 agro-pastoralists directly affected, including	187%	22,514 women representing 40% of beneficiaries	Farmers Breeders

carried out by the groundwater component and the surface water component. 36586 beneficiary breeders	13,000 women and 5,000 young people			
More than 390,000 people	390,000 people benefiting from the benefits	100%	156,000 women	Rural population

6. Unforeseen or additional effects (if necessary, add more lines)

Description	Type (e.g. gender, climate change, social aspect, others)	Positive or negative	Impact on the project (high, medium, low)
Fixation of populations in the terroirs	The project's diversified intervention has made it possible to revitalize the areas concerned, leading to a significant reduction in rural exodus. More than 70% of the farmers installed on the new farms are young people between 18 and 35 years old and the majority of them have decided not to leave the village in search of work.	positive	high
Better integration of territories	The creation of the tracks by the project, in complementarity with the intervention of other partners, has fostered exchanges between the forestry area and the groundnut basin, thus developing a better integration of agriculture and livestock. This has resulted in a significant drop in the price of groundnut fane in forestry-pastoral areas.	positive	Medium
Evolution of Kaffrine in agricultural basin	The Kaffrine area, thanks to the development of rice lowlands and farms, tends to become a real agricultural basin (diversification of crops beyond groundnuts). Unexpectedly, market gardening has developed strongly in the developed lowlands. It is also worth highlighting in this area, the important role played by some built by the project, in terms of recovery of salty land and opening up.		
Involvement of new partners	The project's inclusive approach has led to fruitful partnerships with partners in the intervention area. This has had the effect of pooling certain activities and providing additional support. On mention in particular without being exhaustive: (i) the partnership with the ACMU which has enabled 11240 rice producers to be enrolled in health mutuals; and (ii) the collaborations with AVSF and the FAO which have allowed a densification of the animation system and also the strengthening of actions in terms of resilience.	positive	Medium

7. Lessons learned on effectiveness (if necessary, add more lines)

Key questions (5 maximum; if necessary, add more lines)	Lessons Learned	Target audience
1- Good technical reliability of new infrastructures	1- Use of proven techniques, adapted to local conditions and responding to real needs expressed. Essential preliminary technical studies. Importance of quality of execution through strict control of the works. Follow-up required during and after commissioning.	Bank Government Implementing body
2- Management and maintenance of insured infrastructures	2- Essential support over time for the management of new infrastructures. Necessary involvement of technical services and beneficiaries at all stages. Pay attention to operating expenses and depreciation of equipment,	Government

	especially for agricultural farms equipped with boreholes. Establishment of maintenance funds, financed and managed by users. Training of managers.	
3- Inclusive and participatory approach implemented	3- Necessary involvement of all stakeholders. Listening and dialogue skills required. Flexibility recommended to best meet the needs expressed. Availability of budget lines to respond to certain initiatives emerging during implementation. Development of partnerships and pooling of resources. Possibility of reasoned adjustments during execution, and revision of the LBS in particular during the mid-term review.	Implementing body Bank
4- Effective measurement of effects and results	4- Robustness of logical framework indicators. Establishment of efficient mechanisms to collect relevant and reliable information (number of beneficiaries, volume of production, number of jobs created, etc.). Involvement of partners in the measurement of effects and products.	Implementing body Partners

C Efficiency

1. Adherence to schedule

Estimated duration – year (A) (as per EPR)	Actual turnaround time – year (B) (since the entry into force of the 1st disbursement)	Expected time vs. actual turnaround time (A/B)	Notation *
60 months	108 months	0,55	3

Report (indicative maximum length: 250 words)

The project experienced delays in its start-up linked in particular to the acquisition process and the preparation of tender documents. However, some infrastructures were able to be realized in the first years, through an anchoring program, and allowed the project to establish its credibility. Some work has been delayed by the weak organizational and financial capacity of the companies recruited. In particular, the groundwater component experienced significant delays due to the necessary termination of several contracts. The extension of the project's closing date until 31 March 2023 made it possible to complete the final works, consolidate the achievements and continue efforts to make the sustainable use of the facilities, infrastructures and equipment put in place.

2. Efficiency of use of resources

Average percentage of physical achievement of CLAR outputs financed by all financiers (A) (see II.B.3)	Commitment rate (%) (B) (see Table 1.C – Total commitment rate of all donors)	Average percentage of physical achievement in relation to commitment rate (A/B)	Notation *
99	99	1	4

Report (indicative maximum length: 250 words)

The project was successfully carried out, achieving almost all the objectives set and sometimes exceeding them, within the allocated budget. The exchange gain recorded at the level of the GAFSP grant during the execution of the project even made it possible to leave a balance of 30 912 745.36 u.a. Some operational adjustments or expansions, sometimes translated into new activities (fight against Ebola, ACMU partnership, agricultural entrepreneurship, credit savings, etc.) , could be achieved without major budgetary implications. All annual audits of the project accounts were completed on time and found efficient use of financial resources.

3. Cost-benefit analysis

Economic rate of return (upon approval)	Discounted economic rate of return (upon completion)	Notation *
21%	16%	4

Descriptive report (indicative maximum length: 250 words)

The economic analysis was carried out using the reference price method, and based on the comparison between the 'no project' situation and the 'with a project' situation. All project investment costs, as well as operating costs, were taken into account, and estimated on the basis of economic prices. In terms of the benefits of the project, rice production (husked), vegetable products, milk production, beef and sheep/goat meat, and poultry meat were taken into account. Based on the assumptions defined, the economic rate of return (ERR) of the project was estimated at the time of the evaluation at 21%.

The TRE is very satisfactory because part of the benefits could not be quantified and the PASA LOUMAKAF targets categories of population with precarious conditions, relatively disadvantaged and living in vulnerable areas in terms of access to resources and who are handicapped by high levels of transaction costs. Similarly, other intangible benefits were not considered. This concerns in particular the improvement of the living conditions, hygiene, and diet of the populations concerned.

4. Implementation Status (IP)

EA scoring (from the updated ERA) *	Descriptive report (comment specifically on the headings in the EA that received an unsatisfactory or very unsatisfactory rating, according to the most recent ERA). (maximum indicative length: 500 words)
3	<p>The status of implementation of the Project was assessed as satisfactory. It was implemented in accordance with the rules of procedure of the Bank and the State of Senegal. The status of implementation was assessed in each of the following 3 main categories:</p> <p>(i) Compliance with commitments:</p> <p><u>-Project conditions:</u> The Government has diligently complied with funding conditionalities. The project was put into force relatively short (2 months for the GAFSP grant and 4 months for the ADF loan), as was the satisfaction of the conditions for the first disbursement (8 months for both sources of financing). The two "other conditions" were also met.</p> <p><u>-Environmental safeguards:</u> The project categorized 2 was subject to an ESIA and an ESMP. The CSE and the DEEC respectively set up the monitoring and environmental monitoring of the project. The protocol between PASA-LMK and DEEC was signed late, but the environmental clearance could be issued. The ESMP has been updated and validated by the DEEC through an order. Measures to mitigate negative impacts have been implemented, as has water quality monitoring. In addition, the project carried out environmental protection works and climate change resilience activities (ESC/DRS works, firewalls, breezes, water saving, use of solar energy, etc.).</p> <p><u>-Audit:</u> All audit reports (2014 to 20 21) were validated by the Bank. External audits of the project accounts were carried out and transmitted on time. The various audit recommendations were broadly followed by the Project. The closing audit for the last financial year 2022 will take place during the first half of 2023 and will be carried out by the auditor in charge of the last two audits 2021 and 2022.</p> <p>ii) Project systems and procedures:</p> <p><u>-Procurement:</u> In total, since the beginning of the project, 8 MPCs have been developed and implemented with 218 acquisitions made and 297 contracts signed for an amount of 21,292,025,354 FCFA, or 85% of the overall financing of the project. The majority of the planned acquisitions were made in accordance with the procedures laid down by the lessor and the Code of Public Procurement and Code of Procedures of the Project. Arrangements have been made for the termination of certain contracts in the underground hydraulic component. Close follow-up of files by the PMU has made it possible to reduce delays in the acquisition process as much as possible.</p> <p><u>-Financial management:</u> A manual of administrative, accounting and financial procedures was developed by the project and approved by the Bank in 2014, and revised and updated in 2017. The project was also equipped with a computerized accounting system which enabled the production of financial statements and was linked to the project's monitoring and evaluation system.</p> <p><u>-Monitoring and evaluation :</u> The project set up a computerized monitoring and evaluation system, integrating financial and programmatic aspects, and accompanied by a monitoring and evaluation guide. It includes a relational and geo-referenced database allowing the entry and processing of master data by the decentralized level and their consolidation at the central level. A monitoring table of nearly 50 products was the subject of regular information. Several field surveys were organized to better assess the effects and impacts of the project. The CSE also supported the project for the implementation of a GIS to localize the project's achievements. The project provided its quarterly and annual activity reports on a regular basis. The Steering Committee met annually in a decentralised manner and made recommendations relevant for the implementation of activities and for greater coherence with national sector strategies.</p> <p><u>-Communication:</u> A communication plan was developed at the start of the project. The project developed various communication and capitalization media (logo, brochure, website, signage, media coverage, films, fact sheets, etc.) which allowed him to have good visibility.</p> <p>(iii) Implementation and financing of the project:</p> <p><u>-Disbursement:</u> The overall disbursement rate amounts to more than 99%, almost all planned activities have been completed..</p>

<p>-Budget commitment : The commitment rate is 99%, reflecting the residual activities contracted and in the process of completion. This concerns in particular the civil engineering works around 4 boreholes.</p> <p>-Counterpart financing: The amount disbursed under the counterpart provided for in the evaluation for the Government (UA 3,799,000) was disbursed at more than 130% of the initial forecasts, which testifies to the commitment of the State to support the project. There are, however, some delays in the release of funds (salaries) which have sometimes led to difficulties for the staff concerned. As regards the beneficiaries' counterpart, it is estimated at UA 460 000 . Field observations suggest, however, that the evaluation of this contribution has been underestimated.</p>
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5. Lessons Learned on Efficiency

Key questions (5 maximum; if necessary, add more lines)	Lessons learned	Target audience
1- Professionalism and qualification of the implementing body	1- The efficient implementation of project resources and means requires qualified and experienced staff at the level of the implementing bodies, as was the case for the ASAP-LMK. It is therefore essential that the recruitment or appointment of project staff be done in a rigorous and transparent manner, on the basis of well-established job profiles.	Government
2- Length of the acquisition process	2- Delays in procurement are the main causes of delays in project implementation. In addition to the availability of procurement files, processing times at national and Bank level (for some opinions) should also be reduced. Constant anticipation, increased decentralization of processes and the use of country procedures can reduce delays. When executing contracts, especially those relating to works, attention should also be paid to compliance with contractual deadlines and, if necessary, initiate terminations.	Government Implementing body Bank
3- Importance of the operability of monitoring and evaluation systems	3- Project monitoring and evaluation systems must be simple to design and use, quickly operational and allow all activities to be monitored and operational weaknesses to be alerted in time. They must also ensure, realistically and efficiently, a periodic collection of the level of achievement of the indicators of the logical framework.	Implementing body
4- Exchange rate variation	4- The variation in the exchange rate of the source of financing (case for the PASA-LMK of GAFSP financing in USD) may constitute a constraint during execution by a reduction of resources and / or settlements. In order to limit the risks vis-à-vis contractors, preference should be given to contracts in local currency, the time taken to execute expenditure should be shortened and, if necessary, a compensation mechanism should be set up at national level for penalised service providers.	Government Bank
5- Compliance with national environmental safeguard measures	5- Any project must comply with the national provisions on environmental and social safeguards, while respecting the Bank's requirements for ESIA and ESMP. This therefore requires appropriate mechanisms and means to ensure compliance with the clauses and timetables of investigation.	Government Bank

D Durability

1. Financial sustainability

Notation	Descriptive report (maximum indicative length: 250 words)
*	
3	Financial viability at the end of the ASAP-LMK is based in particular on the ability to recover costs related to the maintenance of the infrastructure and facilities carried out. The hydro-agricultural structures of the rice lowlands require regular monitoring and may require reinforcement work depending on the seasons and the importance of the floods. The management committees set up have been made aware of these aspects and the DBRLA monitors the structures that have been geo-located. At the level of agricultural and pastoral drilling, arrangements have also been made for awareness-raising and coverage of operating costs, as well as for the training of managers and drill operators (OFOR). Breakdown equipment was also provided at the farm level, which also benefited from various supports,

including those for the establishment of business plans. Regular monitoring by the relevant technical services is generally necessary to monitor and revitalize the structures put in place, as well as further capacity building. The involvement of permanent national structures during implementation (ANIDA, DBRLA, DIREL, OFOR) SHOULD ALLOW THE CONTINUATION OF FOLLOW-UP ACTIONS AT THE END OF THE PROJECT.

2. Institutional sustainability and capacity-building

Notation *	Descriptive report (indicative maximum length, 250 words)
3	The project activities were implemented by three existing state agencies, part of whose staff was mobilized for the needs of the project: (i) Directorate of Livestock (DIREL) for the activities of the livestock component, (ii) National Agency for Integration and Agricultural Development (ANIDA) for the establishment of farms, from groundwater use, and (iii) Retention Basins and Artificial Lakes Branch (DBRLA) for lowland development and related activities. This arrangement is a guarantee of a better sustainability of the actions implemented and has allowed greater sectoral coherence in the interventions. These structures were able to benefit from the support of the project, on various levels (logistics, equipment, operation, training, recruitment of staff, etc.) which strengthened their overall intervention capacities. In addition, various technical services of the State (water and forests, hydraulics, drilling, agriculture, environment, etc.), through numerous protocols and conventions, were closely involved in the implementation of the project and also benefited from support and capacity building. The project, through its second component, supported at different levels the strengthening of local and national capacities, pastoralists and producers, including youth and women. The project has made a significant contribution to institutional capacity building to ensure the benefits of the project over time.

3. Ownership and sustainability of partnerships

Notation *	Descriptive report (maximum indicative length: 250 words)
3	The project sought to develop a participatory approach involving beneficiaries and local actors in the first place. The project has forged partnerships with other projects and institutions (AVSF, FAO, WFP, etc.), and supported synergistic initiatives to amplify the impact of its interventions. At the level of the three regions concerned, the political, administrative and customary authorities were closely involved in the intervention of the SAP-LMK P and contributed to informing and raising awareness among beneficiaries. The voluntary and private sector has also been involved in many activities. Many national NGOs were involved in the implementation and support of the activities. All these provisions must contribute to a better appropriation by the beneficiaries, which must guarantee the preservation and proper management of the project's products. It will also require sustained attention from the Government and the relevant regional technical services. However, this remains a challenge for the future, without the guarantee of specific external resources dedicated to this support.

4. Environmental and social sustainability

Notation *	Descriptive report (maximum indicative length: 250 words)
3	Due to its broad environmental and social impact and scope, the PASA/LMK has been classified as Environmental Category II by the Bank. The potential direct and indirect impacts generated by the infrastructure carried out in this project have been controlled. The CSE and the CED provided environmental monitoring and monitoring, respectively. The collaboration of the project with AVSF and FAO resulted in the financing of 2 projects by FFEM and GEF. These programmes have strengthened the ownership of climate change issues in the project intervention area. The project has also developed actions to protect the environment and the natural environment: 1538 kilometers of firewalls, 527 hectares of area treated by CES/DRS. It should be noted in terms of local climate change, that the creation of small bodies of water (ponds, shallows) and the development of plantations (windbreaks, agroforestry) undertaken as part of the project, have an overall beneficial influence on temperature and humidity around perimeters and developed areas.

5. Lessons Learned on Sustainability

Key questions (5 maximum; if necessary, add more lines)	Lessons learned	Target audience
1- Effective support of the recurring costs of the infrastructures carried out	1- Favor simple and proven techniques. Encourage the use of solar energy where possible (building lighting, cold chain, etc.). Solicit the contribution of beneficiaries before any intervention, in physical or financial form, to promote the appropriation and establishment of maintenance funds. Anticipate the management methods of collective infrastructures carried out and involve the private sector and civil society in the management of production and processing infrastructures. Provide training for the staff of the management bodies set up. Anticipate the mechanisms for withdrawing from the project, including the granting of spare parts, and provide at the State level for adequate budgetary allocations to the technical services in charge of the infrastructures and areas concerned.	Government Implementing body
2- Continued monitoring and support of the new structures put in place	2- Involve local technical services to ensure perfect involvement. Promote financing mechanisms by the State, for the accompaniment of beneficiaries beyond the duration of the project. Integrate selected activities from closed projects into the scope of new operations.	Government Donors
xxx		

III Stakeholder performance

A Relevance

1. The Bank's performance

Notation *	Descriptive report on the Bank's performance (both quantitative and qualitative, depending on available information), to be included by the borrower. See the guidance note on the issues to be addressed. (maximum indicative length: 250 words)
xxx	<p>The Bank's performance was assessed by the borrower and found satisfactory on the following criteria:</p> <p>(i) <i>Prevention and resolution of project problems</i> : During supervision missions and periodic meetings, the Banque discussed with the government authorities and the project the problems raised, and always made recommendations to overcome the constraints identified. The presence of the Bank's office in Senegal and the Task Manager greatly facilitated the timely resolution of the problems raised.</p> <p>(ii) <i>Information from other projects</i> : The project design largely took into account the lessons learned from previous Bank projects in the sector (PMIA, PAPEL, PAPIL, PADERCA, etc.) at both technical and operational levels. The contribution of the other TFPs, as part of the development of the GAFSP request and the evaluation of the project, also made it possible to capitalize on best practices.</p> <p>(iii) <i>Stakeholder participation</i>: The approach adopted for the implementation of the Project was participatory at all stages (diagnosis, planning) and was based in particular on the empowerment and participation of communities in the various actions and activities of the Project. State services were largely involved.</p> <p>(iv) <i>Fiduciary and safeguarding</i>: The loan agreement clearly indicated the fiduciary provisions to be respected by the implementation of effective management tools such as the use of accounting management software and the development of an administrative, financial and accounting management manual. The Bank has ensured the implementation and functionality of these tools. She was vigilant about the auditors' recommendations. With regard to environmental safeguards, the Bank regularly monitored compliance with the provisions laid down on environmental monitoring and surveillance.</p> <p>(v) <i>Project Monitoring and Evaluation System</i>: The operationalization of the project-level ES system has enabled the Bank to access and use data on indicators, periodic reporting, and communication.</p> <p>(vi) <i>Supervision of the Bank</i> : the Bank carried out regular supervisory missions (8 in total or an average of 2 times per year) with teams of varying size. The Bank's supervision has always resulted in constructive recommendations for improving the effectiveness of the project's actions. In addition to field missions, the project was able to benefit from regular contacts with the COSN-based project manager, as well as with experts in charge of procurement, financial management and disbursements. This proximity undeniably facilitated the management of the project and the resolution of the problems raised.</p>

	(vii) <i>Response to project requests</i> : The Bank responded to the various project requests within the required time frames, although delays were sometimes noted in the processing of disbursement requests.
Comments to be inserted by the Bank on its own performance (both quantitative and qualitative, depending on available information). See the guidance note on the issues to be addressed. (maximum indicative length: 250 words)	
The Bank was able to effectively support the Government of Senegal in formulating a request to the GAFSP, allowing the granting of a grant of USD 40 million. She participated in the design of the project by drawing on her previous experiences in the country and in the subregion. It ensured, at the national level, the integration of the sectoral departments concerned (DBRLA, DIREL, ANIDA) for the design and implementation. It ensured the participation of local authorities and beneficiaries in the definition of activities and infrastructures. The project was regularly monitored by the Bank, with periodic supervision and monitoring missions. The Bank also promoted the development of agricultural entrepreneurship activities, to better integrate the dynamics driven by the project. Fiduciary arrangements were followed by the Bank in financial audits. The Bank effectively fulfilled the mandate to manage the GAFSP funds, reporting regularly on the use of the resources made available. The Bank's performance is considered satisfactory.	
Key issues (related to Bank performance, 5 maximum; if necessary, add more lines)	Lessons learned
1- Supervision and monitoring of the Bank	1- Carry out periodic supervision with multidisciplinary teams and ensure rigorous follow-up of the implementation of recommendations. The presence of the TM and the various experts (acquisitions, finance, disbursement) in Dakar greatly contributed to strengthening the monitoring of the project. Good coordination between the Bank and the DCEF also allowed for good monitoring of implementation.
2- Changes of task managers	2- Reduce to the strict minimum the changes of task managers and provide for a real handover between the interested parties in order to ensure good continuity. The PASA-LMK did not suffer too much from this problem because the rotation was limited (3 TM) and the transition ensured (new TM = old alternate).
3- Monitoring, evaluation and communication systems	3- Ensure the rapid efficiency of monitoring and evaluation mechanisms and periodic reporting of indicators. Ensure the consistency of the data collected for the indicators and ensure that the measurement of impacts and effects is effective. Promote communication actions within projects, and feed the Bank's products to better value results and impacts. Consider the dissemination of common key indicators at project level, allowing a better final aggregation of effects.

2. Borrower performance

Notation *	Descriptive performance report (both quantitative and qualitative, depending on available information). See the guidance note on the issues to be addressed. (maximum indicative length: 250 words)
4	<p>The borrower's performance was found to be satisfactory based on the following criteria:</p> <p>i) <i>Guarantee of quality preparation and execution</i>: The borrower has mobilized to ensure an adequate set-up of the project. With the Bank's support, he was able to mobilize GAFSP funds dedicated to the preparation of the operation. It has set up, in a transparent and competitive manner, a competent and experienced team of experts for the management of the Project with the establishment of regular external monitoring.</p> <p>ii) <i>Compliance with commitments, agreements and safeguards</i>: The project was implemented and conditions met within a short time frame. Steps have been taken to ensure environmental monitoring and surveillance in accordance with the provisions laid down and in compliance with the regulations in force.</p> <p>iii) <i>Provision of the counterpart</i> : Since its implementation, the State has made resources available to the project for the counterpart, sometimes with certain delays that may have temporarily penalized the implementation, but this counterpart has finally exceeded the planned amount of (130%).</p> <p>(iv) <i>Implementation of the monitoring and evaluation system</i> : The project was equipped with an efficient monitoring and evaluation system, which enabled all stakeholders (including GAFSP) to be regularly informed. A special effort has been made in terms of communication to ensure that the actions undertaken are clearly visible. Initiatives have been carried out to ensure capitalization of the project's actions (UP animation methodological guide, experience sheets, etc.). The Government held all steering meetings and provided external follow-up through several missions.</p> <p>(v) <i>Responsiveness to supervisory recommendations</i> : The recommendations of the supervisory missions were closely followed up by the borrower, with prompt action. A status of their implementation has always been recorded in the various reports and aide-memoires.</p>

<p>vi) <i>Participation of project stakeholders</i>: A diversified partnership has been developed within the framework of the Project, allowing the different actors (local authorities, state services, producers, civil society, NGOs, etc.) to work in synergy. Many consultations have been carried out at the local level to ensure the sustainability of actions, such as the choice of women and young people living on farms.</p> <p>vii) <i>Coordination of donor assistance</i>: The request for funding from GAFSP was supported by the TFPs' "rural sector" group. During implementation, the GAFSP committee was regularly informed of the level of progress. In the field, the project has developed synergies with actions initiated by other donors (WFP for CES/DRS in Kaffrine, CTB via BARVAFOR for the valorization of lowlands, AFSF and FAO for resilience to climate change, etc.).</p>	
Key questions (related to borrower performance, 5 maximum; if necessary, add more lines)	Lessons learned
1- Competence and commitment of the staff of the implementing bodies	1- The success of a project depends greatly on the skills, experience, integrity and commitment of the staff of the implementing bodies. In this respect, it is desirable to use existing agencies with recognised capacities and, if necessary, to strengthen them. The processes for appointing or recruiting project personnel must be conducted in a rigorous and impartial manner, based on previously agreed job profiles and assignments between the two parties.
2- Effective and timely mobilization of the counterpart	2- The effective mobilization of the counterpart, within the required deadlines, greatly promotes the execution of the Project and the assumption of the planned costs (including those relating to salaries and operation). It allows a good fluidity of interventions. It also reflects the degree of commitment of the borrower to achieve the objectives assigned to the Project. To limit the risks during execution, it is also necessary not to charge the State, activities and expenses whose non-realization would have too heavy an impact on the entire project.
3- Accounting for the beneficiaries' contribution	3- The contribution of the beneficiaries must also be subject to specific monitoring by the project, by accounting for and valuing both physical and financial contributions. The ES systems of projects must integrate this dimension and set up appropriate counting, evaluation and collection tools.
4- Close and efficient monitoring of project activities	4- Even if it is essential, for greater efficiency, that the implementing bodies have a large autonomy, the fact remains that the Ministries concerned must be regularly informed and actively participate in the monitoring and steering of the project. This limits possible deviations and ensures a better overall coherence of the intervention of the different actors, while allowing greater synergies.

3. Performance of other stakeholders

Notation *	Descriptive reporting on the performance of other stakeholders, including co-financiers, contractors and service providers. See the guidance note on the issues to be addressed. (maximum indicative length: 250 words)
3	<p>The project used many and diverse services in its implementation, including agreements and protocols with technical services and state structures, contracts with consultants for various studies and for the control of the works, with NGOs for awareness and social engineering, and with companies for the realization of the various works:</p> <p>i) <u>Performance of State partners</u>: In accordance with the project design and the proposed institutional framework, the Project entrusted the implementation of three main components to existing State technical departments: DIREL for livestock, ANIDA for farms, and DBRLA for lowland management. These structures, with the support of the project, were able to mobilize their operational mechanism both at the central level and in the regions. Some adjustments and clarifications were necessary during implementation to facilitate understanding of the tasks entrusted and the responsibilities incumbent on each of the parties. The partner technical services have generally carried out the tasks entrusted, even if difficulties have sometimes been noted (CNAG, xxx), in relation to the weakness of human and material resources, in the necessary justification of the resources allocated.</p> <p>(ii) <u>Performance of consultants</u>: The recruitment of consultants who intervened under the SAP-LMK P was done in accordance with the AfDB rules of procedure for the procurement of services. The project suffered from some delays in the delivery of ODA and CAD studies related to the hydraulic works.</p> <p>iii) <u>NGO performance</u>: NGOs recruited for social engineering played an important role during the second part of the project's implementation, through local support and structuring activities. Despite the project's efforts, coordination and</p>

	<p>information between all the actors and with the technical services concerned did not always lead to the expected synergies.</p> <p>(iv) Business performance: Some enterprises have properly honoured their commitments and the work has been carried out to the required standards. However, there were delays, particularly in the surface and underground hydraulic components, due to the poor organization of the contracting firms, combined with their low technical capacity, e, material and financial. Termination procedures in the most alarming cases have contributed to the extension of the duration of the project.</p>	
Key questions (related to the performance of other stakeholders, 5 maximum; if necessary, add more lines)	Lessons learned (up to 5)	Target audience (for lessons learned)
1- Capacity of certain companies	1- Ensure the conformity of allotments for works in line with the capacities of the bidding companies. Ensure a transparent and efficient recruitment process. Ensure that control offices closely monitor work. Plan and anticipate, depending on the case, the formal notice and termination processes. Conduct awareness-raising and training actions to strengthen the capacities of small local businesses.	Government Implementing body
2- Insufficient capacity and organization of certain partner technical services	2- Use certain specialized state structures to ensure the ownership and sustainability of the activities implemented, while objectively assessing the material and human capacities in place, and strengthening them if necessary. Accompany the partnership with a periodic evaluation of the performance and compliance with the terms of the protocols established. Promote awareness and information of partner services. Terminate agreements in the most difficult cases.	Implementing body Government Bank

IV Summary of key lessons learned and recommendations

1. Key lessons learned

Key questions (5 maximum; if necessary, add more lines)	Key lessons learned	Target audience
1- Taking into account the lessons of previous projects	1- The integration into project design of lessons learned from previous similar projects is a success factor. This aspect affects both the technical solutions chosen and the proposed operating procedures. In particular, PASA-LMK had been able to capitalize on PAPEL (livestock) and PAPIL (lowlands), as well as on the first experiences of setting up young people by ANIDA.	Bank Partners Government
2- Delays in the start-up of project activities	2- A recurring problem concerns delays in the start-up of projects in the rural sector linked in particular to the delays in meeting the conditions associated with financing, the absence of dedicated staff before the establishment of the implementing bodies, and the unavailability of all studies and acquisition files.	Bank Government
3- Inadequacies of the companies responsible for hydraulic works	3- The low capacity of local and national companies in charge of the works, sometimes combined with the low attractiveness of markets in the hydro-agricultural sector (dispersion of sites, modest structures, hydrological constraints), constitutes a constraint for the efficient implementation of agricultural infrastructure projects.	Government
4- Durability of the works and actions carried out	4- Support actions for the structuring and training of POs, the involvement of beneficiaries including financial, and the establishment of management bodies are essential (but not always sufficient) measures for the sustainability of water and agricultural infrastructure. This sustainability issue should be a major concern throughout the project cycle and after its closure.	Government Implementing body Populations
5- Measurement of impacts and effects	5- Monitoring and evaluation mechanisms focus more on measuring outputs than on measuring impacts. The mechanisms for measuring impacts and	Government Bank

	effects are poorly popularized and disseminated, both at the level of States and the Bank.	Executing agencies
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2. Key recommendations (with a particular focus on ensuring the sustainability of project benefits)

Key questions (maximum 10; if necessary, add more lines)	Key Recommendation	Responsible	Delay
1- Sustainable management of hydro-agricultural structures by farmers' organizations	<ul style="list-style-type: none"> -Choice of simple techniques masterable at the local level. -Essential involvement of beneficiaries at all stages for effective ownership. -Training and capacity building actions for beneficiaries and managers of the works (advisory support, management, maintenance, etc.). -Financial contributions of beneficiaries to operating expenses and constitution during the execution of management funds managed by POs. -Land tenure security of sites and official handover of works to POs. -Reflection on advisory and management support services entrusted to the private sector and supported by POs. -Involvement of technical services to ensure periodic monitoring of structures and local supervision. -Budgeting by the State of sufficient allocations at the level of decentralized technical services after the withdrawal of the project to ensure the follow-up of activities. 	Government Services techniques Implementing body ON Private sector	Permanent
2- Sustainability of the dynamics initiated around development poles and value chains	<ul style="list-style-type: none"> -Rigorous initial selection of beneficiaries, POs and agri-entrepreneurs supported by the project. -Operating expenses controllable by local actors. -Support and start-up training in the establishment of business plans and market research. -Equipment and support during the implementation. -Linking of different actors and development of networking at local and national level. -Search for synergies with other partners to continue the support and development of activities. -Continuation of monitoring by the dedicated services of the State. 		
xxx			

In Overall RAP Rating

Streams and criteria	Notation*
STREAM A: RELEVANCE	4
Relevance of the project development objective (II.A.1)	4
Appropriateness of Project Design (II.A.2)	4
STREAM B: EFFECTIVENESS	3
Development Goal (SD) (II.B.4)	3
STREAM C: EFFICIENCY	3
Adherence to schedule (II.C.1)	3
Resource Efficiency (II.C.2)	4
Cost-benefit analysis (II.C.3)	xxx

Status of Implementation (PI) (II.C.4)	3
STREAM D: SUSTAINABILITY	3
Financial sustainability (II.D.1)	3
Institutional sustainability and capacity building (II.D.2)	3
Ownership and sustainability of partnerships (II.D.3)	3
Environmental and Social Sustainability (II.D.4)	3
ARITHMETIC MEAN OF THE PANES	xxx
OVERALL SCORE OF PROJECT COMPLETION	3 satisfactory

WE Acronyms and abbreviations

Acronym (if necessary, add more lines)	Description
NESTS	National Agency for Agricultural Integration and Development
ANCAR	National Agricultural and Rural Advisory Agency
ACMU	Agency for Universal Health Coverage
ASUFOR	Drilling Users Association
ESC/DRS	Water and Soil Conservation / Soil Defence and Restoration
DBRLA	Directorate of Retention Basins and Artificial Lakes
DIREL	Livestock Department
GAFSP	Global Agriculture and Food Security Program
MAER	Ministry of Agriculture and Rural Equipment
PAM	World Food Programme
SNDES	National Strategy for Economic and Social Development
UP	Pastoral Unit

APPENDIX1: FINANCIAL AND ECONOMIC ANALYSIS

(use of an agro-economist)

1. Benefits and beneficiaries

The priority targets of the project will be small-scale producers (men and women) residing in the three regions of intervention of the programme, with a stronger focus on the Louga and Kaffrine regions, taking into account ongoing actions and those planned by IFAD in the Matam region. In total, more than 30,000 farmers and herders will be directly affected by the project, including about 13,000 women and 5,000 young people. These will include the 14,000 producers in the Kaffrine region who will benefit from developments in the valleys, the 2,000 women and young people in the Louga and Kaffrine regions who will be installed in 36 modern equipped farms, about 14,000 livestock farmers in the silvopastoral zone who will be organized and supported in pastoral units that will be created or revitalized. The beneficiaries of the project will be not only the families of producers and herders directly affected by the activities promoted to increase production, but also the populations of the surrounding villages who will see their living conditions improve, thanks to better availability of food, access roads and the multiplication of drinking water supply points. It is estimated that 390,000 people will benefit from the project.

1.

The selection of beneficiaries was carried out after a concerted definition of the selection criteria (gender, degree of vulnerability, experience of the people in the activity concerned, possibility of contribution in kind, place of residence, etc.) by targeting committees chaired by the administrative authorities. The lists of beneficiaries were then sent to the management committees of the various project activities.

Vulnerable groups	
Number of farmers directly affected by the project	10,500 farmers including 5,600 women and 1,900 young people
Number of livestock producers directly affected by the project	19,700 breeders including 7,500 women and 3,400 young people
Total population directly benefiting from the project	211,000 people of which 51% are women
Total population benefiting from the project's benefits	490,000 people of which 51% are women
Number of persons assisted with food	87,792 people including 44,774 women
Minimum rate of access to land for women	50% shallows, 100% gardens, 25% perimeters

2. Estimation of additional production

The economic analysis of PASA LOUMAKAF evaluated the quantitative benefits of the project from agricultural production and processing/marketing of agricultural products. Environmental benefits such as improved soil fertility, reduced erosion, improved groundwater recharge and better management of the water resource base, notably through the actions of the Project, have not been quantified and are therefore taken into account qualitatively.

Since the project will develop the land on which different production systems will be set up, it has been difficult to quantify in detail all the productions of all the speculations in the different production systems; The economic analysis that has been made is based on the most cultivated food speculations as well as those most widespread in the project area.

PASA LOUMAKAF will develop land that is currently mostly degraded. These new developments will therefore come in a way in addition to the cultivable areas currently used by producers. The project will popularize improved varieties and farming techniques, which will contribute to significantly increasing production. The IGAs will lead to a better quality and quantity production of milk, meat and poultry. The current supply of project products is far below demand; It is not anticipated that the project will distort the downward costs of these products in local markets.

The production increases induced by PASA LOUMAKAF will be sustainable because they are mainly based on increasing knowledge about production practices, multiplying improved varieties in farmer fields and promoting simple production/processing technologies. In the beneficiaries' plots, rational water management and optimal rotations/associations of speculation, coupled with a series of soil defense and restoration activities, will contribute to the improvement of soil fertility and maximize the potential positive effects of project activities on the environment.

3. Economic rate of return

The FSEP economic analysis was based on a number of assumptions, the main ones being the following:

- the benefits taken into account are those of agricultural production (rice, onion, chilli, watermelon, tomato, sorghum, millet, groundnut, okra); those of AGRs (production and sale of milk, poultry farming).
- For agricultural production, crop losses ranging from 5 to 1% were taken into account.
- Production was valued on the basis of prices at harvest time.
- For pastoralists, it is estimated that only 75% will be able to take full advantage of the pastoral achievements and support provided by the project.
- FSEP economic costs (capital and operating costs) were derived from financial costs after taxes and other duties were eliminated.
- a period of 20 years and a constant exchange rate of 550 FCFA per USD were taken into account in the calculation.

These assumptions, as well as those on production levels, are conservative. The shortfalls and benefits of reducing transaction costs due in particular to easier access to certain technical services, information and technology have not been taken into account as they are difficult to measure in the context of this mission.

Based on the above assumptions, the Project's internal economic rate of return (ERN) is 16%. The TRE is very satisfactory because part of the benefits could not be quantified and the PASA LOUMAKAF targets categories of population with precarious conditions, relatively disadvantaged and living in vulnerable areas in terms of access to resources and who are handicapped by high levels of transaction costs. Similarly, other intangible benefits were not considered. This concerns in particular the improvement of the living conditions, hygiene, and diet of the populations concerned.

Sensitivity analysis

In order to test the cost-effectiveness of PASA LOUMAKAF under different scenarios, a sensitivity analysis was made against the base case. The different scenarios concern the impact on the TRE of a 20% upward or downward variation in project costs and a 20% drop in project profits. The estimate is made variable by variable (VPV) and in terms of scenarios. VPV analysis indicates the sensitivity of the ERT to an increase (or decrease) in costs, assuming constant benefits, or an increase (decrease) in benefits while costs are constant. As for the sensitivity of the profitability of PASA LOUMAKAF without integration of runway costs and critical points, the

TRE is 16%. On the other hand, the Project ERR would decrease by 3 points compared to the base ERR if project costs increased by 20%. A 20% reduction in project costs would propel the TRE to 20%, all other things being equal.

In terms of variable by variable analysis (VPV), the calculations of the TRE by retaining the scenario of the different models of culture and IGA over the entire economic life of the project as well as all the other components show that a fall in the overall benefits of the project of 10% gives an ERR equal to the opportunity cost of capital, estimated here at 10%, in the best case.

Sensitivity of the TAR to changes in additional Project costs and benefits (%)

Calculation assumptions	Value of the ERR
Current	16 %
Project costs	
+20%	13%
-20%	20%
Benefits of the project	
-10%	10%

Recurring costs represent 8.8% of total project costs but vary from year to year: from 10.5% in year 2 and 7.1% in year 3. These recurring costs are high even for the last years of the project because the project has adopted a Faire-Faire method that charges service providers until the last year of its implementation. At the end of the project, most of the equipment will have been depreciated or will be about to be depreciated.

Ultimately, the variations in the TRE of the PASA LOUMAKAF are not significant when the costs or benefits vary upwards or downwards by 10% since the ERR would always be greater than or equal to the COC in each case. Given that the potential benefits have been estimated in a minimalist way (some benefits have not even been accounted for) and that the costs have been estimated in a maximalist way, it is safe to say that the PASA LOUMAKAF remains an economically profitable project over a period of 20 years. The TRE of 16% is robust and stable enough to justify the investment. This ERT is below the ERR calculated during the preparation of the project because of investments that have not been finalized and the low level of exploitation of certain areas under development.

Financial analysis

I. Financial and economic prices

The prices of agricultural, forestry and animal production vary. The prices used for the financial analysis correspond to those paid to producers for products on the farm departure. For inputs, prices correspond to those paid by the producer on the local market. These awards were obtained through interviews with producers, breeders and from a literature search on the bibliographic basis of the project. The financial prices of the products of the sectors covered by the analysis correspond to average prices obtained during the various agricultural years.

Economic prices were introduced in order to correct distortions due to state intervention (taxation, subsidies) and the imperfection of the labour, capital and goods and services markets covered by the LOUMAKAF ASAP. These

prices were based on world prices for products traded internationally, taking into account Senegal's position (either net exporter or net importer). Conversion factors (CF) are derived from the comparison of financial and economic prices. For products not traded internationally, financial prices were used for economic analysis.

A. Crop models

In the project area, agricultural production is highly dependent on rainfall and the ability of producers to control water resources.

It is true that the project has developed farms and gardens ranging from 5 to 20 hectares. It should be noted, however, that the exploitation of these areas is not yet effective, as indicated in the impact assessment carried out by the ISRA. Some infrastructure has not been fully completed and many have just been completed.

All the activities of the Project related to the agricultural sector were carried out in Louga and Kaffrine. In particular, the "Surface Water" component of the project, which aimed to develop and enhance the lowlands through the construction of reservoirs, the development of lowlands for rice cultivation, the establishment of market gardening perimeters, the organization and capacity building of producers and finally the establishment of a savings system (EPC). However, in the implementation, this component had focused more on flagship speculations such as rice and vegetable products.

For the "Groundwater" component with its two main components, namely investment in agricultural infrastructure and capacity support, aim to ensure water control in the targeted areas, and to improve the knowledge of beneficiaries in agricultural practices and farm management.

As a result of these investments, producers have started to exploit the developed land with mainly ten crops such as sorghum, groundnuts, millet, okra, onion, watermelon, chilli, maize, rice and tomatoes.

The improvements that have been made could make it possible to double the areas exploited in year 3, year 5 and year 7, without problems. This would then lead to the exploitation of 60% of the total developed area.

The accounts of farms with project and without project are given for the 10 speculations. These farm accounts are models that can represent current practices in the project area.

B. Income-generating business models: Livestock and pastoralism

In terms of livestock and pastoralists, it is estimated that all the project's achievements have directly affected 19,700 pastoralists. These pastoralists/pastoralists are spread over the three regions of the project. The additional annual gross margin for one type of breeder in each region was determined. Then an average additional gross margin was calculated. For the sake of prudence, it has been estimated that only 75% of all these farmers will be able to achieve this additional gross margin.

The gross margin per cycle was thus determined. It has been multiplied by three (3) to take into account the three potential production cycles. For the hundred chicken coops established by the project, this additional annual gross margin amounts to 5,026,800 FCFA.

C. Poultry farming

Similarly, the additional gross margin generated by poultry farming through the poultry houses established by the project was calculated. A comparison of the situation without a project was made with the situation with a project.

ANNEX 2: Updated progress report on implementation and results (ERA)

(to be produced by the AfDB)