

PROJECT COMPLETION REPORT (PCR)

A. PROGRAMME DATA AND KEY DATES

I. BASIC INFORMATION

Project Number : P-MR-AAE-002	Project Name : LIVESTOCK DEVELOPMENT AND RANGE MANAGEMENT PROJECT (PADEL)	Country: ISLAMIC REPUBLIC OF MAURITANIA	
Lending instrument(s) : PROJECT LOAN			Environmental Classification: I
ADF : No. 2100150000647			
OPEC : No. 6540654000083			
Original Commitment:	Amount Cancelled:	Amount disbursed:	% Disbursed :
ADF : UA 5 000 000 (54.5% of total cost)		UA 3 978 554.58	79.57%
Borrower : Islamic Republic of Mauritania (RIM)			
Executing Agency(ies) [<i>List the main Ministries, project implementation units, civil society agencies and organizations responsible for implementing project activities.</i>]:			
(1) Supervisory Ministry: Ministry of Rural Development (MDR) – Department of Livestock (DE) – National Steering Committee (CNP)			
(2) Executing Agency: Project Management Unit (PMU) – Group of National Agro-Sylvo-Pastoral Associations (GNAASP) - Pastoral Cooperative Associations (ACP)			
Co-financiers and other External Partners [<i>List all other sources and amounts of financing, technical assistance or other resources used in this project</i>]:			
OPEC (loan No. 6540654000083) : UA 2 550 000 (27.8% of total cost)			
Government : UA 750 000 (8.3% of total cost) --- Beneficiaries : UA 1 000 000 (9.5% of total cost)			

II. KEY DATES

Project Concept Note Approved by Ops. Com. : Not applicable	Appraisal Report Cleared by Ops. Com. : Not determined	Board approval : 19/09/2000	
Restructuring(s):			
	Original Date	Actual Date	Difference in months [Actual-Original]
EFFECTIVENESS	4-Apr-01	03-July-01	3
MID-TERM REVIEW	In 2003	March-06	36
CLOSURE	31-Dec-06	30-June-09	30

III. RATINGS SUMMARY

CRITERIA RATING	SUB-CRITERIA	RATING
PROJECT OUTCOME	Achievement of Outputs	3
	Achievement of Outcomes	2
	Timeliness	2
	OVERALL PROJECT OUTCOME	2
BANK PERFORMANCE	Design and Readiness	3
	Supervision	3
	OVERALL BANK PERFORMANCE	3
BORROWER PERFORMANCE	Design and Preparation Status	3
	Implementation	2
	OVERALL BORROWER PERFORMANCE	3

IV. RESPONSIBLE BANK STAFF

POSITIONS	AT APPROVAL	AT COMPLETION
Regional Director	B. OGUNJOBI, OCDN	N. LOBE, ORNB
Sector Director	B. OGUNJOBI, OCDN	A. ABOU-SABAA, OSAN
Division Manager	M. J. RUSHEMEZA, OCDN.2	C. OJUKWU, OSAN.1
Task Manager	A.I. MAHDI, OCDN.2	M. KANE, OSAN.1
PCR Team Leader		M. KANE, OSAN.1
PCR Team Members		R. MAROUKI, OSAN.1 --- S. L. CISSE, Consultant

B. PROJECT CONTEXT

Summarize the rationale for Bank assistance. State:

- what development challenge the project addresses,
- the Borrower's overall strategy for addressing it,
- Bank activities in the country (ies) and sector over the past year and how they performed, and
- ongoing Bank and other externally financed activities that complement, overlap with or relate to this project.

PADEL is consistent with the Government's rural development strategy. It aims to create conditions for the sustainable and participatory development of the livestock sub-sector, particularly by investing to enhance range management and livestock development. It will draw lessons from the Livestock II project (co-financing: ADF, IDA, NDF, OPEC), which was completed in late 1998, with the establishment of a network of Pastoral Cooperative Associations (ACPs).

The project aims specifically to address some major challenges that impede rural development and reduce productivity in the livestock sector, which employed 70% of the rural population and generated 15% of GDP in 1999. The primary objective is to enhance growth and incomes while addressing the inherent shortcomings in the areas of stock watering, range management and marketing outlets.

Indeed, the project aims to reduce the incidence of rural poverty by lifting some technical and institutional constraints noted in the area covered, including: (i) the highly unequal distribution of the "water" resource (i) notorious lack of infrastructure in extensive and semi-intensive migratory herding concerning more than 90% of the herd, (iii) inadequate hygiene and medical coverage, (iv) poor genetic potential of the herd, (v) lack and high cost of veterinary products, (vi) inadequate development of livestock by-products (milk, meat, hides and skins), (vii) difficult access to credit for livestock activities, (ix) inadequate institutional capacity of state operating structures and pastoral cooperative associations. It targets 40 pastoral associations bringing together 200 000 persons grouped into 32 00 families, representing 11% of the overall population of the administrative intervention area.

Overcoming these challenges will enhance the sector strategy initiated by the Mauritanian Government to develop the livestock sub-sector. These strategic directions are: (i) development of effective sub-sectors (milk, agribusiness, red meat, hides and skins, poultry), (ii) consolidation of public livestock services (animal health including prevention of animal diseases, epidemiological studies, and cattle health care), and (iii) management and development of pasturelands (more responsibility for cooperative associations in the management of range land). In this regard, the Government adopted a new Pastoral Code and initiated actions aimed at strengthening stock watering, livestock health, promoting livestock sector downstream activities, developing the emerging private sector.

Three (3) Bank portfolio reviews were conducted during the project (2001, 2004 and 2007). The overall score was 2.2 in 2007 against 2.0 in 2004 on a scale between 0 and 3. In 2007, the Project, although recording an overall score of 2.06, was not considered potentially problematic. The last country portfolio review was conducted in October 2009 and did not take into account the PADEL Project, which had already been closed.

The results of the 2009 portfolio review showed the following: (i) the active portfolio includes 8 public sector operations amounting to a net commitment of UA 52.16 million and 5 private sector operations (UA 144.97 million) (ii) portfolio performance was deemed satisfactory with an overall score of 2.1, despite efforts to improve portfolio quality, (iii) the portfolio is fairly diversified but more recent with added private sector operations, (iii) the generic and specific problems relate to the inadequate national capacity of service providers (contractors, consulting firms), the high turnover of project coordinators, delays in mobilizing counterpart funds (State, beneficiaries), inadequate mastery of the rules of procedures for the procurement of goods, works and services and disbursement, delays in the processing of files and monitoring and evaluation deficiencies.

Source 1 : Mauritania : PADEL Appraisal Report, September 2000

Source 2 : Mauritania : Portfolio Review Report, 2007

Source 3 : Mauritania : Portfolio Review Report, 2009

C. PROJECT OBJECTIVE AND LOGICAL FRAMEWORK

1. State the Project Development Objective(s) (as set out in the appraisal report)		
The project will help to achieve the sector objectives of: (i) ensuring food security; (ii) reducing poverty; (iii) protecting and preserving natural resources and as such ensure sustainable development. More specifically , the project aims to improve livestock output in Mauritania and increase the incomes of livestock farmers.		
2. Describe the <u>major</u> project components and indicate how each will contribute to achieving the Project Objective(s).		
<u>Project components:</u>		
(i) Range protection and management: Enhancement of livestock productivity through the financing of stock watering infrastructure (12 boreholes and 45 wells), regeneration of natural rangeland and grazing improvements (4000 ha of grazing reserves and soil scarification, 4000 km of firebreaks, 4000 ha of dikes and dikelets) and environmental follow-up actions.		
(ii) Livestock Development: Financing of animal health activities (80 pens, 40 livestock input depots) and granting of stockbreeding credits (animal-drawn farming, animal feed manufacturing units, construction of rural dairy stables, promotion of small cattle and sheep fattening units).		
(iii) Support to Operating Structures: Financing to support the creation of micro-funds for livestock credit for the Group of National Agro-Sylvo-Pastoral Associations (GNAASP), Pastoral Cooperative Associations (ACP) and structures of the Ministry of Rural Development.		
(iv) Project Management: Establishment of the management unit, and monitoring of project activities.		
The project components will help to improve livestock productivity in Mauritania and increase the incomes of stockbreeders through: (i) quantitative and qualitative improvement of natural grazing lands and stock watering points, (ii) the preservation of water quality and soil fertility, while protecting the environment, (iii) improvement of livestock health, (iv) promotion of credit for livestock activities, (v) capacity building for operating structures, and (vi) promotion of livestock products and by-products.		
3. Provide a brief assessment (up to two sentences) of the project objectives along the following 3 dimensions. Rate the objectives using the rating scale provided in Appendix 1.		
PROJECT OBJECTIVES DIMENSIONS	ASSESSMENT	RATING
RELEVANT	a) Relevant to the development priorities of the country	4
ACHIEVABLE	b) Objectives considered achievable in terms of contributions to the project and proposed time frame	2

CONSISTENT	c) Consistent with the Bank's national or regional strategy.	The Project was consistent with the Bank's various assistance strategies for the country (CSP 1999-2001, CSP 2002-2004) through the strategic direction "support for rural development" focused on rural areas to fight poverty, consistent with the Bank's policies and operational guidelines. While continuing its operational assistance to the rural sector, the 2006-2007 CSP was designed with a temporary perspective and a selective focus with 2 pillars comprising both the micro-credit and water components of the Project	4
	d) Consistent with the Bank's corporate priorities.	The project is aligned with the Bank's vision of food security, poverty reduction and balanced rural sector development. It is consistent with the priorities of the Bank's assistance strategy for Mauritania.	4

4. Summarize the log. frame. If a log. frame does not exist, complete the table below, indicating the overall project development objective, the major components of the project, the major activities of each component and their expected outputs, outcomes, and indicators for measuring the achievement of outcomes. Add additional rows for components, activities, outputs or outcomes, if needed.

Objectives	Activities	Outputs	Expected outcomes	Indicators to be measured
Sector objective	Contribute to achievement of sector objectives: (i) ensuring food security, (ii) reducing poverty, (iii) protecting and preserving natural resources for sustainable development.	Increased livestock products (red meat, milk and other processed products) and incomes, as shown below	(i) Food security is improved, (ii) the share of livestock in GDP has increased, (iii) the conditions of livestock farmers have improved	(i) average milk yield of livestock, (ii) poverty rate in project area
Project objectives	Improve livestock productivity in Mauritania	Dairy production from 2 to 4 l/d (cattle), 2 to 3 l/d (sheep), from 3 to 5 l/d (goat), from 4 to 6 l/d (camel)	National milk supply is improved	Dairy production in project area
	Increase the incomes of livestock farmers	Increase in incomes from: (i) MRO 14 680 to MRO 21 289 for an average livestock farm; (ii) from MRO 25 550 to MRO 31 370 for a cattle fattening farm and (iii) MRO 6270 to MRO 7775 for a sheep fattening farm	livestock farmers' incomes are improved	Income level of livestock farmers in the reference breeding farms

Objectives	Activities	Outputs	Expected Outcomes	Indicators to be measured
Component A : Range Protection and Rehabilitation (UA 3.82 million/ total cost)	Construct community stock watering facilities	12 boreholes and 45 constructed and equipped wells and 8 overdeepened ponds readily accessible to stock	The stock watering facilities are functional and fully used by livestock; regular availability of quality water is improved	Number of stock watering facilities constructed and functional
	Regenerate natural range land	4000 ha of grazing reserves developed		Surface area in ha of grazing reserves developed
	Plant trees and fodder shrubs	400 000 trees and fodder shrubs planted		Number of trees and fodder shrubs planted
	Set up firebreaks	4000 km of firebreaks installed	Availability of fodder resources improved	Number of km of firebreaks set up
	Carry out pastoral improvements	4000 ha of dikelets set up; 2000 ha of unfarmed land marked; 2000 ha of grazing land enriched with leguminous plants; 200 km of fortified hedges made		Surface area in ha of pastoral improvements made
	Carry out extension and training activities for livestock farmers and ACPs	Livestock farmers and 1000 extension workers trained		Livestock farmers' capacity is enhanced
	Carry out environmental follow-up activities	An action plan to mitigate the negative environmental impacts of the project is developed and implemented	The negative environmental impacts of the project are reduced	
Component B : Livestock development (UA 3.19 million / total cost)	Grant credit to livestock farmers for various activities in the stockbreeding chain	100 units of draught farming procured; 10 cottage farming units for manufacturing cattle feed set up; 3 drawn units procured; 600 dairy stables constructed and 100 peri-urban enclosed areas constructed	Farming units are set up and are functional	(i) Number of income-generating farming units set up; (ii) total volume of credits granted

	Build vaccination pens	80 vaccination pens built	Vaccination pens are built and functional; animal health is improved	Number of vaccination pens built ; stock vaccination rate
	Provide pastoral cooperatives with stocks of drugs	40 stocks of veterinary drugs constituted	Stocks of livestock inputs are available in pastoral cooperatives	Number of pastoral cooperatives provided with livestock inputs
	Organize artificial insemination campaigns	Cows selected, treated and inseminated	(i) the genetic status of cows is improved, (ii) Milk production has increased	(i)milk yield of inseminated cows, (ii) quantity of milk production
	Conduct small-scale studies in animal production downstream	Studies on the disposal, processing, preservation and marketing of livestock products and by-products carried out.	Small-scale studies in animal production downstream are finalized and made available to pastoral cooperatives	Study reports produced and shared with pastoral cooperatives
Component C : Support to operating structures (UA 1.27 million / total cost)	Provide support to operating structures (credits for livestock and pastoral associations)	10 micro pilot funds created; logistic support provided to CAPEC, GNAASP and ACPs	(i) micro funds created and functional; (ii) capacity of CAPEC, GNAASP and ACPs is built	(i) number of micro-funds created, (ii) increase in volume of credit granted, (iii) number of functioning ACPs
	Provide support to the Ministry of Rural Development and the Environment (MDRE)	2 four-wheel-drive vehicles procured and supplied to DEA and DPSE	State structures involved are effective in their operations in pastoral areas	Number of field visits by MDRE central structures
Component D : Project management (UA 1.02 million / total cost)	Set up Project Management Unit (PMU)	PMU Staff (1 Coordinator, 1 Finance and Administrative Officer, 1 Technical Director and 3 technical staff + support staff) recruited and in service	The PMU is functional and efficient. The activities and results are properly monitored	
	Provide PMU with logistic support.	12 vehicles, 14 motorbikes, computer equipment procured	The PMU is functional and efficient. The activities and results are properly monitored	

5. For each dimension of the <u>log. frame</u> , provide a brief assessment (up to two sentences) of the extent to which the log. frame achieved the following. Insert a working score, using the rating scale provided in Appendix 1. If no log. frame exists, rating this section as a 1 (one).			RATING
LOG. FRAME DIMENSIONS		ASSESSMENT	
LOGICAL	a) Presents a logical causal chain for achieving the project development objectives	The log. frame matrix as set out in the appraisal report does not highlight expected outcomes. The layout of activities makes the logical causal chain for achieving the project development objectives less obvious.	2
MEASURABLE	b) Expresses objectives and outcomes in a way that is measurable and quantifiable	The objectives are clearly expressed and measurable. However, the expected outcomes are not sufficiently defined. The expected results are defined primarily in terms of measurable outputs	2
DETAILED	c) States the risks and key assumptions.	The key assumptions/risks to the Project and mitigation measures are clearly described	3

D. OUTPUTS AND OUTCOMES

I. ACHIEVEMENT OF OUTPUTS


In the table below, assess the achievement of actual vs. expected outputs for each major activity. Import the expected outputs from the log. frame in Section C. Score the extent to which the expected outputs were achieved. Weight the scores by the activities' approximate share of project costs. Weighted scores are auto-calculated by the computer. The overall output score will be auto-calculated as the sum of the weighted scores. Override the auto-calculated score, if desired, and provide justification.

MAJOR ACTIVITIES		Rating	Share of Project Costs in percentage (as stated in Appraisal Report)	Weighted Rating (auto-calculated)
Expected Outputs	Actual Outputs			
Component A : Range Protection and Rehabilitation (UA 3.82 million/ total cost)				
<i>Stock watering:</i>				
12 boreholes and 45 wells constructed and equipped, and 8 ponds readily accessible to stock	Legdeim II borehole (North of the Wilaya Assaba) was equipped, 27 pastoral wells sunk with 14 equipped (a completion rate of 50% compared to the revised target) and 20 wells are under construction --- Note: sinking of wells and ponds abandoned owing to default by the studies contractor and budgetary implications	2	20.30%	0.406
<i>Pastoral and environmental improvements:</i>				
4000 ha of controlled grazing areas developed	The planned 40 grazing areas have been developed (4 000 ha that is 100%)	2	20.10%	0.402
400 000 trees and fodder shrubs planted	377 449 seedlings of fodder trees and shrubs were replanted between 2003 and 2005, on 134 sites that is, 95% of the target and 176 nursery farmers trained, particularly women			
4000 km of firebreaks created	2 731 km of firebreaks open and/or maintained between 2003 and 2006, a 99% achievement compared to the revised target			

4000 ha of dikelets constructed; 2000 ha of unfarmed land scarified; 2000 ha of grazing land enriched with leguminous plants; 200 km of fortified hedges made.	580 ha anti-erosion dikelets (stone or earth) constructed, that is 15% of target, 58 ha of unfarmed land marked and 36 acres of stone bunds realised on 7 sites, soil and water conservation activities (SWC) carried out, 30 km of fortified hedges on 8 sites. NB: Nitrogen enrichment of depleted soils was not carried out because of lack of interest by the population. Environmental action (relating to stock water wells) was not followed-up.			
1000 livestock farmers and extension workers trained	Training provided in animal health, animal husbandry and agricultural economics: 158 livestock farmers, 128 veterinary assistants, 129 rural extension workers and 204 ACP officials - NB: target revised to a total of 680 farmers to be trained.			
Environmental impact mitigation measures:				
An action programme for mitigation of the project's negative environmental impact developed and implemented	Not carried out : owing to the late sinking of stock water wells	1	0.60%	0.006
Component B : Livestock development (UA 3.19 million / total cost)				
100 draught farming units procured; 10 cottage farming units for manufacturing cattle feed set up; 3 drawn units procured; 600 dairy stables constructed and 100 peri-urban enclosed areas constructed	Not carried out: The line of credit provided for that purpose was not put in place. However, the balance of the credit distributed by the 20 CECEL amounted to around MRO 94 million by end 2008 against MRO 36 million by end 2006. The resources came from mobilized cooperative shares. The credit was primarily intended for the purchase of livestock inputs.	2	21.10%	0.422
80 vaccination pens built	89 vaccination pens built, representing an achievement rate of 111%	4	8.40%	0.336

40 stocks of veterinary drugs constituted	36 depots built by managers trained, including 34 revolving fund recipients (50% by the project) for procurement of livestock inputs (drugs, feed, wire netting), representing an achievement rate of 90%.	3	4.30%	0.129
Cows selected, treated and inseminated	1 678 cows selected, 1 348 treated with 1 295 inseminated in the 3 target Wilayas (Trarza, Brakna and Gorgol), representing 77% of target			
Studies on the disposal, processing, preservation and marketing of livestock products and by-products conducted.	A sub-sector study conducted in 2 phases: (i) diagnosis, current situation and guidelines for the promotion of livestock products, and (ii) an action programme for improving the collection, processing, upgrading and marketing of livestock products (meat, milk).	4	0.60%	0.024
Component C : Support to operating structures (UA 1.27 million / total cost)				
10 micro pilot funds created; logistic support provided to CAPEC, GNAASP and ACPs	(i) 20 Savings and Loans Funds for Livestock (CECEL) created and equipped (safes, tables, chairs and supplies), a 200% achievement compared to target. Managing bodies formed. A network of 20 funds dubbed UNCECEL was set up in April 2009 with an initial cooperative share value of MRO 8 million (ii) logistics were provided and training sessions delivered to the ACPs and GNAASP	4	13.70%	0.548
2 four-wheel-drive vehicles procured and supplied to DEA and DPSE	Vehicles purchased within the framework of agreements signed with the project, the Directorate of Livestock (former DEA), the DPSE, DRFV			
Component D : Project management (UA 1.02 million / total cost)				
PMU Staff (1 Coordinator, 1 Finance and Administrative Officer, 1 Technical Officer and 3 technical staff + support staff) recruited and in service	Proposed staff was recruited, and has assumed duty. The number dropped from 60 to 34 at Project closure (11 seconded officers and 24 contract workers).	3	11.00%	0.330

12 vehicles, 14 motorcycles, computer equipment procured	All rolling stock was procured, as well as furniture and computer equipment			
OVERALL OUTPUT RATING [rating is calculated as the average rating]				3

 Check here to override the auto-calculated rating

Provide justification for over-riding the auto-calculated rating	
Insert the new rating or re-enter the auto-calculated rating	
3	

II. ACHIEVEMENT OF OUTCOMES

OUTCOMES		Rating
Expected	Actual	
Sector and specific objectives of the Project		
(i) Food security is improved, (ii) the share of livestock in GDP has grown, (iii) the conditions of livestock farmers have improved	(i) the prevalence of food insecurity in rural areas was 21% in June 2009 against 23% in June 2007, (ii) the livestock sector share of the real GDP increased from 15% in 1999 to 21% in 2007, (iii) the prevalence of extreme poverty stood at 25.9% in 2008 against 28.8% in 2004 and 31.4% in 1998	3
National milk supply is improved	The quantity of milk production increased from 448,000 tonnes (milk equivalent) in 2000 to 506 thousand tonnes in 2005 and 1000 thousand tonnes in 2008. The average milk yield increased from 2 to 4.5 l/day for cattle	3
Livestock farmers' incomes are improved	Net income for an average livestock farm grew from MRO 8 884 to MRO 54 858, that is 2.5 times the expected target of MRO 21 289 at appraisal (See Appendix 3A_Analfin).	3
Component A : Range Protection and Rehabilitation (UA 3.82 million/ total cost))		
The stock watering facilities are functional and fully used by livestock; the regular availability of quality water is improved	With the construction of 27 stock water wells (out of 45 targeted) including 14 equipped and drilling equipment: (i) transhumance reduced, especially during the lean season and the capacity of livestock farmers was built in the management of stock water wells, (ii) the participatory approach, a first in the project area, emerged (iii) national milk production increased, (iv) the income of "small-scale livestock farmers" increased. Management committees were set up. Levy-based cost recovery mechanisms were not formalized to ensure support for the maintenance of facilities.	2

Availability of fodder resources improved	Through creation of 40 grazing reserves (4000 ha), transhumance is reduced, especially during the lean season and the capacity of livestock farmers was built in the management of grazing reserves, (ii) fodder resources have been upgraded. Although the management committees of grazing reserves were set up, no arrangement was made for cost recovery to ensure infrastructure maintenance.	3
Livestock farmers' capacity is strengthened	The project has revitalized the livestock sector through the transfer of know-how, development of stockbreeder associations and private initiatives, and laid the groundwork for development of the dairy, meat, leather and hides sub-sectors	2
The negative environmental impacts of the project are reduced	Not achieved: The agreement signed in 2007 with the DPNP was not enforced for reasons of capacity and delay in the construction of stock watering facilities	1
Component B : Livestock development (UA 3.19 million/total cost)		
Farming units are set up and functional	The pastoral units were not created under the project. Actually, the micro-funds set up did not really start their credit operations as planned. They limited themselves to recycling the amounts of cooperative shares mobilized into small loans to members. They did not receive credit funds to finance the creation of pastoral units. However, the establishment of the umbrella structure (UNCECEL) is an important mechanism to promote livestock credits for which the Government provided financial support worth MRO 1 billion from the 2010 State budget.	1
Vaccination pens are built and functional; animal health is improved	Animal health improved with the introduction of vaccination pens used by the authorities during national campaigns. The management committees for the vaccination pens were set up, but the operating procedure and cost recovery to cover maintenance of the facilities are still to be determined.	3
Stocks of livestock inputs are available in pastoral cooperatives	Animal health improved with regular availability of livestock inputs (drugs, feed ...). The depots management system is adequate.	3

(i) the genetic status of cows is improved, (ii) milk production has increased	Livestock milk production improved with inseminated cows. The level of milk production improved (more collection units) and stockbreeders' incomes have increased. Problems were identified in stabling the concerned species.	3
Small-scale studies in animal production downstream are finalized and made available to pastoral cooperatives	Studies were conducted, but results are yet to be used by pastoral associations and the Government.	3
Component C :	Support to operating structures (UA1.27 million / total cost)	
(i) micro funds created and functional; (ii) the capacities of CAPEC, GNAASP and ACPs are strengthened	The 20 micro funds established by the project have equipped premises. Members of managing organs were trained in fund management. The funds limited themselves to recycling amounts of cooperative shares into small loans for the purchase of livestock inputs. By end 2008, the total loans granted amounted to about MRO 94 million against MRO 36 million at the end of 2006. The recovery rate stood at around 93%. However, the Government has shown strong political will to sustain the 20 micro-funds (CECEL) through the UNCECEL network which received funding of MRO 1 billion (line of credit) for the promotion of livestock credit. The momentum of participatory approach in pastoral cooperatives (GNAASP and ACPs) was reinforced with regard to: (i) the implementation of project activities, (ii) community management of livestock infrastructure, micro-funds and livestock input depots, (iii) sensitization and rural extension.	3
State structures involved are effective in their interventions in pastoral areas	The agreements signed with State operating structures were in general satisfactorily enforced. There were weaknesses in environmental follow-up and monitoring and evaluation.	2
Component D :	Project management (UA 1.02 million / total cost)	
The PMU is functional and efficient. The activities and results are properly monitored.	Project organization and management performance was quite adequate: (i) change of coordinator and accountant, (ii) financial management improprieties, (iii) weakness in monitoring and evaluation.	2
The PMU is functional and efficient. The activities and results are properly monitored.		
OVERALL OUTCOME RATING [rating is calculated as an average rating]		2

 **Check here to override the auto-calculated rating**

Provide justification for over-riding the auto-calculated score

Insert the new score or re-enter the autocalculated rating

2

2. Additional outcomes. Comment on the project's additional outcomes not captured in the log-frame, including cross-cutting issues (e.g. gender).

Relevant additional outcomes were not identified. However, the project helped to set up 6 additional ACPs and ACP membership has increased. The number of members of the Project's 40 beneficiary ACPs (out of 45 GNAASP) increased to 4481 of which 31% were women. The 20 micro-funds established by the Project had 5237 members (49% women) by end 2008 against 2196 by end 2007.

3. Risks to sustained achievement of outcomes. State the factors that affect, or could affect, the long-run or sustained achievement of project outcomes. Indicate, if any, new activity or institutional change recommended to help sustain outcomes. The analysis should draw on the sensitivity analysis in Annex 3, where appropriate.

A sensitivity analysis of the economic rate of return was carried out at project appraisal. In addition, certain factors could potentially affect the project achievements, namely: (i) lack of maintenance of pastoral infrastructure, (ii) non continuation of capacity building for ACPs and pastoral infrastructure management committees, (iii) lack of political will to consolidate the achievements and sustain the momentum initiated by the Project, (iv) inadequate support for UNCECEL (livestock credit) and non-optimization of survey results relating to the promotion of products generated by the livestock sector, (v) persistent drought and natural disasters (locusts). However, the Mauritanian authorities have taken steps to carry on the Credit component with the establishment of the UNCECEL Network including the 20 CECEL of the Project. In this regard, a provision of MRO 1 billion was made in the 2010 BCI (budget) to support UNCECEL. Furthermore, the Government is committed to consolidate achievements and to continue the activities undertaken.

E. PROJECT DESIGN AND READINESS FOR IMPLEMENTATION

1. State the extent to which the Bank and the Borrower ensured that the project took into account the Borrower's capacity to implement by designing the project appropriately and putting in place the necessary implementation arrangements. Consider all major design aspects, such as extent to which project design took into account lessons learned from previous PCRs in the sector or the country (please cite key PCRs); whether the project was informed by robust analytical work (please cite key documents); how well the Bank and Borrower assessed the capacity of the implementing agencies and/or Project Implementation Unit; scope of consultations and partnerships; economic rationale of project, and provisions made for technical assistance.

[250 words maximum. Any additional narrative about implementation should be included in Annex 6 : project narrative]

During the design phase, Project preparedness was not analyzed by the internal services of the Bank. It was appraised on the basis of the preparedness report drawn up at the end of 1998 at the request of the Bank and the Government of Mauritania by the FAO Investment Centre. The appraisal carried out in 2000 was also based on the results of consultations held with the Mauritanian authorities, development partners and the structures involved in implementation, including Pastoral Cooperative Associations and Government services

Project design drew from the experience of Livestock Project II financed by the ADF, IDA of the World Bank, Nordic Development Fund, OPEC, the Government and beneficiaries. Achievements and lessons learned from the implementation of Livestock Project II were taken into account in formulating the Project. It is under this project that ACPs were established.

At design, the institutional arrangements of the project were analyzed and presented as an already functional organizational chart. The project's institutional arrangements provided for an autonomous implementation unit supported at the regional level by versatile mobile teams, a national steering committee, State operating structures and pastoral cooperative associations grouped under the GNAASP. The composition of the Steering Committee took into account all the project's major stakeholders.

The project is economically justified as it will contribute to the achievement of specific livestock objectives (increasing production of animal products, support to livestock structures, rendering beneficiaries responsible for the management of grazing areas, and fight against rural exodus). The project also finds justification in its contribution to improving food security, reducing poverty and protecting and preserving natural resources.

Technical assistance arrangements were on the whole adequate for this type of project. However, the technical capacity of national contractors in the design and construction of stock watering points, in particular boreholes, were inadequately studied at project design (change of procurement procedure and 4 revisions of the list of goods and works during implementation). At design, the Bank did take not steps to develop and implement the ESMP, although the project was classified under Category I.

2. For each dimension of project design and readiness for implementation, provide a brief assessment (up to two sentences). Insert a rating, using the scale provided in Appendix 1.

PROJECT DESIGN AND READINESS FOR IMPLEMENTATION DIMENSIONS		ASSESSMENT	RATING
REALISM	a) Project complexity is matched with country capacity and political commitment.	The Project falls is consistent with the Government's livestock sub-sector development strategy. The appraisal report described the analytic situation of the sub-sector in economic, institutional, technical and organizational terms and with respect to donor interventions. There is political will on the part of Government to address the drawbacks identified in the sub-sector, particularly with respect to food security and poverty reduction. The project is the concrete expression of Government's political will in the area of range management and development, capacity building of livestock farmers, development of effective livestock by-products sub-sectors, and support for livestock farmers (capacity building and promotion of livestock credit)	3
RISK ASSESSMENT AND MITIGATION	b) Project design includes adequate risk analysis.	Risks and assumptions were identified at project design and described in the appraisal report, as well as mitigation measures. Institutional risks inherent in the Project, as well as the assumptions, were properly identified in the appraisal report. A sensitivity analysis was carried out to determine the project's economic rate of return	3
USE OF COUNTRY SYSTEMS	c) Project procurement, financial management, monitoring and/or other systems are based on those already in use by Government and/or other partners.	In keeping with the contractual arrangements, the procurement of Bank-financed goods, works and services were based on the Bank's rules of procedures except for the procurement of goods and works under the credit component that were based on commercial practices deemed acceptable to the Bank. Financial management (disbursement, special account management, audits) and the monitoring of operational activities were based on the Bank's rules of procedures as set out in the disbursements, financial management and operations manuals. The project's accounting was consistent with national procedures in the domain.	3

For the following dimensions, provide separate working scores for Bank performance and Borrower performance:			RATING	
			Bank	Borrower
CLARITY	d) Responsibilities for project implementation are clearly defined.	The roles and responsibilities of the Project Executing Agency (Project Management Unit and National Steering Committee) were adequately defined in the appraisal report (Ref. 5.1) to ensure proper technical and financial implementation of the project. The institutional arrangements were established with operational structures and pastoral cooperative associations (as project entry point). The responsibilities of the structures involved had to be defined under bilateral agreements. However, the roles and responsibilities of the Directorate of Livestock, the Project's supervisory authority, were not clearly defined in the appraisal report	3	3
PROCUREMENT READINESS	e) Required implementation documents (e.g. specifications, design, procurement documents) were ready at appraisal.	The appraisal report adequately describes the provisions relating to the procurement of goods, works and services. Documents on procurement methods, including the Bank's standard tender and disbursement documents were provided to the Project during the project launch mission (March 2002). However, the procurement methods recommended for watering points proved to be inadequate.	2	3
MONITORING READINESS	f) Monitoring indicators and monitoring plan were agreed upon before project start-up	At design, the monitoring and evaluation system was intended to be under the Project Management Unit. Conduct of the baseline study had been scheduled to take place at project start-up to establish a basis for monitoring and evaluation. An external evaluation of project activities should have been conducted by the DPSE. No data collection mechanism had been designed to allow for analysis of the mid-term or end-of-project outcomes.	2	2
BASELINE DATA	h) Baseline data were available or were collected during project design	At project design, there was a plan to develop a baseline at the start of activities and to determine a set of indicators for monitoring the economic impact of the project. In addition, the financial and economic rates of return were calculated based on well-defined assumptions.	2	2

F. IMPLEMENTATION

1. State the major characteristics of project implementation with reference to: adherence to schedules, quality of construction or other works, performance of consultants, effectiveness of Bank supervision, and effectiveness of Borrower oversight. Assess how well the Bank and the Borrower ensured compliance with safeguards.

[300 words maximum. Any additional narrative about implementation should be included in Annex 6 : project narrative]

Adherence to schedules: Originally planned for five years (2001-2006), project implementation was extended for two and a half years to complete the main project activities. The project took off much later due mainly to a number of factors: (i) confusion over roles and responsibilities with respect to dialogue and coordination of activities between the project management and GNAASP (Association of beneficiaries), (ii) belated procurement of rolling stock for field operations (end 2003), (iii) the late selection of sites and preliminary studies to be conducted for the establishment of livestock infrastructure, and (iv) delays in the procurement process. From January 2006, the Project gained fresh momentum irrespective of the procurement difficulties in the "stock watering component". But the implementation timeline was not sufficiently respected in view of the annual programmes of activities.

Furthermore, technical and financial implementation of the project was bedevilled by: (i) delays in mobilizing the national counterpart funds and the contribution of beneficiaries (20% expected for pastoral infrastructure); this contribution was deemed to be high, and (ii) delays in preparing and processing procurement files.

Quality of goods and services and consultants: Bank-financed goods, works and services were procured in accordance with the Bank's rules of procedure. Apart from delays in the procurement process and the inadequate capacity of service providers and local contractors, the goods procured (rolling stock, computer equipment and office furniture), pastoral infrastructure constructed (boreholes, vaccination pens, grazing reserves, premises for CECEL micro-funds) and services (studies, evaluations, audits, genetic improvement) were of satisfactory quality and are functional. Maintenance of pastoral infrastructure constitutes a real challenge for the sustainability of investments.

Quality of Supervision: Between 2002 and June 2009, the Bank conducted, nine (9) supervision missions, including the start-up (62 days in total), representing an average of 1.2 per year. The last supervision dates back to June 2008, one year before closure of the Project. Supervision missions went smoothly and the work carried out generally improved the level of technical and financial implementation of the Project. As concerns the Borrower, there was no mechanism for monitoring and supervising the technical and financial implementation of the Project. However, the Project signed agreements with the Directorate of Livestock, its supervisory structure, and other State structures for the implementation of project activities. The Directorate of Livestock and Regional Rural Development Departments covering the Project areas played a key role in selecting locations for livestock infrastructure through national and regional joint committees.

Safeguards: Given the classification of the project under category I, the Bank attached importance to implementation of the environmental follow-up component to mitigate the negative impacts around the pastoral infrastructure. The Directorate for Nature Protection (DNP) was responsible for implementing the environmental follow-up component as part of an agreement signed belatedly with the Project. The said agreement was not enforced due in particular to the lack of appropriate skills at the level of DNP. Although the ESMP was not prepared, the Bank conducted the required monitoring during the various supervision missions carried out for implementation of the component.

2. Comment on the role of other partners (e.g. donors, NGOs, contractors, etc.). Assess the effectiveness of co-financing arrangements and donor coordination, if applicable.

The project did not receive external co-financing. Since 2000, the Bank has been Mauritania's only partner in the livestock sector. However, it is important to highlight the significant contribution of OPEC resources to the project's implementation (62% disbursement rate), especially with regard to the establishment of 20 micro-credit unions (CECEL). The beneficiaries' contribution was not effective: there were difficulties in mobilizing community contributions for activities.

3. **Harmonization.** State whether the Bank made explicit efforts to harmonize instruments, systems and/or approaches with other partners.

Nothing to report.

4. For each dimension of project implementation, assess the extent to which the project achieved the following objectives. Provide a brief assessment (up to two sentences) and insert a rating using the scale provided in Appendix 1.

PROJECT IMPLEMENTATION DIMENSIONS		ASSESSMENT	RATING
TIMELINESS	a) Extent of project adherence to the original closing date. If the number on the right is: below 12, rating 4 between 12.1 to 24, rating 3 between 24.1 to 36, rating 2 beyond 36.1, rating 1	Difference in months between original closing date and actual closing date or date of 98% disbursement rate.	2
		30	
BANK PERFORMANCE	b) Bank complied with:		
	Environmental Safeguards	The Bank had classified the Project under Category I in view of the environmental impact assessment that was conducted by the FAO Investment Centre. Under implementation of the "range protection and rehabilitation" component, the Project belatedly signed (December 2007) an agreement with the Directorate for Nature Protection (DNP) to carry out the environmental follow-up component to mitigate the negative impacts of infrastructure around livestock infrastructure. The said agreement was not enforced. The Bank regularly reviewed the implementation status of this component during supervision missions. It is clear that the implementation of environmental follow-up is subject to completion of pastoral infrastructure. Also noted was the lack of appropriate skills at the level of DPN.	2
	Fiduciary Requirements	The Bank took the appropriate fiduciary measures as stipulated in the loan agreement, the appraisal report, and the corrigendum to the appraisal report on the procurement of goods, works and services. Disbursements submitted were generally made on time. Measures were taken to monitor management of the special account. In 2008, the Bank conducted an internal audit mission (OAGL) to Mauritania, which covered the Project's operations. The annual audit reports of the Project were regularly discussed with observations and recommendations. The Bank in 2009 commissioned a supplementary audit of the Project's special account for	3

		the period 2002-2008. In this regard, an amount of about 112 million MRO was considered "ineligible expenditure" under the prefinancing carried out. An amount of 100 million MRO has been refunded. The 2009 audit covered only 6 months (January to June) while a technical extension of 4 months was authorized for the ADF part and the closure of OPEC component in December 2009.	
	Project Covenants	All contractual clauses as stipulated in the ADF loan agreement and the OPEC protocol were respected by the Bank and OPEC. The Bank took into account the actual context of implementation of the Project and accommodated several technical and financial adjustments to the Project (4 revisions of the list of goods and services). However, worth noting is the lack of harmonization of ADF (30 June 2009) and OPEC (31 st December 2009) closing dates.	3
	c) Bank provided quality supervision in the form of skills mix and practicality of solutions	Supervision missions were properly conducted with relevant recommendations, solutions provided and matrices of priority actions established. The team composition was generally multi-skilled (in some cases, joint supervisions). During supervision missions, there were frequent exchanges on sectoral aspects, crosscutting issues and prospects. The Bank provided technical assistance during supervision missions (procurement procedures, disbursement and reporting). Also, the Bank was keen to sensitize the project on results-based management during supervision missions and through the organization of a regional workshop in Nouakchott in 2008 involving all the agricultural projects in the region. However, it is important to highlight the high level of turnover of the Project's Task Managers: 6 in the 2002-2009 period, a rate of approximately 1 TM per year.	3
	d) Bank provided quality management oversight	The Bank carried out regular and generally satisfactory monitoring between March 2002 and June 2008. The average number of supervisions per year is 1.2, well below the acceptable target 1.5. The last supervision took place in June 2008. It was noted that the measures in preparation for the Project's closing operations were inadequate and started just after the Bank's approval of the last revision of the list of goods and services (LGS).	2

BORROWER PERFORMANCE	e) Borrower complied with:		
	Environmental Safeguards	<p>The Project was classified under category 1 at appraisal. The environmental follow-up component to mitigate the negative impacts around the livestock infrastructure was the subject of an agreement with the Directorate of Nature Protection (DPN) signed belatedly (December 2007). The environmental follow-up mission consisted in implementing identified support measures. The said agreement was not enforced. In reality, DPN's intervention was limited to a single identification mission. Apart from delays in the establishment of pastoral infrastructure, there was a real problem of expertise at DPN.</p>	1
Fiduciary Requirements	<p>The Project had an administrative, accounting and financial procedures manual (drawn up in 2004) which was not adequately utilized. It was not updated. The Project put in place a computerized accounting system (TOMPRO software) in 2005 with settings limited to general and cost accounting (in MRO). The information system was in general acceptable and makes it possible to enter, follow up and generate financial statements. However, there was a serious problem of information security (an external hard drive to store data once a month). The financial statements produced did not facilitate project audit (no use/resources tables). Annual audits were regularly carried out and reports submitted to the Bank. The State structures (Procurement Board, Prime Minister's Office and Ministry) were involved in the Project's procurement process by way of approvals and signature of contracts. This heavy administrative involvement tended to draw out the average duration of the procurement procedure.</p>	2	

	Project Covenants	The agreements with ADF and OPEC were largely complied with. One of the two (2) other loan conditions was not met, namely the onlending agreements concluded under the credit component. The Project signed 9 agreements with operating structures, including three with the Directorate of Livestock. Implementation of the conventions was generally satisfactory except for the environmental follow-up component and monitoring and evaluation. As for service providers, performance was mixed: limited capacity of contractors, especially with regard to implementation of the stock watering component (several unsuccessful tender procedures, defaults, budgetary implications) leading to changes in the works procurement process with respect to the contractor and the use of community services by consulting local well diggers.	3
	f) Borrower was responsive to Bank supervision conclusions and recommendations	The Mauritanian authorities (MAED and MDR) were regularly informed of the conclusions of Bank missions. They were often responsive to the Bank's recommendations. However, there was inadequate follow-up of recommendations at the central level. As regards the Project, the degree of implementation of recommendations and priority actions arising from the missions was fairly satisfactory.	2
	g) Borrower collected and used monitoring information for decision making.	Although the baseline study was conducted belatedly in 2005, the monitoring and evaluation system was only put in place in April 2007. The results of the baseline study were not utilized. Monitoring and evaluation were limited to collecting data on the physical and financial achievements of the Project. Financial and economic data and output indicators were not monitored to be able to assess the outcomes and impacts (financial and economic rates of returns). National statistics on the livestock sub-sector are not developed.	2

G. COMPLETION

1. Is the PCR delivered on schedule, in compliance with Bank policy?

Date project reached 98% disbursement rate (or closing date, if applicable)	Date PCR was sent to pcr@afdb.org	Difference in months	RATING (auto-calculated) if the difference is 6 months or less, a 4 is scored. If the difference is 6.1 or more, a 1 is scored
30-June-09	28-Feb.-10	8	1

Briefly describe the PCR Process. Describe the Borrower's and co-financiers' involvement in producing the document. Highlight any major differences of opinion concerning the assessments made in this PCR. Describe the team composition and confirm whether a site visit was undertaken. Mention any major collaboration from other development partners. State the extent of field office involvement in producing the report. Indicate whether comments from Peer Reviewers were received on time (provide names and positions of Peer Reviewers).

[150 words maximum]

The PCR team comprised Mr. Kane, Principal Rural Infrastructure Engineer, OSAN.1, R. Maroukis, Principal Agricultural Economist OSAN.1 and S. L. CISSE, Consultant, Financial Analyst. The PCR preparation mission was undertaken to Mauritania from 18 to 31 January 2010, 7 months after the project's closing date. The Consultant's stay was extended by one week in order to further examine some key aspects and obtain additional information. The mission worked specifically with the Coordinator, the Administrative and Finance Officer, and the Accountant. The key technical Project staff were not present during the mission period (contract expired at the end of June 09). Field visits were carried out and targeted interviews conducted with the beneficiaries. Several meetings were held with Borrower's representatives (the Directorate of Financing and Evaluation) and the technical services involved in the implementation of the Project. However, it was noted that statistical data on the livestock sub-sector were inadequate and of poor quality.

The Project submitted its completion report to the Bank in October 2009. The Project's contribution was appreciated in terms of the provision of relevant information, field visits (in 4 wilayas out of the 7 of the project area) and the facilitation of working sessions. The mission took note of the strong involvement of the authorities and pastoral associations with which it had discussions and working sessions.

Peer Review: The draft of this completion report was forwarded to five (5) peer reviewers: Ba Mamadou Samba, Agronomist OSAN.1; Ould Cheikh Ahmed Mohamed Aly, OSAN; Nzeyimana Jeanne, OSHD; Samali Ousmane, Consultant ORNB and, Nna Ebono Alain ORPF/SNFO. Four of the five peer reviewers submitted their comments in time.

H. LESSONS LEARNED

Summarize key lessons for the Bank and the Borrower suggested by the project's outcomes.

[300 words maximum. Any additional narrative about lessons learned, if needed, must be placed in Annex 5: Project Narrative]

During the 2000s, the Bank was almost the Government's sole partner in the livestock sub-sector. In spite of the ambitious nature of the project design unmatched by an adequate budget to cover a vast project area (7 wilayas covering 90% of the national cattle herd, 70% of the total population, 39% of the total surface area), the delays noted at start-up and problems faced in the establishment of stock watering points, technical and financial implementation was relatively satisfactory with an overall disbursement rate of about 72% (ADF: 79.5% - OPEC: 61.8% - State: 120.7% - Beneficiaries: 22.7%), several watering points to be completed, 20 micro-credit funds to be made more operational and unmet financial commitments by the Government.

The project managed to trigger within the stockbreeder community a real momentum around pastoral infrastructure through: (i) the improvement of animal health (use of vaccination pens during national campaigns), fodder availability and stockbreeding credits, (ii) transfer of know-how and strengthening of pastoral associations, (iii) the emergence of a basis for weaving livestock into the economic production environment based on the promotion of dairy products, meat and hides and skins. Furthermore, the Government demonstrated clear political will by providing financial support to the tune of MRO one billion to the umbrella structure (UNCECEL) covering 20 micro-funds set up under the Project.

The economic rate of return at completion stands at 19.7% against 16% at appraisal (See Appendix 3B Economics). This increase could be attributed to the spill-over effects of pastoral investment (wells, grazing areas, vaccination pens, and livestock input depots) that contributed to the overall increase in fodder availability and improved animal health.

However, certain problems were raised during implementation of the Project, :

For the Borrower, (i) deficiencies noted in the participatory approach as the project stalled at start-up (conflict between project management and GNAASP) and the difficulties in mobilizing the beneficiaries' projected contribution of 20% for pastoral infrastructure; (ii) flaws noted in the overall project management (change of coordinator and accountant), (iii) weak monitoring and evaluation (no baseline or mechanism for collecting and processing data relevant to outcomes and impact) (iv) quality inadequacies in the preparation and processing of procurement files for goods, works and services leading to delays in field operations, (v) lack of capacity of local service providers and contractors (3 unsuccessful national procurement procedures relating to contracts for stock watering facilities, 1 audit firm out of 4 deemed competent by the Bank), (vi) recurring delays in mobilizing national counterpart resources, and

For the Bank, (vi) recurring delays in mobilizing national counterpart resources, (vii) the high turnover of project Task Managers and delays in processing files; (vii) absence of Project supervision mission by Bank staff since June 2008 (one year before closure of the Project).

Project implementation highlighted a number of design, implementation and monitoring lessons, which can be summarized as follows:

(1) The Bank should ascertain improved quality at entry by ensuring prior preparation of operations by its internal services, seeing to the positive correlation between the level of resource allocation and the set objectives. The PADEL Project would have recorded more operational efficiency and visibility if the actions concentrated on one or two regions (wilaya) considering the budget allocated.

(2) The design of any similar project should at start-up facilitate site selection, preliminary studies and comprehensive dialogue with the beneficiaries to identify the key socio-economic factors of the participatory approach.

(3) The Project has many activities with shared costs between the different funding sources that undermined operational and financial implementation. Project budgeting should be more segregating with respect to the financing of activities.

- (4) The project would be more sustainable if it incorporated mechanisms of support to promoters of subprojects in terms of assistance, advisory services, guidance and training. A programme for developing subprojects could be implemented or deployed with the support of specialized partners to promote the emergence of leadership for private contractors.
- (5) The Bank should as much as possible harmonize its dates of project closure with those of co-financiers for instance trust funds such as with the Project (OPEC)
- (6) The Bank should encourage the conduct of a pre-closure supervision mission 6 months to the completion of projects.
- (7) It would be important for the Bank to include in the conditions for first disbursement the establishment of an administrative, financial and accounting management system and a monitoring and evaluation system to be supported by the Borrower.

I. PROJECT RATINGS SUMMARY

All working scores and ratings are auto-generated by the computer from the relevant section in the PCR

CRITERIA	SUB-CRITERIA	RATING
PROJECT OUTCOME	Achievement of outputs	3
	Achievement of outcomes	2
	Timeliness	2
	OVERALL PROJECT OUTCOME RATING	2
BANK PERFORMANCE	Design and Readiness	
	Project Objectives were relevant to country development priorities	4
	Project Objectives could in principle be achieved with the project inputs and in the expected time frame	2
	Project Objectives were consistent with the Bank's country or regional strategy	4
	Project Objectives were consistent with the Bank's corporate priorities	4
	The log frame presents a logical causal chain for achieving the project development objectives.	2
	The log frame expresses objectives and outcomes in a way that is measurable and quantifiable	2
	The log frame states the risks and key assumptions	3
	Project complexity was matched with country capacity and political commitment	3
	Project design includes adequate risk analysis.	3
	Project procurement, financial management, monitoring and/or other systems were based on those already in use by Government and/or other partners.	3
	Responsibilities for project implementation were clearly defined	3
	Required implementation documents (e.g. specifications, design, procurement documents) were ready at the time of appraisal	2
	Monitoring indicators and monitoring plan were agreed upon during design	2
	Baseline data were available or were collected during design	2
	PROJECT DESIGN AND READINESS SUB-SCORE	3
	Supervision:	
	Bank complied with:	
	Environmental Safeguards	2
	Fiduciary Requirements	3
	Project Covenants	3
	Bank provided quality supervision in the form of skills mix provided and practicality of solutions	3
	Bank provided quality management oversight	2
PCR was delivered on schedule	1	
SUPERVISION SUB-RATING	3	
OVERALL BANK PERFORMANCE RATING	3	

BORROWER PERFORMANCE	Design and Readiness	
	Responsibilities for project implementation are clearly defined	3
	Required implementation documents (e.g. specifications, design, procurement documents) were ready at the time of appraisal	3
	Monitoring indicators and monitoring plan are agreed upon and baseline data are available or are being collected.	2
	PROJECT DESIGN AND READINESS RATING	3
	Implementation	
	Borrower complied with:	
	Environmental Safeguards	1
	Fiduciary Requirements	2
	Project Covenants	3
	Borrower was responsive to Bank supervision findings and recommendations	2
	Borrower collected and used of monitoring information for decision-making	2
	IMPLEMENTATION SUB-RATING	2
	OVERALL BORROWER PERFORMANCE RATING	3

J. PROCESSING

STEP	SIGNATURE AND COMMENTS	DATE
Sector Manager Clearance		
Regional Director Clearance		
Sector Director Approval		

APPENDIX 1

Rating Scale and Corresponding Explanations

RATING	EXPLANATIONS
4	Highly satisfactory - Fully implemented no weaknesses
3	Satisfactory - the majority of the objectives are achieved despite a few shortcomings
2	Average - project partially completed. Almost as many outcomes as shortcomings
1	Poor - Very few outputs and serious shortcomings
NA	Not applicable

N.B.: The formulae are rounded up or down to the nearest decimal point. Only whole numbers are used in the calculations.

APPENDIX 1A : PROJECT COSTS BY COMPONENT (UA Million)

No.	Components	UA million
I	Range protection and rehabilitation	3.82
II	Livestock development	3.19
III	Support to operating structures	1.27
IV	Project management	1.02
	Total	9.3

(1) Financial implementation compared to initial allocations

		In UA millions	ADF		OPEC		GOVERNMENT		BENEFICIARIES		TOTAL	
			Initial allocation (*)	Implementation	Initial allocation	Implementation	Initial allocation	Implementation	Initial allocation	Implementation	Initial allocation	Implementation
CATEGORIES	A	Works	1.01	0.87	0.92	0.95	-	-	0.60	0.22	2.53	2.04
	B	Equipment	2.32	1.22	-	0.09	-	-	-	-	2.32	1.31
	C	Consultancy services	0.33	0.53	0.05	0.16	-	-	-	-	0.38	0.69
	D	Training	0.82	0.53	-	0.22	0.34	0.34	-	-	1.16	1.09
	E	Credit	-	-	1.58	0.16	-	-	0.40	0.01	1.98	0.17
	F	Operation & Staff	0.52	0.82	-	-	0.41	0.56	-	-	0.93	1.39
	Total	5.00	3.98	2.55	1.58	0.75	0.90	1.00	0.23	9.30	6.69	
	Percentage share		79.52%		61.96%		120.30%		22.70%		71.88%	

(*) The List of Goods and Services (LGS) was revised 4 times

(2) Financial implementation compared to the last review of allocations

		ADF		OPEC		GOVERNMENT		BENEFICIARIES		TOTAL		
In UA million		Allocation revised at closure (**)	Implementation	Allocation revised at closure	Implementation	Allocation revised at closure	Implementation	Allocation revised at closure	Implementation	Allocation revised at closure	Implementation	
CATEGORIES	A	Works	0.93	0.87	1.03	0.95	-	-	0.60	0.22	2.56	2.04
	B	Equipment	1.96	1.22	0.21	0.09	-	-	-	-	2.17	1.31
	C	Consultancy services	0.63	0.53	0.07	0.16	-	-	-	-	0.70	0.69
	D	Training	0.55	0.53	0.30	0.22	0.34	0.34	-	-	1.19	1.09
	E	Credit	-	-	0.94	0.16	-	-	0.40	0.01	1.34	0.17
	F	Operation & Staff	0.93	0.82	-	-	0.41	0.41	-	-	1.34	1.23
Total		5.00	3.98	2.55	1.58	0.75	0.75	1.00	0.23	9.30	6.53	
Percentage share		79.57%		61.99%		99.73%		22.70%		70.26%		

(**) Last LGS revision approved in February 2009

Exchange rate : 1 UA to 1 MRO

1 UA =
MRO

As at appraisal : June 2000	331.851
As at approval : April 2001	328.724
As at implementation : July 2001	328.724
As at first disbursement: June 2002	339.741
As at closure : June 2009	410.8757
As at completion	406.048

Variations

Appraisal / 1 st disbursement	2.38%	
Appraisal / 1 st disbursement	3.4%	
Appraisal / Closure	23.8%	2.5%
1 st disbursement / Closure	20.9%	
Completion / Closure	-1.2%	

1 MRO =
UA
0.0030134

Yearly average exchange rate UA into MRO			
		in MRO	Variation
2002		345.433	
2003		362.161	4.8%
2004		390.073	7.7%
2005		390.107	0.0%
2006		396.177	1.6%
2007		400.332	1.0%
2008		392.494	-2.0%
2009		404.560	3.1%
Jan-June 09		396.395	

At project closure in June 2009 the following was noted:

(i) a 23.8% relative appreciation of the exchange rate of the UA to the MRO compared to the rate in June 2000 (appraisal report), hence a larger volume in local currency

(ii) a 20.9% relative appreciation of the exchange rate of UA to MRO compared to the rate at first disbursement

(iii) an average appreciation of 2.5% per year since project appraisal

At completion, the exchange rate of UA to MRO had depreciated by 1.2% compared to situation at project closure

APPENDIX 1B : YEARLY DISBURSEMENTS (IN UA)

IN UA	ADF				OPEC			
	5 000 000,00				2 550 000,00			
Year	Annual disbursements	Yearly implementation rate	Cum. disbursement	Cum. Implementation rate	Annual disbursements	Yearly implementation rate	Cum. disbursement	Cum. Implementation rate
2 002	399 428.75	7.99%	399 428.75	7.99%	-	0.00%	-	0.00%
2 003	281 617.99	5.63%	681 046.74	13.62%	-	0.00%	-	0.00%
2 004	622 856.32	12.46%	1 303 903.06	26.08%	28 582.67	1.12%	28 582.67	1.12%
2 005	846 780.99	16.94%	2 150 684.05	43.01%	63 143.33	2.48%	91 726.00	3.60%
2 006	508 832.95	10.18%	2 659 517.00	53.19%	343 509.00	13.47%	435 235.00	17.07%
2 007	351 771.27	7.04%	3 011 288.27	60.23%	472 918.00	18.55%	908 153.00	35.61%
2 008	423 090.70	8.46%	3 434 378.97	68.69%	223 191.00	8.75%	1 131 344.00	44.37%
2 009	544 175.61	10.88%	3 978 554.58	79.57%	444 551.78	17.43%	1 575 895.78	61.80%

IN UA	GOVERNMENT				BENEFICIARIES			
	750 000,00				1 000 000,00			
Year	Annual disbursements	Yearly implementation rate	Cum. disbursement	Cum. Implementation rate	Annual disbursements	Yearly implementation rate	Cum. disbursement	Cum. Implementation rate
2 002	110 006.83	14.67%	110 006.83	14.67%	-	0.00%	-	0.00%
2 003	129 776.48	17.30%	239 783.31	31.97%	26 768.47	2.68%	26 768.47	2.68%
2 004	128 181.14	17.09%	367 964.46	49.06%	57 492.98	5.75%	84 261.45	8.43%
2 005	57 676.52	7.69%	425 640.98	56.75%	45 321.11	4.53%	129 582.56	12.96%
2 006	205 084.95	27.34%	630 725.93	84.10%	40 296.07	4.03%	169 878.63	16.99%
2 007	77 958.89	10.39%	708 684.82	94.49%	30 870.43	3.09%	200 749.06	20.07%
2 008	195 620.73	26.08%	904 305.55	120.57%	22 696.01	2.27%	223 445.07	22.34%
2 009	-	0.00%	904 305.55	120.57%	3 454.16	0.35%	226 899.23	22.69%

In UA	TOTAL			
	9 300 000,00			
Year	Annual disbursements	Yearly implementation rate	Cum. disbursement	Cum. Implementation rate
2 002	509 435.58	5.48%	509 435.58	5.48%
2 003	438 162.94	4.71%	947 598.52	10.19%
2 004	837 113.11	9.00%	1 784 711.64	19.19%
2 005	1 012 921.95	10.89%	2 797 633.59	30.08%
2 006	1 097 722.97	11.80%	3 895 356.56	41.89%
2 007	933 518.59	10.04%	4 828 875.15	51.92%
2 008	864 598.44	9.30%	5 693 473.59	61.22%
2 009	992 181.55	10.67%	6 685 655.14	71.89%

APPENDIX 1C : REVOLVING FUND – ADF SPECIAL ACCOUNT

REVOLVING FUND	Dates	Amounts MRO	Amounts UA
RF 1	6-June-02	134 551 686	399 428.75
RF 2	21-Oct.-03	73 804 875	198 233.76
RF 3	4-June-04	89 613 513	230 516.75
RF 4	18-Oct.-04	79 329 022	203 293.66
RF 5	1-Apr.-05	84 110 415	207 529.21
RF 6	2-Aug-05	99 944 123	254 147.84
RF 7	29-Dec.-05	73 199 687	185 656.97
RF 8	31-Aug-06	96 414 867	241 187.82
RF 9	8-Oct.-07	125 492 742	320 536.03
RF 10	5-Aug-08	116 819 221	324 710.67
RF 11	23-March-09	140 952 950	372 718.65
Total amount		1 114 233 101	2 937 960.11
Total RF amount justified			2 406 756.32
RF balance unjustified			531 203.79

SUMMARY OF DISBURSEMENTS

	in UA
Total disbursed	3 978 554.58
Total direct payments	1 040 594.47
Total approved (Net)	5 000 000.00
Total undisbursed	1 021 445.42
Disbursement rate	79.57%

CASHFLOW SITUATION OF THE ADF SPECIAL ACCOUNT

	in MRO
Special account balance as at 21 January 2010	52 097 958
Prefunded expenses to be refunded (Audit)	11 656 611
Total available	63 754 569

USE OF SPECIAL ACCOUNT BALANCE

	en MRO
Last instalment of Audit fees 1 st half 2009	1 974 000
Last instalment of completion report fees	1 248 000
Provision for additional period audit (July-Dec 09)	846 000
Arrears of project staff costs	7 503 755
Rents and additional property expenses	7 921 584
Mail dispatch arrears (DHL)	700 000
Arrears for mission and travel allowances	1 820 084
Balance - community contracts for diggers (67.4% of 61 928 653 MRO)	41 741 146
Total	63 754 569

CONTRACTS IMPLEMENTED BUT NOT PAID ON ADF FUNDS AT CLOSURE (PAID BY GOVERNMENT)

	in MRO
Equipment of 14 boreholes (contract signed on 29 June 2010) - GIE ACTIF	83 121 345
HYDROCONSEIL balance (study for construction of 44 boreholes and supervision)	10 354 000
GEOCONSULT balance (construction and supervision of 11 boreholes)	2 508 728
ERB contract balance (3.6% charged to ADF) - 15 vaccination pens	1 710 242
Balance - community contracts for well diggers (32.6% of MRO 61 928 653)	20 187 507
Total	117 881 822

APPENDIX 2 : BANK HUMAN RESOURCES INPUTS - LIST OF MISSIONS UNDERTAKEN

Missions	Dates		Number of persons	Name	Specialization	Number of field trip days	Comments	Actual number of days	Supervision scores
	From	to							
Identification			Undetermined						
Preparation	end 1998		FAO Investment Centre						
Evaluation	19/06/1999	09-juil-99	4	A. I. Mahdi V. Jogoo	Chief Financial Analyst, OCDN.2 Senior Environmentalist, OESU 2 consultants (agronomist and zootechnician)	21		21	NA
Launching	17/03/2002	21/03/2002	1	A. Gombe	Senior Agronomist, OCDN.2	5		5	2.28
Supervision	30/12/2002	13/01/2003	1	A. Gombe	Senior Agronomist, OCDN.2	15		15	2.39
Supervision	09/12/2003	23/12/2003	1	A. Gombe	Senior Agronomist, OCDN.2	15		15	2.17
Sectoral review	March 2004		4	Sangbé Kane	Agricultural economist	15		5	NA
Supervision	24/08/2004	02/09/2004	2	T.Bédingar Mahama	Agricultural economist	10	Combined with other projects	3	1.94
Supervision	08/09/2004	10/09/2004	1	X. Boulenger	Rural Engineering Expert	3		3	1.94
Supervision	13/12/2004	21/12/2004	2	Sangbé Diallo	Agricultural economist	9	Combined with other projects	3	ND
Supervision	07/02/2006	16/02/2006	1	A. M. Dioum	Agricultural economist	10	Combined with Pahabo	5	2.17
Supervision	04/02/2007	18/02/2007	2	R. Marouki A. Ba	Principal Agricultural Economist, OSAN.1 Agricultural economist, SNFO	15	Combined with other projects	5	2.11
Supervision	21/06/2008	06/07/2008	3	R. Marouki M. El Ouhabi M.O. Abdallahi	Principal Agricultural Economist, OSAN.1 Water and Sanitation Specialist, MFO Consultant, Financial Analyst	16	Combined with Pahabo	8	2.06
Completion	18/01/2010	31/01/2010	3	M. Kane R. Marouki S. L. Cissé	Senior Rural Infrastructure Engineer, OSAN.1 Principal Agricultural Economist, OSAN.1 Consultant, Financial Analyst	14	Combined with Pahabo supervision	14	NA
						Total number of days		113	
						For Supervision including launch		98	
						Average number of supervisions per year		1.2	
						Average supervision score			2.13

APPENDIX 3A : FINANCIAL ANALYSIS AT COMPLETION

**AVERAGE SEMI-INTENSIVE LIVESTOCK
FARM
SMALL-SCALE LIVESTOCK FARMERS
13 Cattle (5 females, 5 young, and 3 bulls)
+ 10 sheep and goats**

INPUTS		At appraisal	At completion	At appraisal
	Assumptions/Comments at completion	Costs before project (MRO)	Costs after project (MRO)	Costs after project (MRO)
1. CATTLE				
1.1 Feed				
Local bran (rice or peanuts)	0.5 kg x 100 days x 4 x 30 dairy cows MRO/kg	3000	6000	
Cottonseed or other supplement	0.5 kg x 100 days x 4 females x 120 MRO/kg	0	24000	15600
Salt Lick (salt)	12 g/days x 7 cattle x 365 days x 1000 MRO/kg	0	30660	3760
Sub total		3000	60660	19360
1.2 Vaccines				
Rinderpest	Eradicated since 2000	385		
Pleuropneumonia -- PPCB	13 cattle x (MRO 1200 for 40 head)		390	1001
Fowl cholera	13 cattle x (MRO 1500 for 50 head)	0	390	507
Anthrax	5 cattle x (MRO 1500 for 50 head)	195	150	273
Sub-total		580	930	1781
1.3 Treatments				
Disinfestation	13 cattle (before and after rainy season) - 8 tablets per head per year for MRO 800	1386	10400	2730
Strypanocides, antibiotics, ...	13 cattle on oxy tetracycline 20% (MRO 400 for a dose for 5 cattle) + trypanocides 1g (MRO 2500 for a dose for 8 head)	1540	5	2 015
			103	
Sub-total		2926	503	4 745
			77	
TOTAL CATTLE		6506	093	25 886
2. SHEEP - GOATS				
2.1 Feed (rice bran + fodder supplement)	0.250 kg x 100 days x 5 x 30 head MRO/kg + supplement for 4 heads at 0.5 kg per head per day of feed concentrate at 100 MRO/kg	0	23750	1540
2.2 Rinderpest vaccines --- PPR	1 vial for 100 head at 3000 MRO	0	300	539
2.3 Treatments				
Disinfestation	10 head (before and after rainy season) - 8 tablets per head per year for MRO 400	920	4000	3070
Other treatments		0		
Sub-total treatments		920	4000	3070
TOTAL SHEEP - GOATS		920	28050	5149

OVERALL TOTAL		7426	105	31 035
	OPERATING ACCOUNT	At appraisal	At completion	At appraisal
	Assumptions/Observations	Before project (MRO)	After project (MRO)	After project (MRO)
		2000	2009	2000
1. PRODUCTS	Production			
1.1 Beef	2 bulls	123500	180000	148200
1.2 Mutton and goat meat	4 sheep/goats	17500	80000	26973
1.3 Milk	8 litres of milk per day / 100 days	14400	140000	40800
Total products		155400	400000	215973
2. EXPENSES				
2.1 Feed		3000	84 410	19 360
2.2 Vaccines		580	1 230	1 781
2.3 Treatments		3846	19 503	4 745
Total expenses		7426	105 143	25 886
ADDED VALUE		147974	294 858	190 087
3. PRODUCTION SOLD				
3.1 Beef		9880	108000	14820
3.2 Mutton and goat meat		3500	24000	7875
3.3 Milk		2880	28000	24480
Total production sold		16260	160000	47175
NET OPERATING INCOME		8834	54 858	21 289

APPENDIX 3B : ASSUMPTIONS AT COMPLETION

		Cattle	Sheep/goats	Camel
Number of livestock (thousand head)	2001	1521	9071	1117
Net growth rate of livestock		1.40%	5%	0.70%
BEEF				
Offtake rate		11%	34%	6%
Estimated proportion of head sold with the Project	As from 2007	4%	2%	1%
Average weight (kg) of a head operated		150	18	200
Average selling price per kg of meat (MRO)		700	750	700
MILK				
Percentage of females		48%	50%	40%
Percentage of annual milk production / female		15%	4%	40%
Estimated proportion of milk sold with the Project	As from 2007	1.50%	1.50%	0%
Average selling price of a litre of milk (by livestock farmers) in MRO		150	150	150
Operating costs per head per year in MRO		6000	2800	8000
Other operating costs per year (% increase)		40%	30%	30%

Duration of projections

15 years As at appraisal

APPENDIX 3B : ECONOMIC ANALYSIS AT COMPLETION

CATTLE	2001	2002	2003	2004	2005	2006	2007	2008	2009
Number (in thousand head)	1 521	1 542	1 564	1 586	1 608	1 630	1 653	1 676	1 700
Net annual growth: 1.4%									
BEEF									
Offtake rate per annum in %		11%	11%	11%	11%	11%	11%	11%	11%
Offtake (number of head sold)		167310	169652	172027	174436	176878	179354	181865	184411
Number of head sold after project (4% from 2007)		5969	6045	6135	6467	6721	7174	7275	7376
Number of head sold before project		5969	6045	6135	6467	6721	6738	6722	6738
Additional number of head sold		0	0	0	0	0	436	553	638
Additional production (in tonnes)		0	0	0	0	0	65	83	96
Additional value (MRO thousand)		0	0	0	0	0	45798	58024	67038
MILK									
No. of females (48%)		740	751	761	772	783	794	805	816
Milk/female (in tons)		15%	15%	15%	15%	15%	15%	15%	15%
Overall milk production (thousand tons)		111	113	114	116	117	119	121	122
Milk production after project (in tonnes) - 1.5% from 2007		1818	1721	1371	1624	1558	1786	1811	1836
Milk production before the project (in tonnes)		1818	1721	1371	1624	1558	1281	1423	1426
Additional production (in tonnes)		0	0	0	0	0	505	388	410
Additional value (MRO thousand)		0	0	0	0	0	75688	58138	61490

Operating costs in MRO thousand		50140	50778	51534	54323	56456	60263	61107	61962
6000 MRO per head per annum + 40% increase									

SHEEP/GOATS	2001	2002	2003	2004	2005	2006	2007	2008	2009
Number (in thousand head) Net annual growth: 5%	9 071	9 525	10 001	10 501	11 026	11 577	12 156	12 764	13 402
MEAT									
Offtake rate per annum in %		34%	34%	34%	34%	34%	34%	34%	34%
Offtake (number of head sold)		3084140	3238347	3400264	3570278	3748791	3936231	4133043	4339695
Number of head sold after project (2% from 2007)		27376	30163	26986	28628	29920	78725	82661	86794
Number of head sold before project		27376	30163	26986	28628	29920	25684	26882	27674
Additional number of head sold		0	0	0	0	0	53041	55779	59120
Additional production (in tons)		0	0	0	0	0	955	1004	1064
Additional value (MRO thousand)		0	0	0	0	0	716048	753014	798119
MILK									
No. of females (50%)		4 762	5 000	5 250	5 513	5 789	6 078	6 382	6 701
Milk/female (in tonnes)		4%	4%	4%	4%	4%	4%	4%	4%
Overall milk production (thousand tonnes)		190	200	210	221	232	243	255	268
Milk production after project (in tons) - 1.5% from 2007		1031	1219	1096	928	1065	3647	3829	4021
Milk production before the project (in tonnes)		1031	1219	1096	928	1065	1025	823	980
Additional production (in tonnes)		0	0	0	0	0	2622	3006	3041
Additional value (MRO thousand)		0	0	0	0	0	393270	450921	456090
Operating costs in MRO thousand		99649	109793	98229	104206	108909	286558	300885	315930
2800 per head per annum + 30% increase									

CAMELS	2001	2002	2003	2004	2005	2006	2007	2008	2009
Number (in thousand head) Net annual growth: 0.7%	1 117	1 125	1 133	1 141	1 149	1 157	1 165	1 173	1 181
MEAT									
Offtake rate per annum in %		6%	6%	6%	6%	6%	6%	6%	6%
Offtake (number of head sold)		67020	67489	67962	68437	68916	69399	69885	70374
Number of head sold after project (2% from 2007)		1386	1391	1404	1382	1431	1457	1468	1478
Number of head sold before project		1386	1391	1404	1382	1431	1428	1418	1431
Additional number of head sold		0	0	0	0	0	29	50	47
Additional production (in tonnes)		0	0	0	0	0	6	10	9
Additional value (MRO thousand)		0	0	0	0	0	4112	6941	6559
MILK									
No. of females (40%)		450	453	456	459	463	466	469	472
Milk/female (in tons)		40%	40%	40%	40%	40%	40%	40%	40%
Overall milk production (thousand tons)		180	181	182	184	185	186	188	189
Milk production after project (in tonnes)—0.0%									
Milk production before the project (in tonnes)									
Additional production (in tonnes)		0	0	0	0	0	0	0	0
Additional value (MRO thousand)		0	0	0	0	0	0	0	0

Operating costs in MRO thousand		14414	14466	14602	14373	14882	15157	15263	15370
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8000 MRO per camel per annum + 30% increase

Total operating costs in MRO thousand		164203	175038	164365	172902	180248	361977	377255	393262
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Source : *Directorate of Agriculture and Livestock and estimates by the Statistics Production and National Accounts Service (ONS)*

APPENDIX 3B : ECONOMIC ANALYSIS AT COMPLETION - TOTAL COSTS

In MRO

Sources	Year								Total
	2 002	2 003	2 004	2 005	2 006	2 007	2 008	2 009	
ADF	399 428.75	281 617.99	622 856.32	846 780.99	508 832.95	351 771.27	423 090.70	544 175.61	3 978 554.58
OPEC	-	-	28 582.67	63 143.33	343 509.00	472 918.00	223 191.00	444 551.78	1 575 895.78
STATE	110 006.83	129 776.48	128 181.14	57 676.52	205 084.95	77 958.89	195 620.73	140 337.27	1 044 642.82
BENEF.	-	26 768.47	57 492.98	45 321.11	40 296.07	30 870.43	22 696.01	3 454.16	226 899.23
Total	509 435.58	281 617.99	837 113.11	1 012 921.95	1 097 722.97	933 518.59	864 598.44	1 132 518.82	6 825 992.41

Average annual exchange rate

1 UA = MRO	345.433	362.161	390.073	390.107	396.177	400.332	392.494	404.560

In MRO

Sources	Year								Total
	2 002	2 003	2 004	2 005	2 006	2 007	2 008	2 009	
ADF	137 975 908	101 991 096	242 959 417	330 334 955	201 588 057	140 825 407	166 060 643	220 151 521	1 541 887 005
OPEC	0	0	11 149 327	24 632 637	136 090 463	189 324 358	87 601 172	179 847 734	628 645 692
STATE	38 000 000	47 000 000	50 000 000	22 500 000	81 250 000	31 209 461	76 780 000	56 774 804	403 514 265
BENEF.	0	9 694 500	22 426 458	17 680 070	15 964 388	12 358 431	8 908 052	1 397 414	88 429 312
Total	175 975 908	158 685 596	326 535 202	395 147 662	434 892 908	373 717 657	339 349 866	458 171 474	2 662 476 273
In MRO thousand	175 976	158 686	326 535	395 148	434 893	373 718	339 350	458 171	2 662 476

APPENDIX 3B : ECONOMIC ANALYSIS ERR AT COMPLETION

Year	Additional meat output value (MRO thousand)	Additional milk output value (MRO thousand)	Total additional income (MRO thousand)	Costs (investment + recurrent costs) (MRO thousand)	Operating costs (MRO thousand)	Total costs (MRO thousand)	Basic Cash-flow (MRO thousand)	Cash-flow with "+" 15% income (1)	Cash-flow with "+"15% costs (2)
2002	0	0	0	175 976	164 203	340 179	-340 179	-340 179	-391 205
2003	0	0	0	158 686	175 038	333 723	-333 723	-333 723	-383 782
2004	0	0	0	326 535	164 365	490 900	-490 900	-490 900	-564 535
2005	0	0	0	395 148	172 902	568 049	-568 049	-568 049	-653 257
2006	0	0	0	434 893	180 248	615 141	-615 141	-615 141	-707 412
2007	765 959	468 958	1 234 917	373 718	361 977	735 695	499 222	684 459	388 868
2008	817 979	509 059	1 327 038	339 350	377 255	716 605	610 433	809 489	502 942
2009	871 715	517 580	1 389 295	458 171	393 262	851 433	537 862	746 256	410 147
2010	871 715	517 580	1 389 295		393 262	393 262	996 033	1 204 427	937 044
2011	871 715	517 580	1 389 295		393 262	393 262	996 033	1 204 427	937 044
2012	871 715	517 580	1 389 295		393 262	393 262	996 033	1 204 427	937 044
2013	871 715	517 580	1 389 295		393 262	393 262	996 033	1 204 427	937 044
2014	871 715	517 580	1 389 295		393 262	393 262	996 033	1 204 427	937 044
2015	871 715	517 580	1 389 295		393 262	393 262	996 033	1 204 427	937 044
2016	871 715	517 580	1 389 295		393 262	393 262	996 033	1 204 427	937 044
						NPV (10%)	1 384 290		
						ERR	19.7%	24%	15%
ERR at appraisal							14%	17%	14%

Appendix 5: SOURCES OF INFORMATION

Author	Title	Period
ADB/OCDN	Mauritania : Appraisal Report of the Livestock Development and Range Management Project (PADEL)	Sept. 2000
ADB/OCDN	Mauritania : Corrigendum of Appraisal Reminder	Oct-00
ADB/Mauritania	Loan Agreement between the Islamic Republic of Mauritania and the African Development Fund: Livestock Development and Range Management Project (PADEL)	June-01
ADB/ORNB	Mauritania : Country Strategy Paper 2006-2007	Oct. 2006
ADB/ORNB	Mauritania : Completion Report of the Country Strategy Paper 2006-2007	Feb. 2008
ADB/OPEV	Mauritania : Evaluation of Bank Assistance	May-03
ADB/OPEV	Mauritania : Evaluation of Bank Assistance in the agricultural sector	May 2005
ADB/OCDN	Mauritania : PADEL Implementation Document	
ADB/ORNB	Mauritania : Portfolio Review Report 2009	Nov. 2009
ADB/ORNB	Mauritania : Portfolio Review Report 2007	March-08
ADB/OCCW	Mauritania : Portfolio Review Report 2004	Dec. 2004
ADB	Project completion report format	March 2009
ADB	Guidelines for drafting PCR s	March 2009
ADB	Ledgers of ADF confirmed disbursements	Jan. 2010
ADB	Ledgers of ADF confirmed disbursements by categories	Jan. 2010
ADB	Project monitoring sheet t (SAP)	Jan. 2010
PADEL	Annual Activity Reports (2002, 2004,	
PADEL	Quarterly Activity Reports (1 st quart. 2009, 2 nd quart 2009)	
PADEL	External audit Report 2008	
ADB	Checklist: launching mission 17 to 21 March 2002	March 2002
ADB	Checklist: supervision mission of 30 December 2002 to 13 January 2003	Jan. 2003
ADB	Checklist: supervision mission of 9 to 23 December 2003	Dec. 2003
ADB	Checklist: supervision mission of 24 August to 2 September 2004	Sept. 2004
ADB	Checklist: Supervision Mission of 8 to 10 September 2004	Sept. 2004
ADB	Checklist: supervision mission of 12 to 21 December 2004	Dec. 2004
ADB	Checklist: Supervision Mission of 7 to 16 February 2006	Feb. 2006
ADB	Checklist: supervision mission of 21 June to 5 July 2008	July. 2008
Mauritania/MAED/ONS	Poverty Profile 2008	Sept. 2009
Mauritania	Poverty Reduction Strategy Paper PRSP II – Action Plan (2006 - 2010)	Oct. 2006
Mauritania/MAED/ONS	Poverty Profile 2008	Sept. 2009
UNICEF	Study on Social Protection in Mauritania, situation analysis and operational recommendations	Jan. 2010
Mauritania	PRSP I (2001-2004) Implementation Report	July. 2004
Mauritania	PRSP II (2006-2010) Report progress	July. 2008
Mauritania	Survey on Household Living Conditions (EPCV-5) – 2008	
Mauritania/ONS	the Wilayas in figures	
Mauritania/CSA/WFP	Survey on Household Food Security in Mauritania	July. 2009