

AFRICAN DEVELOPMENT FUND



ISLAMIC REPUBLIC OF MAURITANIA

NOUAKCHOTT CITY “AFTOUT ESSAHELI” DRINKING WATER SUPPLY PROJECT

COMPLETION REPORT

Table of Contents

A.	<u>PROJECT DATA AND KEY DATES</u>	:	5
	• Basic Information and Key Dates	:	5
	• Ratings Summary	:	6
	• Responsible Bank Staff	:	7
		:	
B.	<u>PROJECT CONTEXT</u>	:	7
C.	<u>PROJECT OBJECTIVE AND LOGICAL FRAMEWORK</u>	:	8
	• Project Development Objective(s)	:	8
	• Key Project Components	:	8
	• Final Schedule for the Implementation of Various Project Components	:	12
	• Evaluation of Project Objectives	:	13
	• Project Logical Framework	:	13
	• Contribution of the Logical Framework to the Achievement of Objectives	:	19
D.	<u>OUTPUTS AND OUTCOMES</u>	:	20
	• Outputs	:	20
	• Outcomes	:	22
	• Other Outcomes	:	24
	• Threats to the Sustainability of Outcomes	:	25
E.	<u>PROJECT DESIGN AND IMPLEMENTATION READINESS</u>	:	25
	• Design and Readiness	:	26
	• Project Design and Implementation Readiness Evaluation	:	27
F.	<u>PROJECT IMPLEMENTATION</u>	:	27
	• Main Characteristics of Project Implementation	:	27
	• Coordination and Harmonization of Approaches with Other Partners	:	28
G.	<u>PROJECT COMPLETION</u>	:	30
	• Key Dates and Project Completion Evaluation in Line with Bank Policy	:	30
	• Brief Description of the PCR Process	:	30
H.	<u>LESSONS LEARNED FROM THE EVALUATION</u>	:	31
I.	<u>SUMMARY OF PROJECT RATINGS</u>	:	32
J.	<u>PROCESSING</u>	:	34

LIST OF ANNEXES

1. Project Implementation
2. Project Implementation Schedule
3. Project Cost

CURRENCY EQUIVALENTS (December 2010)

UA 1 = MRO 435.382 = EUR 1.15966

WEIGHTS AND MEASURES

m	=	metre	m ²	=	square metre
ml	=	linear metre	m ³	=	cubic metre
km	=	kilometre	Mm ³	=	million cubic metre
km ²	=	square kilometre	m ³ /h	=	cubic metre per hour
l/s	=	litre per second	l/d/inhab.	=	litre per day per inhabitant

FISCAL YEAR

(1 January – 31 December)

LIST OF ABBREVIATIONS

ADB	:	African Development Bank
IsDB	:	Islamic Development Bank
ADF	:	African Development Fund
KFAED	:	Kuwait Fund for Arab Economic Development
AFESD	:	Arab Fund for Economic and Social Development
LDCs	:	Least Developed Countries
CSP	:	Country Strategy Paper
MDGs	:	Millennium Development Goals
DWS	:	Drinking Water Supply
MHE	:	Ministry of Water Resources and Energy
DWSS	:	Drinking Water Supply and Sanitation
PRSP	:	Poverty Reduction Strategy Paper
GDP	:	Gross Domestic Product
RDWS	:	Rural Drinking Water Supply
HDI	:	Human Development Index
SNDE	:	National Water Corporation
IMF	:	International Monetary Fund
UNDP	:	United Nations Development Programme

A. PROJECT DATA AND KEY DATES

I. BASIC INFORMATION AND KEY DATES

Country	ISLAMIC REPUBLIC OF MAURITANIA		
Project Name	Nouakchott City "AFTOUT ESSAHLI" Drinking Water Supply Project		
Project Reference	INITIAL LOAN	ADDITIONAL LOAN (1 ST TRANCHE OF ADDITIONAL FINANCING)	GRANT (2 ND TRANCHE OF ADDITIONAL FINANCING)
Loan/Grant Number	P-MR-EA0-004	P-MR-EA0-007	P-MR-EA0-008
Borrower	Islamic Republic of Mauritania	Islamic Republic of Mauritania	Islamic Republic of Mauritania
Executing Agency	SNDE	SNDE	SNDE
Approval Date	24/9/2003	28/5/2008	14/5/2010
Signature Date	16/12/2003	12/11/2008	27/5/2010
Effectiveness Date	8/3/2004	7/5/2009	27/5/2010
Loan Closure Date	31/12/2009 deferred to 31/12/2010	31/12/2010	31/12/2010
First Disbursement Date	25/5/2006	25/5/2009	16/8/2010
Loan/Grant Amount (UA million)	10.00	9.46	3.588
Amount Disbursed: % Disbursed:	UA 22 946 733.19 99.5 %		
Amount Cancelled (in UA)	UA 102 266.81, representing 0.5 % of the overall loan amount		
<p>The project is jointly financed by the ADF, AFESD, KFAED, IsDB, SFD and the Government of Mauritania. <u>At project appraisal</u> in June 2003, the total project cost was UA 155.78 million. The financing plan (in UA million) was as follows: AFESD (70.35), KFAED (23.24), SFD (21.13), IsDB (6.69), ADF (10) and the Government of Mauritania (24.37). <u>In July 2007</u>, the total project cost was revised upwards (see Annex 1). The new cost was UA 330.35 million (UA 286.29 million in foreign exchange and UA 44.06 in local currency). Contributions (in UA million) by co-financiers were as follows: AFESD (153.15), KFAED (48.44), SFD (32.21), IsDB (11.90), ADF (26), OPEC (5.4), and the Government of Mauritania (46.25).</p>			

II. RATINGS SUMMARY

CRITERIA	SUB-CRITERIA	RATING
PROJECT OUTCOME	Achievement of Outputs	4
	Achievement of Outcomes	4
	Adherence to Time Schedule	3
	OVERALL PROJECT OUTCOME	3.6
BANK PERFORMANCE	Design and Readiness	3.2
	Supervision	3.5
	OVERALL BANK PERFORMANCE	3.4
BORROWER PERFORMANCE	Design and Readiness	3.6
	Implementation	3.2
	OVERALL BORROWER PERFORMANCE	3.4

III. RESPONSIBLE BANK STAFF

DUTIES	AT APPROVAL	AT COMPLETION
Region Director	NA	I. LOBE - NDOUMBE
Sector Director	A. R. RAKOTOBÉ	A. KIES
Project Director	M. EL AZIZI	B.BENSASSI
PCR Team Leader	M. EL AZIZI	M. ELOUAHABI
PCR Team Members		B. BENSASSI, M. ELOUAHABI, I. J. KILAL, D.KISSI

B. PROJECT CONTEXT

Development challenge to be met by the project: the project was designed to meet the drinking water needs of Nouakchott, estimated at more than 100 000 m³/d in 2010, which can no longer be met by the production of the Trarza water table, from the Idini well field, estimated at appraisal to be 55 000 m³/d, which is the only available water resource for the capital. To address the water shortage problem which is hampering the economic and social development of the capital, the Government decided to supply the city of Nouakchott with water from Senegal River. A study conducted in September 2001 helped to design a water supply project to meet the drinking water needs of the city up to 2030.

The Borrower's overall strategy to meet the challenge: the distribution of ongoing operations by sector reflects the Bank's increased selectivity in its operations in Mauritania over the last two ADF X and XI cycles during which a significant portion of its allocation was devoted to the water and sanitation sector. The priority given to the sector by both the Government and the Bank can be explained by the acute water shortage in Mauritania which is seriously affecting the living conditions and health status of the population and impeding Mauritania's economic development, particularly industrial and commercial activities. To mitigate this problem, the Government has, with the support of several development partners, including the Bank, launched a major project to supply the city of Nouakchott with drinking water from the Senegal River known as the "Aftout Essahli Project". This project is contributing significantly to achieving the Government's water sector objectives in the country. It is a strategic project par excellence for Mauritania that will help reduce water shortage in Nouakchott and safeguard the city from water shortage at least until 2030 by remarkably improving water production capacity.

Bank activities and performance in the water sector in Mauritania: the Bank has financed many projects in the water sector in Mauritania. Two projects are being implemented, namely the Rural Drinking Water Supply Project in the southern zone and the Integrated Water Resource Management Support Project (IWRM). Despite difficulties encountered in recent years, particularly those related to the country's socio-political environment, the various stakeholders have considered the implementation of these two operations to be satisfactory.

C. PROJECT OBJECTIVES AND LOGICAL FRAMEWORK

C.1 Project Development Objective(s)

The project's sector goal is to improve access to drinking water and contribute thereby to enhancing living conditions and reducing poverty. The specific objective of the project is to increase coverage of the water requirements of Nouakchott dwellers bringing the daily drinking water production 55 000 m³ in 2007 from the Idini water table to 170 000 m³ by the year 2020 and 226 000 m³ by 2030 from surface water. Besides supplying drinking water to the city of Nouakchott, the project also seeks to provide drinking water for rural dwellers along the "Aftout Essahli" water supply pipeline.

C.2. Major Project Components

Project components:
The project comprises seven major components:

- (i) Construction of an intake structure and raw water pumping stations;
- (ii) Construction of raw water treatment plants;
- (iii) Laying of a 170 km pre-treated water transfer pipeline;
- (iv) Construction of a pre-treated water storage with a capacity of 120 000 m³; and
- (v) Laying of a 19 km drinking water transfer pipeline, and a 5 000 m³ reservoir.

Two other components are added to these five:

- (vi) Consultancies and works inspection and supervision;
- (vii) Institutional support and project management.

The table below presents the scope and rate of implementation of each component:

Component	Lot Number	Financing Institution	Works Start-up Date	Scope	Implementation Rate (December 2010) in %	Remarks
Component B	Lot 1 – Treatment plants	FKAED	February 2008	<ul style="list-style-type: none"> ▪ Béni Nadji pre-treatment plants (oxidation with chlorine, pH adjustment, coagulation, flocculation and sedimentation) for a 2m³/s flow rate during the first phase. ▪ PK17 treatment plants (flocculation, rapid sand filtration and disinfection) for a treated water flow rate of 1.7 m³/s during the first phase. 	100%: start of semi-industrial running on 1 November 2010 (lasting one year). The provisional acceptance is scheduled for the end of the semi-industrial operation.	Production of drinking water to be supplied to the city from 12 October 2010 at 10 a.m.

Component A	Lot 2A – Pumping stations	SFD	June 2008	<ul style="list-style-type: none"> ▪ Remote management system. ▪ 170 000 m³/d water intake expandable to 267 000 m³/d from the Aftout water intake constructed on the Senegal River as part of the Diama anti-salt dam project. ▪ 155 000 m³/d (2.05 m³/s at 20 m, 2 variable speed pumps) Aftout raw water pumping station expandable to 225 000 m³/d (3 variable speed pumps). ▪ 150 000 m³/d (2 variable speed pumps with a back-up,) Béni-Nadji pre-treated water pumping station expandable to 220 000 m³/d (1.8 m³/s at 140 m, three pumps with a backup). ▪ 86 000 m³/d (2 fixed speed pumps with a back-up,) Nouakchott (PK17) drinking water pumping station expandable to 198 720 m³/d (4 pumps with a back-up) to the city's existing distribution reservoirs (1.3 m³/s at 33m). ▪ Elevated tank with a capacity of 1 000 m³ at PK-17 	100%: start of semi-industrial operation on 15 November 2010 (lasting 6 months). The provisional acceptance is scheduled for the end of the semi-industrial operation.	<ul style="list-style-type: none"> • The first bid solicitation (single lot) comprising pumping stations and electric power transmission lines was cancelled in October 2007 and a decision was taken to issue a new bid. • A new bid solicitation was issued with two separate lots, 2A (pumping stations) and 2B (electric power transmission lines).
	Lot 2B – Power supply	AFESD	March 2009	<ul style="list-style-type: none"> ▪ Power supply to Béni-Nadji from the Rosso OMVS station through a 51 km 90 kV overhead transmission line. ▪ Power supply to the Aftout station from Béni-Nadji through a 33 kV overhead cable. 	100%: provisional acceptance on 20 October 2010	

				<ul style="list-style-type: none"> Power supply to PK 17 through a 13 km 33 kV underground armoured cable from the Arafat SOMELEC power plant (Nouakchott) 		
Component D	Lot 3 – Pre-treated water reserve	IsDB	December 2007	129 000 m ³ pre-treated water reserve at PK17.	99 %	Ongoing leak test, imminent provisional acceptance.
Component C	Lot 4 – Pre-treated water transfer pipes	AFESD/ KFAED/SDF /OPEC	June 2007	<ul style="list-style-type: none"> Two DN 1100 parallel water supply (ductile iron) pipes between Aftout and Béni-Nadji (6 km). DN 1400 (ductile iron) pre-treated water pipe between Béni Nadji and PK17 (170 km). 	100%: provisional acceptance on 30 September 2010.	
Component E	Lot 5 – Drinking water transfer pipe + 5 000 m ³ reservoir	ADF	January 2008	<ul style="list-style-type: none"> DN 1 200 treated water transfer (ductile iron) pipe between PK 17 and the Water Town (Château d'eau) (19.6 km) 5 000 m³ semi-buried tank near existing reservoirs in Nouakchott (at a place known as Château d'eau). 	100 %: provisional acceptance (completion certificate) on 4 November 2010.	

Remarks:

- The physical components were implemented as planned at appraisal and no major changes were noted;
- The different project components are complementary and integrated (intake, treatment, storage and supply) and all contribute to the same degree to the achievement of project objectives (increased production and supply of drinking water to the city of Nouakchott);
- Though the physical components have been implemented, project outcomes and impacts are still contingent on the construction of the distribution network and sanitation works.

Component E and part of Components F and G are financed jointly by the ADF and the Government of Mauritania. The activities financed by the ADF are:

Component E: Drinking Water Transfer Pipe and Nouakchott Reservoir

- Drinking water pipe: the drinking water transfer pipe from the treatment plant located at PK 17 is a ductile iron pipe (DI), 1 200-mm wide and about 19.6-km long. Provision has been made for water supply along the supply line, particularly disadvantaged neighbourhoods in the southern part of the city.
- Elevated water tank: an additional semi-buried tank with a 5 000-m³ usable capacity will be constructed on the elevated water tank site to increase the existing 5 000-m³ and 1 000-m³ capacity tanks presently supplied with water from the Idini water table.

Component F: Consultancies, and Works Inspection and Supervision

- Rural DWSS Study: Conduct a Rural DWSS study along the water supply pipeline
- Consulting Environmentalist: an environmental expert will be recruited in the Aftout Essahli Project Management Unit (UGPA) to ensure the implementation of environmental measures, particularly the management of work sites, implementation of specific environmental and social works, and the search for solutions to ad-hoc environmental issues. This expert will also to train SNDE officers to protect, manage and monitor the environment.

Component G: Institutional Support and Project Management

- Support to SNDE in the form of equipment and tools: this concerns the supply to SNDE of a set of IT equipment to strengthen the commercial service, a crane truck for the maintenance of water pumps and a tool kit for repairing and maintaining water distribution systems.

N.B: the procurement of a crane truck was cancelled.

C3. Final Schedule for the Implementation of Various Project Components

Contract	Signing of Contract	Start of Works According to Administrative Order	End of Contract	Provisional Acceptance or Semi-industrial Running (for Lots 1 and 2A)
Lot 1 – Treatment stations and remote management	6 October 2007	1 April 2008	4 July 2010	1 November 2010
Lot 2A – Pumping stations	26 June 2008	26 June 2008	27 April 2010	15 November 2010
Lot 2B – Electric power transmission lines	8 October 2008	11 March 2009	13 June 2010	20 October 2010
Lot 3 – Water reserve at PK 17	18 December 2007	18 December 2007	20 December 2009	-
Lot 4 – Pipes for the transfer of water from Aftout to PK-17	2 May 2007	15 June 2007	16 March 2010	30 September 2010
Lot 5 – Drinking water transfer pipes and a 5 000 m ³ reservoir	31 October 2007	28 January 2008	29 November 2009	4 November 2010
<p>Initial priming from Senegal River on 5 July 2010 Supply of water to the city of Nouakchott from 12 October 2010 The overall delay with respect to projections made at project appraisal in 2003 is two (2) years. It is one (1) year with respect to projections made in 2008 (project re-costing and review of implementation schedule). The actual project implementation schedule is presented in Annex 2.</p>				

C4. Assessment of Project Objectives

PROJECT OBJECTIVES DIMENSIONS		ASSESSMENT	WORKING SCORE
RELEVANT	(a) Relevant to the country's development objectives	The project is a continuation of the Poverty Reduction Strategy Paper (PRSP) adopted by the country for the 2001-2004 period.	4
ACHIEVABLE	(b) Objectives could in principle be achieved with the project inputs and in the expected timeframe	The project as presented in the logical framework at appraisal in 2003 was not feasible within the prescribed time lines. The schedule for the execution of works was restrictive, necessitating its revision twice during the project implementation phase (see Annex 1).	2
CONSISTENT	(c) Consistent with the Bank's country or regional strategy.	The project is consistent with the Bank's poverty reduction intervention strategy in the country .	4
	(d) Consistent with the Bank's corporate priorities.	The project is consistent with the Bank's 2003-2007 Strategic Plan and is part of efforts aimed at achieving the Millennium Development Goals. It also contributes to the achievement of the objectives of the Bank's Rural Drinking Water Supply Initiative by financing Rural DWS works for the population around DWS facilities and conducting a study on rural DWSS along the 200-km water supply pipeline.	4

C5. Project Logical Framework

Two logical frameworks were developed during the project cycle:
The first was designed at project appraisal in June 2003. This was a simplified version that did not provide a logical causal chain for achieving project development objectives and did not detail risks and assumptions. With the constraints faced during project implementation, this version became out-dated and a second logical framework was designed in March 2008.
The second designed in 2008 included data for the 2003-2006 period. It defined project objectives and expected outputs in a quantifiable and measurable manner. However, objectively verifiable performance and cross-cutting impact indicators were not sufficiently detailed.
 In preparing this PCR, only the last logical framework was considered.

HIERARCHY OF OBJECTIVES	EXPECTED OUTCOMES	SCOPE	PERFORMANCE INDICATORS	TARGET INDICATORS AND TIME FRAME	ASSUMPTIONS / RISKS
<u>SECTOR GOAL</u> 1. Improving the living conditions of the populations by ensuring quality access to drinking water at the national level.	<u>IMPACT (LONG-TERM OUTCOMES)</u> 1.1 Increased access to drinking water at the national level. 1.2 Poverty reduced at the national level. 1.3 Improved management of underground resources and water use optimized at national level.	<u>BENEFICIARIES</u> 1. The population of Mauritania (mainly Nouakchott and populations along the supply pipe).	<u>IMPACT INDICATORS</u> 1.1 Achievement of MDGs regarding access to drinking water. 1.2 Decline in prevalence rate of water-borne diseases at the national level. 1.3 Reduction in medical expenses due to water-borne diseases. <u>Sources:</u> Statistics (Water Resources and Health Ministries), SNDE, supervision mission, etc.	<u>PROGRESS EXPECTED IN THE LONG TERM (2030) – at national level –</u> 1.1 Increase in the rate of access to drinking water from 60 % currently to 74 % in 2015 and more than 80% in 2030. 1.2 Decline in average prevalence rate of water-borne diseases, from the current 13 % to 7 % in 2015. 1.3 Fifty percent reduction in national health spending on water-borne diseases in 2030	
<u>PROJECT GOAL</u> 1. Increasing coverage of drinking water needs of Nouakchott residents and neighbouring rural dwellers.	<u>OUTCOMES (MEDIUM-TERM OUTPUTS)</u> 1.1 Improved drinking water supply to Nouakchott residents (about 1 million inhabitants in 2020)	<u>BENEFICIARIES</u> 1. Nouakchott residents and populations along the water supply pipeline	<u>IMPACT INDICATORS</u> 1.1. The daily allocation of drinking water per inhabitant in Nouakchott. 1.2. Drinking water connection rate in Nouakchott	<u>PROGRESS EXPECTED IN THE MEDIUM TERM (2020) – at the level of the city of Nouakchott –</u> 1.1 The daily allocation per inhabitant increases from 40 litres currently to 73 litres/d/inhab. in 2020. 1.2 Increase in drinking water connection rate in Nouakchott from 35% currently to 65% in 2015 and 80% in 2020.	<u>Risks:</u> (1) Weak institutional and sectoral framework. (2) Failure to invest or delay in investing in rural areas.

	<p>1.2 water for rural dwellers along the water supply pipeline harnessed</p>		<p>1.3. Economic developments in the city of Nouakchott</p> <p>Sources: SNDE, National Statistics, supervision mission.</p>	<p>1.3 About 1 million inhabitants served from the treatment station by 2020.</p> <p>1.4 Establishment of several oil (including at least one refinery) and fish preservation industries with the guarantee of a sufficient quantity of water. Also, many tourist units (including at least one luxury hotel) are under study in Nouakchott.</p>	<p><u>Mitigation:</u></p> <p>(1) The institutional framework is strengthened with the establishment of a Regulatory Authority for the sector and the adoption of a Water Code.</p> <p>(2) The ADB is currently financing the start-up phase of the RDWSS programme. Several bilateral donors (European, Japanese and Arab) have undertaken to support this programme (some financing arrangements are currently becoming effective)</p>
--	---	--	---	--	---

INPUTS AND ACTIVITIES	OUTPUTS (SHORT-TERM ACHIEVEMENTS)	BENEFICIARIES	OUTPUT INDICATORS	AT PROJECT-END (2010)	<u>Risks:</u>
<ol style="list-style-type: none"> 1. Laying of drinking water supply pipe 2. Building of Nouakchott reservoir. 3. Conduct of a Rural DWSS study. 4. Providing Support for SNDE. 5. Providing SNDE with technical assistance in environment 6. Building raw water dewatering station. 7. Construction of pre-treatment station. 	<ol style="list-style-type: none"> 1. Water supply pipe 1 200 mm in diameter and 1.91 km in length laid. 2. A semi- buried 5 000 m³ capacity reservoir built. 3. Rural DWSS study reports prepared. 4. Procurement of: (a) a set of IT equipment; (b) a tool kit for maintenance services of the drinking water network; and (c) a crane truck. 5. Recruitment of a consulting expert in environment. 6. Dewatering station with a 3 m³/s flow rate built. 	<ol style="list-style-type: none"> 1.1 Urban dwellers in Nouakchott and rural dwellers along the supply pipe. 1.2 Consulting firms and contractors involved in studies, works and technical assistance. 1.3 Executing Agency (SNDE) 	<ol style="list-style-type: none"> 1. Volume of additional drinking water produced by the treatment station. 2. Rural dwellers served directly from the pre-treatment station. 3. Number of studies conducted. 4. Operational capacity of SNDE. 5. Number of jobs created during project implementation. 6. Number of inhabitants covered by the pre-treatment and treatment stations. 	<ol style="list-style-type: none"> 1. Volume of available water in Nouakchott increased from 55 000 m³/d currently to 170 000 m³/d, for an urban population (Nouakchott) of about 700 000 in 2010 (after rehabilitation of the distribution network). 2. A rural population of about 10 000 served as from 2010. 3. A feasibility study report on connecting rural dwellers along the main supply pipe to the Nouakchott supply system available. 4. More than one thousand jobs created during the operation of the construction site. 5. SNDE's capacity built to improve the organization of drinking water production, supply and distribution infrastructure management, operation and maintenance services in the city of Nouakchott. 	<p><u>Risks:</u></p> <ol style="list-style-type: none"> (1) Failure to invest or insufficient investments in rehabilitation or extension of drinking water distribution networks in Nouakchott. (2) Delay in the mobilization of resources and construction of wastewater treatment networks in Nouakchott. (3) SNDE's institutional and organizational capacity is weak and needs to be built. (4) Inadequate or lack of ownership of project gains by the different stakeholders (Administration, SNDE and beneficiaries)

<p>8. Supply of rural dwellers with drinking water.</p> <p>9. Building of two pumping stations.</p> <p>10. Laying of raw water supply pipes</p> <p>11. Building of a pre-treated water reserve.</p> <p>12. Building of water treatment plant.</p> <p>13. Establishment of a remote management system.</p> <p>14. Conduct of a SNDE organizational study.</p> <p>15. Provision of technical assistance to SNDE.</p>	<p>7. Pre-treatment station with a 170 000 m³/d capacity built, limiting the suspension content of water to 10 mg/l.</p> <p>8. Study of RDWSS along the supply pipe conducted.</p> <p>9. Two pumping stations with flow rates of 1.8m³/s and 2.3 m³/s built.</p> <p>10. Two pipes of 1 100 mm in diameter and 6 km long, and a carrier pipe of 1 400 mm in diameter and 170 km long constructed.</p> <p>11. 129 000 m³ reservoir built.</p> <p>12. End-of-line 170 000 m³/d treatment station built.</p> <p>13. Water facilities remote management system established.</p>		<p>7. Organizational and institutional capacity of SNDE.</p> <p><u>Sources:</u> Acceptance report, consultants' reports, project progress reports, supervision missions, technical assistance reports.</p>		<p>(5) <u>Mitigation:</u></p> <p>(1) The AFESD has agreed in principle to finance works that will be determined by the ongoing study on updating the Nouakchott distribution network master plan.</p> <p>(2) A study to update the sanitation network master plan has been launched on own funds to determine the works for which financing requests will be submitted to donors</p> <p>(3) To build SNDE's capacity, two partnership agreements have been signed with SONEDE (Tunisia) and ONEP (Morocco) and a short- and medium-term comprehensive</p>
--	---	--	--	--	---

	<p>14. SNDE organizational study conducted.</p> <p>15. Equipment procured and technical assistance provided to SNDE.</p>				<p>action plan has been prepared with support from AFESD. The project comprises several components for support and assistance to SNDE.</p> <p>(4) Establishing a regulatory agency, empowering the management organ, decentralization and sensitization campaigns constitute measures for addressing issues of maintaining, servicing and protecting project gains.</p>
--	--	--	--	--	---

C6. Contribution of the Logical Framework to the Achievement of Objectives

LOG.FRAMEW DIMENSIONS		ASSESSMENT	WORKING SCORE
LOGICAL	(a) Provides a logical causal chain for achieving project development objectives.	Two logical frameworks were developed during the project cycle: <u>The first</u> was designed at project appraisal in June 2003. This was a simplified version that did not provide a logical causal chain for achieving project development objectives and did not detail risks and assumptions. With the constraints faced during project implementation, this version became out-dated and a <u>second</u> logical framework was designed in March 2008.	2
MEASURABLE	(b) Defines project objectives and outcomes in a way that is measurable and quantifiable.	The second logical framework designed in 2008 included data for the 2003-2006 period. It defined project objectives and expected outcomes in a quantifiable and measurable manner. However, objectively verifiable performance and cross-cutting impact indicators are not sufficiently detailed.	2
THOROUGH	(c) States the key risks and assumptions	At project appraisal, key assumptions and risks were not properly assessed, particularly regarding: <ul style="list-style-type: none"> • overall project implementation time frame. This time frame was strongly influenced by the interdependence of the different project components and by the multiplicity of Donors, which required more time for consultation on the project than provided; • significant price escalation and exchange rate fluctuation during the implementation period. 	2

D. OUTPUTS AND OUTCOMES

D1. Outputs

Component	MAJOR ACTIVITIES		Working score	Share of Project Cost in Percentage (as stated in the Appraisal Report)	Weighted Score (auto-calculated)
	Expected Outputs	Actual Outputs			
Component B	<p><u>Lot 1 – Treatment plants:</u></p> <ul style="list-style-type: none"> • Béni-Nadji pre-treatment plants (oxidation with chlorine, pH adjustment, coagulation, flocculation and sedimentation) for a 2m³/s flow rate during the first phase. • PK 17 treatment plants (flocculation, rapid sand filtration and disinfection) for a treated water flow rate of 1.7 m³/s during the first phase. • Remote management system. 	<ul style="list-style-type: none"> • Works executed • Semi-industrial operation launched on 1 November 2010 (for a one-year period). • Provisional acceptance is scheduled for the end of the semi-industrial operation. • Production and supply of drinking water to the city as from 12 October 2010 at 10 a.m. 	4	14%	0.56
Component A	<p><u>Lot 2A - Pumping stations:</u></p> <ul style="list-style-type: none"> • 170 000 m³/d water intake expandable to 267 000 m³/d from the Aftout water intake constructed on the Senegal River as part of the Damia anti-salt dam project. • Aftout raw water pumping station with a capacity of 155 000 m³/d (2.05 m³/s at 20 m, two variable speed pumps) expandable to 225 000 m³/d (3 variable speed pumps). • Béni-Nadji pre-treated water pumping station with a capacity of 150 000 m³/d (two pumps with a back-up, variable speed) expandable to 220 000 m³/d (1.8 m³/s at 140 m, three pumps with a back-up). 	<ul style="list-style-type: none"> • Works executed • Launching of semi-industrial running on 15 November 2010 (for a period of six months). • Provisional acceptance is scheduled for the end of the semi-industrial operation. 	4	8%	0.32

	<ul style="list-style-type: none"> • Nouakchott (PK17) drinking water pumping station with a capacity of 86 000 m³/d (two pumps with a back-up, fixed speed) expandable to 198 720 m³/d (4 pumps with a back-up) to the city's existing distribution reservoirs (1.3 m³/s at 33 m). • Elevated tank with a capacity of 1 000 m³ at PK-17. 				
	<u>Lot 2B - Power supply:</u> <ul style="list-style-type: none"> • Power supply to Beni-Nadji from the Rosso OMVS station through a 51 km 90 kV overhead transmission line. • Power supply to the Aftout station from Béni-Nadji through a 33 kV overhead cable. • Power supply to PK 17 through a 13 km 33 kV underground armoured cable from the Arafat SOMELEC power plant (Nouakchott). 	<ul style="list-style-type: none"> • Works executed • Provisional acceptance on 20 October 2010. 	4	4%	0.16
Component D	<u>Lot 3 - Pre-treated water reserve:</u> <ul style="list-style-type: none"> • 129 000 m³ pre-treated water reserve at PK17 	<ul style="list-style-type: none"> • 99% of works executed 	4	6%	0.24
Component C	<u>Lot 4 – Pre-treated water transfer pipes:</u> <ul style="list-style-type: none"> • Two DN 1 100 parallel water supply (ductile iron) pipes between Aftout and Béni-Nadji (6 km). • DN 1 400 (ductile iron) pre-treated water pipe between Béni-Nadji and PK17 (170 km). 	<ul style="list-style-type: none"> • Works executed • Provisional acceptance on 30 September 2010. 	4	61%	2.44
Component E	<u>Lot 5 – Drinking water transfer pipe + 5 000 m³ reservoir:</u> <ul style="list-style-type: none"> • DN 1 200 treated water transfer (ductile iron) pipe between PK 17 and the Water Tower (19.6 km) • 5 000 m³ semi-buried reservoir near existing reservoirs in Nouakchott (at a place known as Château d'eau). 	<ul style="list-style-type: none"> • Works executed • Provisional acceptance on 4 November 2010. 	4	8%	0.32
Overall Output Score					4.00

D2. Outcomes

Component	OUTCOMES			Rating
	Expected	Actual	Outcomes	
Component B	<p><u>Lot 1 – Treatment plants:</u></p> <ul style="list-style-type: none"> • Béni-Nadji pre-treatment plants (oxidation with chlorine, pH adjustment, coagulation, flocculation and sedimentation) for a 2m³/s flow rate during the first phase. • PK 17 treatment plants (flocculation, rapid sand filtration and disinfection) for a treated water flow rate of 1.7 m³/s during the first phase. • Remote management system. 	<ul style="list-style-type: none"> • Works executed • Semi-industrial operation launched on 1 November 2010 (for a one-year period). • Provisional acceptance is scheduled for the end of the semi-industrial running. • Production and supply of drinking water to the city as from 12 October 2010 at 10 a.m. 	<p><u>Impacts at project completion</u></p> <ol style="list-style-type: none"> 1. Increase in the volume of available water in Nouakchott from 55 000 m³/d to 170 000 m³/d, for an urban population (Nouakchott) of about 700 000 in 2010 (after rehabilitation of the distribution network). 2. A rural population of about 10 000 have access to drinking water. 	3
Component B	<p><u>Package 2A - Pumping stations:</u></p> <ul style="list-style-type: none"> • 170 000 m³/d water intake expandable to 267 000 m³/d from the Aftout water intake constructed on Senegal River as part of the Damia anti-salt dam project. • Aftout raw water pumping station with a capacity of 155 000 m³/d (2.05 m³/s at 20 m, two variable speed pumps) expandable to 225 000 m³/d (3 variable speed pumps). • Béni-Nadji pre-treated water pumping station with a capacity of 150 000 m³/d (two pumps with a back-up, variable speed) expandable to 220 000 m³/d (1.8 m³/s at 140 m, three pumps with a back-up). 	<ul style="list-style-type: none"> • Works executed • Launching of semi-industrial operation on 15 November 2010 (for a period of six months). • The provisional acceptance is scheduled for the end of the semi-industrial operation. 	<ol style="list-style-type: none"> 3. A feasibility study report on connecting rural dwellers along the main supply pipeline to the Nouakchott supply system is available. 4. More than one thousand jobs created during the operation of the construction site. 5. Concrete actions are taken to build SNDE's capacity to improve 	3

	<ul style="list-style-type: none"> • Nouakchott (PK17) drinking water pumping station with a capacity of 86 000 m³/d (two pumps with a back-up, fixed speed) expandable to 198 720 m³/d (4 pumps with a back-up) to the city's existing distribution reservoirs (1.3 m³/s at 33 m). • Elevated tank with a capacity of 1 000 m³ at PK-17. 		the organization of drinking water production, supply and distribution management, operation and maintenance infrastructure services in the city of Nouakchott.	
	<u>Lot 2B - Power supply:</u> <ul style="list-style-type: none"> • Power supply to Beni-Nadji from the Rosso OMVS station through a 51 km 90 kV overhead transmission line. • Power supply to the Aftout station from Béni-Nadji through a 33 kV overhead cable line. • Power supply to PK 17 through a 13 km 33 kV underground armoured cable from the Arafat SOMELEC power plant (Nouakchott). 	<ul style="list-style-type: none"> • Works executed • Provisional acceptance on 20 October 2010. 		3
Component D	<u>Lot 3 - Pre-treated water reserve:</u> <ul style="list-style-type: none"> • 129 000 m³ pre-treated water reserve at PK17 	<ul style="list-style-type: none"> • 99 % of works executed. 		3
Component C	<u>Lot 4 – Pre-treated water transfer pipes:</u> <ul style="list-style-type: none"> • Two DN 1 100 parallel water supply (ductile iron) pipes between Aftout and Béni-Nadji (6 km). • DN 1 400 (ductile iron) pre-treated water pipe between Béni-Nadji and PK17 (170 km). 	<ul style="list-style-type: none"> • Works executed • Provisional acceptance 30 September 2010. 		3
Component E	<u>Lot 5 – Drinking water transfer pipe + 5 000 m³ reservoir:</u> <ul style="list-style-type: none"> • DN 1 200 treated water transfer (ductile iron) pipe between PK 17 and the Water Tower (19.6 km) • 5 000 m³ semi-buried reservoirs near existing reservoirs in Nouakchott (at a place known as Château d'eau). 	<ul style="list-style-type: none"> • Works executed • Provisional acceptance on 4 November 2010. 		3
OVERALL OUTCOME SCORE [Score is calculated as an average of the working scores]				3

D3. Other Outcomes

The project has additional outcomes producing indirect and cross-cutting impacts, notably:

Socio-economic impacts:

Implementation of the various project components will positively impact other sectors of Mauritania's economy: housing, tourism, industry, education, health, etc. These impacts will be particularly significant for employment in urban and rural areas.

Impact on the environment and health of the people:

The project promotes the mainstreaming of large-scale environmental protection concerns in the water cycle (the production of drinking water is guaranteed, competitive bidding for the distribution phase is being launched, the master plan for the selection of variants and evaluation of investment cost for the sewage system is being fine-tuned). Water production of and the implementation of other components (distribution and sanitation) will ultimately have positive impacts on the environment and the health of the people (reduction of water-borne diseases and health expenditure).

Impacts on industry and tourism:

The project will produce drinking water to meet the medium- and long-term needs of the city of Nouakchott. The infrastructure constructed will supply water to two major tourist and industrial zones (Ribat Albahr and Diar Alkataria project). Consequently, it will significantly boost the development of the tourist and industrial sectors.

The two ongoing tourism projects, which were not provided for at project appraisal and whose overall water needs are estimated to be about 40 000 m³/d, will be met by the drinking water supplied under the project. This significantly enhances the financial and economic return of the Aftout Essahli project evaluated in 2008.

Impact on gender:

The project will significantly help to enhance access to drinking water (quantity and quality), improve household living conditions in Nouakchott, particularly for girls and women who grapple with household chores and are often the most affected by water shortages.

D4. Threats to Sustained Achievement of Outcomes

- The main threat to the sustainability of project outcomes is the probable weakness of the institutional framework within which it will be managed. To mitigate this risk, the measures taken at project appraisal in 2003 included mainly: (i) the establishment of a sector Regulatory Authority which became operational at end 2006; (ii) adoption of the Water Code (which was a condition for the initial ADF loan for the project) and its implementation since February 2005; and (iii) the establishment and strengthening of SNDE (the project Executing Agency). Regarding the strengthening of SNDE, two partnership agreements were signed with SONEDE (Tunisia) and ONEP (Morocco) and a comprehensive action plan to build SNDE capacity in the short and medium terms was developed by SNDE with AFESD support. These actions should be supported by donors and the Mauritanian Government. Any relaxation of efforts by any of these stakeholders will, certainly, undermine project outputs and outcomes.
- Project sustainability is heavily dependent on the establishment of an efficient water distribution network and sewage system in the city of Nouakchott to ensure water distribution and wastewater treatment. Delay in the construction of these two networks will seriously imperil the Aftout Essahli project and significantly affect its outputs and outcomes.
- Rural drinking water supply was considered at project appraisal as a priority measure to achieve the overall project goal. Though studies have been conducted, practical implementation arrangements (investment financing and execution of works) are yet to be adopted. Any relaxation or delay in the construction of RDWS infrastructure will pose serious threats that could affect project outcomes.

E. PROJECT DESIGN AND IMPLEMENTATION READINESS

E1. Design and Readiness

- Project implementation was well prepared by the Bank and the Borrower.
- The project design was based on thorough analytical studies (technical, economic and financial components). The Borrower and Donors properly appraised the project and adopted management mechanisms and monitoring, supervision, inspection and technical assistance arrangements. However, the risks identified at project appraisal are not sufficiently detailed. Other constraints emerged during implementation and adjustments were made.
- In consultation with the project co-financiers, the Borrower established a Project Management Unit (PMU) which is responsible for coordinating the implementation of the different project components. It has competences that enabled it to play an active role in project design and implementation (studies and works). The PMU was also supported by targeted external technical assistance.
- For its part, the Bank took measures to ensure proper project implementation by mobilizing its own competences and recruiting a consultant for project appraisal, monitoring and supervision.

E2. Project Design and Implementation Readiness Assessment

PROJECT DESIGN AND READINESS FOR IMPLEMENTATION DIMENSIONS		ASSESSMENT	Working Score	
REALISM	(a) Project complexity is matched with country capacity and political commitment..	The project is in line with the country's strategy. Its design takes into account the country's capacity and political commitment. The Borrower and Donors agreed on financing terms and the establishment of project support and technical assistance structures. However, implementation time lines and cost of the different components were underestimated at project appraisal.	3	
RISK ASSESSMENT AND MITIGATION	(b) Project design includes adequate risk analysis	The risks identified at appraisal are not sufficiently detailed. Other constraints emerged during implementation and adjustments were made (see Annex 1).	2	
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.	The procurement of goods, works and services financed by the Bank was carried out in accordance with the Bank's rules of procedure.	4	
For the following dimensions, provide separate working scores for Bank performance and Borrower performance:			Working Score	
			Bank	Borrower
CLARITY	(d) Responsibilities for project implementation were clearly defined.	Responsibilities for project implementation were clearly defined (Donors and Borrower)	4	4
PROCUREMENT READINESS	(e) Necessary implementation documents (specifications, design, procurement documents, etc.) were ready at project appraisal.	The procurement of goods, works and services financed by the Bank was done in accordance with the Bank's rules of procedure. Bank standard procurement documents were used to prepare bidding documents and procurement methods complied with the specifications of the project appraisal report. The requisite documents were ready at project appraisal.	4	4
MONITORING READINESS	(f) Monitoring indicators and monitoring plan were agreed upon.	Monitoring indicators and plan were adopted. On the whole, monitoring, inspection and supervision by the Bank or the Borrower were properly carried out. The effective involvement of SNDE in the monitoring of works is considered unsatisfactory.	3	3

BASELINE DATA	(g) The collection of baseline data is completed or ongoing.	Project design data that were not all available during the design phase were completed.	4	4
---------------	--	---	---	---

F. PROJECT IMPLEMENTATION

F1. Major Characteristics of Project Implementation

G. Project implementation schedule: the overall delay compared to projections made during project appraisal in 2003 is two (2) years. It is one (1) year with respect to projections made in 2008 (revision of project cost and implementation schedule). The actual project implementation schedule is presented in Annex 2.

The delay was caused by the following main factors:

- Delays in establishing the project management unit and particularly recruiting its staff.
- Mauritania's institutional weakness regarding procurement which was mitigated by the formation of a special (ad hoc) committee to review bids and manage contracts.
- Significant delays in procuring goods and services, mainly in stages leading to the selection of contractors to execute works (preparation of bidding documents, publication of bid solicitations and contract award, etc.).
- A substantial increase in cost, from UA 155.78 million at the time of initial project appraisal to UA 330.35 million, due mainly to a major hike in the price of materials, particularly iron, and ocean freight rates (increase in the price of oil) and exchange rate fluctuations.

(ii) Bank Supervision was considered satisfactory. The Bank conducted (11) supervision missions. Recommendations shared with the Borrower and the PMU were taken into account.

(iii) The project was coordinated by the Project Management Unit (PMU). Targeted external technical assistance was provided to the PMU. Borrower supervision was carried out through the PMU (own resources) and also by Consulting Engineers in charge of technical assistance under PMU supervision.

F2. Coordination and Harmonization of Approaches with Other Partners

- The project is jointly financed by the ADF, AFESD, KFAED, IsDB, SFD and the Government of Mauritania. At project appraisal, the co-financiers agreed on project objectives, the scope of its physical components and financing arrangements.
- During implementation, constraints emerged, notably the overrun of the overall project cost estimated at appraisal (amounts for bids and for most lots exceeded initial estimates made in 2003). To address this situation, a meeting was held in July 2007 in Nouakchott to mobilize financial resources to cover the cost overrun. It was agreed that each Donor would bear the additional cost for the component it initially financed. Procurements continued in accordance with procedures varying from one Donor to another and no specific constraint with regard to coordination was noted, showing the firm desire and determination of all Donors and the Borrower to implement the project.
- The share of other Donors in financing the total project cost is very significant (about 90%). The effectiveness of co-financing arrangements is considered satisfactory given the scope and composition of the project (treatment, storage, transfer, intake reservoirs). The key success factors for this financing mechanism lie in good coordination between the various Donors.
- During project preparation and appraisal as well as during the different supervision missions, the Bank held consultations with partners involved in the water and sanitation sector in Mauritania as well as with other Donors co-financing the project.

PROJECT IMPLEMENTATION DIMENSIONS		ASSESSMENT		Working Score
TIMELINESS	Extent of project adherence to the original closing date. If the number on the right is: below 12, "4" is scored, between 12.1 to 24, "3" is scored, between 24.1 to 36, "2" is scored, beyond 36.1, "1" is scored	Difference in months between original closing date and actual closing date or date of 98% disbursement rate.		3
		<12		
BANK PERFORMANCE	(b) Bank complied with :			
	Environmental Safeguards	The project is classified under category II according to ADF directives on environmental issues. It contributes significantly to improving access to drinking water and the living conditions of Mauritanian households in Nouakchott. All project activities have been completed and water supply was commissioned in October 2010. However, the project objectives will only be considered partially achieved until works on the drinking water distribution and sanitation networks in Nouakchott as well as works on rural drinking water supply in the project area are completed. The major assumptions and risks identified		2

		at project appraisal include the absolute need to complete the works on the water distribution and sanitation networks in the city of Nouakchott and rural drinking water supply. Although environmental measures were not adequately considered during project appraisal, Bank supervision missions drew attention to these environmental safeguards on several occasions. Unfortunately, no concrete action was taken to implement the activities due mainly to the socio-political context that was not conducive to the mobilization of the necessary financing. Furthermore, the late recruitment of an environmental Consultant that should have been done before the commencement of works did not allow for the close monitoring of environmental measures. However, soon after recruitment, the Consultant ensured the implementation of environmental measures, particularly site management, the execution of specific environmental and social works and the search for solutions to specific environmental problems. The environmental expert also trained SNDE managerial staff on environmental protection, management and monitoring.	
	Fiduciary Requirements	Commitments were honoured and all financial arrangements were made from project start to completion. Mechanisms and measures to control the use of funds were implemented by the Bank.	4
	Project Covenants	All provisions stipulated in the loan agreement were implemented.	4
	(c) Bank provided quality supervision in the form of skills mix and practicality of solutions	The Bank mobilized the necessary skills for project supervision. Reports and briefs are available at the Bank and the PMU.	4
	(d) Bank provided quality management oversight	The project supervision and monitoring mechanism established by the Bank is considered satisfactory (procurement rules and procedures, audit reports, supervision mission).	4
BORROWER PERFORMANCE	(e) Borrower complied with:		
	Environmental Safeguards	Environmental measures were not sufficiently taken into account in project implementation. The environmental impact assessment was carried out only in 2009. The mitigative measures identified have not yet been implemented. Though bid solicitations for the construction of the distribution network have been issued, investments in sanitation may be delayed.	2
	Fiduciary Requirements	The Borrower honoured its commitments by providing the necessary funds for the implementation of the various project components. The PMU was responsible for expenditure monitoring and control, with the support of an external auditor and the project Executing Agency (SNDE).	4
	Project Covenants	Mutual obligations were honoured.	4

	(f) Borrower was responsive to Bank supervision findings and recommendations	The recommendations made during Bank supervision missions were shared with the Borrower and the PMU and have been generally taken into account. Recommendations on environmental measures and the need to revive planned distribution and sanitation actions have not been sufficiently considered by the ministries concerned.	3
	(g) Borrower collected and used monitoring information for decision making	Monitoring and supervision reports were used by the PMU and recommendations generally taken into account. The implementation of recommendations on institutional and organizational aspects of the water and sanitation sector, as at the project completion date, is overdue.	3

G. PROJECT COMPLETION

G1. Key Dates and Project Completion Assessment in relation to Bank Policy

1. Was the PCR delivered on a timely basis in compliance with Bank policy?			
Date project reached 100% disbursement rate (or closing date if applicable)	Date the PCR was sent to: pcr@afdb.org	Difference in months	WORKING SCORE If the difference is 6 months or less, a 4 is scored. If the difference is 6.1 or more, a 1 is scored

G2. Brief Description of the PCR Process

<ul style="list-style-type: none"> • The PCR was prepared in a participatory manner by the Bank mission and the PMU which provided all data and documents requested to the mission. • Meetings were held with stakeholders and operators directly or indirectly involved in project implementation. The Bank mission recorded the opinions and expectations of various project stakeholders to assess its effects and impacts. • Field trips were also conducted for all project components. • The Bank's Office in Morocco (MAFO) was involved in all stages of the preparation of this report, including in launch and restitution meetings together with the PMU and other partners.

H. LESSONS LEARNED

The following lessons can be drawn from project implementation:

H1. During the Design-Appraisal Phase:

- The appraisal report should have included a logical framework clearly spelling out the chain of objectives, activities, outputs and outcomes as well as separate indicators for measuring outputs and assessing outcomes
- The cost of various project components should have been well controlled at appraisal and major risks should have been clearly identified, particularly within the context of the project where to the use of international competitive bidding for the execution of various project-related services and works was known beforehand.
- Major assumptions and risks (distribution and sewage system components) which affect the achievement of the overall project goal set forth in the logical framework were restrictive given the set time frames and their practical implementation arrangements (availability of studies, search for financing, etc.). Delay in the implementation of these components seriously affects the overall performance of the Aftout Essahli project which focused exclusively on the production component.
- In overall project management, special attention should have been paid to the implementation and monitoring of environmental measures and quality control that were generally relegated to the background.

H2. During the Implementation Phase:

- Coordination and technical assistance mechanisms and arrangements for smooth project implementation should have been established at project start-up.
- The importance of establishing a Project Management Unit for projects similar to the Aftout Essahli project: general context and specificities of the project (the urgent need to implement the project, separate but interrelated components, multiple donors and suppliers, limited experience of the Executing Agency (SNDE), etc).
- The substantial contribution of external technical assistance that provided targeted support to the PMU within an institutional context where the Executing Agency (SNDE) does not have enough experience and skills to design and implement projects similar to the Aftout Essahli project (size and complexity).
- Management of the project by the PMU (ad hoc mission) seems to be most appropriate and best suited for projects similar to the Aftout Essahli project. However, this form of management should be accompanied upon commencement of works by mechanisms and practical arrangements for the transfer of expertise from the PMU to the institution that will be responsible for managing facilities after project completion (leveraging of expertise for better management).
- The public-public partnership adopted to build SNDE capacity seems to be the most appropriate within the context of the country (drinking water and sanitation sector in the launching phase and public institutions in the reform and organization phase).
- The technical assistance provided by SONEDE (Tunisia) and ONEP (Morocco) to SNDE (capacity building) are positive elements and necessary support measures to ensure sustainable project supervision and management within an institutionalized framework. This cooperation and “best practices” sharing mechanism should be developed at the sub-regional level.

- Co-financing and implementation of the project did not impede the implementation of the various project components. The key success factor of this financing mechanism lies in proper coordination between the different donors by an independent and autonomous PMU handling all project management aspects.
- Mauritania's institutional weakness in procurement was mitigated by the setting up of a special (ad hoc) committee responsible exclusively for reviewing bids and managing contracts. Considering the relatively good performance of this operation, it is recommended to sustain and institutionalize the committee.
- The Bank should review the various mechanisms and conditions regarding its contribution to financing the action plan for strengthening SNDE which is responsible for operating and managing the facilities built.

I. SUMMARY OF PROJECT RATINGS

CRITERIA	SUB-CRITERIA	Working Score
PROJECT OUTCOMES	Achievement of outputs	4
	Achievement of outcomes	3
	Timeliness	3
	OVERALL PROJECT OUTCOME SCORE	3.6
BANK PERFORMANCE	Design and readiness	
	Project objectives were relevant to the country's 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	2
	Project complexity was matched with country capacity and political commitment	3
	Project design includes adequate risk analysis.	2
	Project procurement, financial management, monitoring and/or other systems were based on those already in use by government and/or other partners.	4
	Responsibilities for project implementation were clearly defined	4
	Necessary implementation documents (e.g. specifications, design, procurement documents) were ready at the time of appraisal	4
	Monitoring indicators and monitoring plan were agreed upon during design	3
	Baseline data were available or were collected during design	4
PROJECT DESIGN AND READINESS SUB-SCORE	3.2	

	Supervision	
	Bank complied with:	
	Environmental Safeguards	2
	Fiduciary Requirements	4
	Project Covenants	4
	Bank provided quality supervision in the form of skills mix provided and practicality of solutions	4
	Bank provided quality management oversight	4
	PCR was delivered on a timely basis	3
	SUPERVISION SUB-SCORE	3.5
OVERALL BANK PERFORMANCE SCORE	3.35	
BORROWER PERFORMANCE	Design and readiness	
	Responsibilities for project implementation are clearly defined	4
	Necessary implementation documents (e.g. specifications, design, procurement documents) were ready at the time of appraisal	4
	Monitoring indicators and monitoring plan are agreed upon and baseline data are available or are being collected.	3
	PROJECT DESIGN AND READINESS SCORE	3.6
	Implementation	
	The Borrower complied with:	
	Environmental Safeguards	2
	Fiduciary Requirements	4
	Project Covenants	4
	Borrower was responsive to Bank supervision findings and recommendations	3
	Borrower collected and used of monitoring information for decision-making	3
IMPLEMENTATION SUB-SCORE	3.2	
OVERALL BORROWER PERFORMANCE SCORE	3.4	

J. PROCESSING

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