



AFRICAN DEVELOPMENT FUND

PROJECT TO SUPPLY DRINKING WATER TO BAMAKO FROM THE KABALA LOCALITY (PAEP BAMAKO/KABALA)

COUNTRY: MALI

APPRAISAL REPORT

OWAS DEPARTMENT
September 2013

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CURRENCY EQUIVALENTS

(May 2013)

UA 1 = CFAF 757.22

UA 1 = EUR 1.15

UA 1 = USD 1.51

Fiscal Year

1 January – 31 December

Weights and Measures

1 ton(t)	= 2204 pounds	1 millimetre (mm)	= 0. 03937 inch
1 kilogramme (kg)	= 2.20 pounds	1 kilometre (km)	= 0. 62 mile
1 metre (m)	= 3.28 feet	1 hectare (ha)	= 2.471 acres

Acronyms and Abbreviations

ADF	:	African Development Fund
AFD	:	French Development Agency
ANGESEM	:	National Water Treatment Plants Management Agency of Mali
CREE	:	Electricity and Water Regulatory Commission
DNACPN	:	National Sanitation, Pollution and Nuisance Control Department
DNH	:	National Water Resources Department
DWSS	:	Drinking Water Supply and Sanitation
EDM	:	Mali Energy Corporation
EIB	:	European Investment Bank
EU	:	European Union.
FD	:	Final Design
GPRSF	:	Growth and Poverty Reduction Strategy Framework
IsDB	:	Islamic Development Bank
IWRM	:	Integrated Water Resource Management
LPSEE	:	Energy and Drinking Water Sector Policy Letter
MDG	:	Millennium Development Goal
MEA	:	Ministry of Environment and Sanitation
MEAH	:	Ministry of Economy and Humanitarian Action
MEE	:	Ministry of Energy and Water Resources
MF	:	Ministry of Finance
PAGAM-GFP	:	Government Action Plan for the Modernization and Improvement of Public Finance Management
PD	:	Preliminary Design
PEFA	:	Public Expenditure and Financial Accountability
PEMFAR	:	Public Expenditure Management and Financial Accountability Review
PIU	:	Project Implementation Unit
PROSEA	:	Water and Sanitation Sector Programme
PRSP	:	Poverty Reduction Strategy Paper
PUARE	:	Economic Recovery Emergency Support Programme
RBCSP	:	Results-based Country Strategy Paper
SME/ SMI	:	Small- and Medium- Sized Enterprise/ Small- and Medium-Sized Industry
SOMAGEP-s.a	:	Société Malienne de Gestion de l'Eau Potable (Mali Drinking Water Management Corporation)
SOMAPEP-s.a	:	Société Malienne de Patrimoine de l'Eau Potable (Mali Drinking Water Heritage Corporation)
UNDP	:	United Nations Development Programme
WADB	:	West African Development Bank
WB	:	World Bank

AFRICAN DEVELOPMENT FUND



BP 323 – 1002 Tunis Belvédère
Tel.: 71 333 511

PROJECT INFORMATION SHEET

Client Information Sheet

BORROWER	:	Republic of Mali
EXECUTING AGENCY	:	Ministry of Energy and Water Resources (MEE) B P: 1909 Cité Administrative – ACI 2000; Bâtiment n°02 Bamako - MALI Tel: (223) 20 22 41 84 or 20 22 78 51 or 20 79 60 11 E-mail (Secretary General): ldiabate@yahoo.fr

Financing Plan

Source of Financing	Amount (UA)	Instrument
ADF	50.000 million	ADF Loan
AFD	33.913 million	AFD
EU	16.000 million	EU
EIB	43.500 million	EIB
World Bank	49.004 million	WB
IsDB	22.029 million	IDB
Italian Cooperation	8.059 million	Italian Cooperation
GVT	16.438 million	-
TOTAL COST	238.943 million	-

Timeframe – Key Milestones (Expected)

Concept Note Approval	July 2013
Project Approval	October 2013
Effectiveness	November 2013
Last Disbursement	December 2018
Completion	December 2017
Last Reimbursement Date	December 2067

Project Executive Summary

Project Overview

1. This project will help to produce an additional 144 000 cubic metres of water per day to ensure the supply of drinking water to Bamako City. This volume of water represents 68% of the current production and will significantly ease the task of fetching water by the beneficiary population, notably women. The cost of the project, estimated at UA 238.943 million, will be financed jointly by AFD, EU, EIB, WB, IsDB, Italian Cooperation and the Government. It will be implemented over a 48-month period.

2. The project will benefit about 1.6 million people, that is 64% of the population of Bamako, of which 50.4% women. In addition to the construction of a water treatment plant capable of producing the entire expected volume of water per day and equipped with a warning station to monitor the quality of water produced, the project will finance: (i) 8 water tanks with storage capacity ranging from 2 000 m³ to 10 000 m³; (ii) an 880 km distribution network, that is 53% of the current network; (iii) 66 144 low-cost connections for the most underprivileged households; and (iv) 1108 standpipes, notably in poor neighbourhoods, the increase of the number of such standpipes and bringing them closer to users, thereby contributing to reducing the price of water for vulnerable consumers. The project will also support the building of the capacity of intervention entities - Société de Patrimoine de l'Eau Potable (the Drinking Water Heritage Corporation, SOMAPEP-s.a), Société de Gestion de l'Eau Potable (the Drinking Water Management Corporation, SOMAGEP-s.a.), the Electricity and Water Regulatory Commission (CREE) and the Ministry of Environment and Sanitation (MEA). Project implementation will involve local SMEs and SMIs as well as youths through labour-intensive works to dig trenches and construct standpipes. Besides saving time, the project will also encourage the management of standpipes by women and disabled persons. All these measures will have a significant impact on urban poverty reduction.

Needs Assessment

3. This operation is justified by the water shortage that Bamako is currently experiencing. Bamako's current rate of access to drinking water, estimated at 36%, is low. It is not uncommon for such shortage to create tensions in some neighbourhoods of the capital. While waiting for additional production which is expected from the second phase scheduled to be implemented by 2020, this project will help to increase the access rate to 60%.

Bank's Value Added

4 The Bank is currently the leading donor in the DWSS sector in Mali. On the strength of its experience in implementing this type of project, the Bank is one of the engines on which the Government can count to solve the water shortage problem in Bamako. The problem is so serious that almost all sector donors have also mobilized to help in reducing the water shortage. Therefore, this Bank operation is judicious and salutary for the Government.

Knowledge Management

5. Through training sessions organized and studies conducted for MEA and CREE, project implementation will help to: (i) update Bamako's sanitation master plan; (ii) identify a sanitation component related to this DWS project; (iii) propose an appropriate organizational and institutional framework for the urban sanitation sub-sector; (iv) regulate the price of water at standpipes to make access to water easier for the poor; and (v) establish a geographic information system (GIS) for SOMAPEP-s.a.

COUNTRY AND PROJECT NAME:		Mali – Bamako Drinking Water Supply Project (PAEP – Bamako/Kabala).				
PROJECT GOAL :		Contribute to sustainably improve the drinking water supply and health conditions of Bamako’s population.				
RESULTS CHAIN		PERFORMANCE INDICATORS			MEANS OF VERIFICATION	RISKS/ MITIGATION MEASURES
		Indicator (including CSIs)	Baseline Situation	Target		
IMPACT	The living conditions of Bamako’s urban population improved through increased access to sustainable and quality DWSS services.	1) Rate of access to drinking water in Bamako.	1) 36%	1) 95% in 2025	Sources: MEE, PROSEA, INS, SOMA-PEP-s.a and SOMAGEP-s.a reports Method: INS urban surveys	
		2) Mortality rate of children below five.	2) 175 ⁰ / ₀₀	2) 133 ⁰ / ₀₀ in 2025		
OUTCOMES	1 –Drinking water supply improved; 2- Diarrhoea and/or cholera cases reduced; 3- Overall performance of DWS structures and networks improved and people supplied; 4- Price of water at standpipes regulated. 5) Daily water consumption per inhabitant in Bamako improved.	1.1 Volume of water produced per day;	1.1)213000m ³ /day in 2017	1.1) 357 000 m ³ /day in 2017	Sources: MEE, INS, SOMAPEP-s.a, SOMAGEP-s.a and CREE reports. Method: INS urban surveys	Risks: SOMAPEP-s.a and SOMAGEP-s.a capacity to undertake activities and ensure project sustainability. Mitigation Measures The project includes provision to build the capacity of these entities. Risks: Uncertainties concerning the financial viability of the institutional arrangement. Mitigation Measures SOMAPEP-s.a and SOMAGEP-s.a remunerations are based on a model to maintain overall financial balance, monitored by CREE. Risk: The non-implementation of the sanitation component of the project. Mitigation Measures The sanitation aspect is already taken into account in Component (B).
		1.2) Rate of access to drinking water in Bamako (CSI)	1.2) 36% in 2013	1.2) 60% in 2017		
OUTPUTS	Component A 1) Quality warning station constructed 2) Water treatment plant constructed; 3) Water tanks constructed; 4) New networks set up ; 5) Networks rehabilitated; 6) Standpipes constructed; 7) Connections made at home; 8) Low-cost connections; 9)Volumetric water meters replaced; Component B 10) Studies conducted to support MEA ; 11) Study carried out to support CREE 12) Support for the management of the project by SOMAPEP-s.a provided;	2. Diarrhoea and/or cholera cases ;	2) 34 850	2) 11278 diarrhoea cases in 2017	Sources: MEE, MEA, INS, SOMAPEP, SOMAGEP-s.a and CREE reports. Method: INS urban surveys	Risks: Insufficient resources for project financing. Mitigation Measures All the donors have confirmed their participation in financing the project and most of them have already approved their contribution. Risks: Failure to mobilize Government’s counterpart contribution owing to the political crisis. Mitigation Measures Preventive measure taken by the Government and Bank support through PUARE will help to mitigate this risk.
		3.1 Number of new households connected and additional population (CSI) ;	0	3.1) 44000 households for 528 000 people, of which 50.4% women;		
KEY ACTIVITIES	COMPONENTS	3.2) Number of SPs and population supplied by SPs (CSI) ;	0	3.2) 1108 SPs for 304 700 people supplied, of which 50.4% women;		
		3.3) Number of households and population supplied by low-cost connections (CSI) ;	0	3.3) 66144 connections for 793 728 people, of which 50.4% women		
		3.4) Overall rate of losses in the network;	3.4) 30.5%	3.4) 20%		
		4) Price of water at standpipes.	4) 22 x the price of SOMAGEP-s.a social segment	4) 4 x the price of SOMAGEP-s.a social segment		
		5.1) Consumption by SP	5.1) 10 l/d/pers.	5.1) 20 l/d/pers. in 2017		
		5.2) Consumption by BP	5.2) 80 l/d/pers.	5.2) 100 l/d/pers. in 2017		
		1) Quality warning plant	1) 0 station	1) 1 warning station		
		2) Treatment plant	2) 0 plant	2) 1 treatment plant		
		3) Number of water tanks	3) 0 tank	3) 8 water tanks		
		4) New networks	4) 1600 km	4) 2 480 km of network, of which 830 km new (68% by ADF)		
		5) Rehabilitated networks	5) 0 km	5) 50 km of network rehabilitated (100% by ADF)		
		6) Number of new home connections	6) 0 connection	6) 52 000 connections, of which 68% by ADF.		
		7) Number of standpipes (SPs) constructed	7) 0 SP	7) 1108 SPs (64% by ADF)		
		8) Number of low-cost connections	8) 0 connection	8) 66 144 low-cost connections, of which 70% by ADF		
		9) Number of meters replaced	9) 0 meter	9) 32 065 meters		
		10.1. Organizational and institutional study report by DNACPN and ANGESEM.	-	1		
		10.2 SDAB study and definition of priority project related to Kabala with ESIA	-	1		
		11) Report on the study on the regulation of the price of water at standpipes	-	1		
		12) Number of audit reports approved	-	4		
		RESOURCES				
		Component A: Development of drinking water infrastructure: (i) Construction of a treatment plant with a quality warning station; (ii) Construction of water tanks; (iii) Construction of new DWS networks and rehabilitation of old ones; (iv) Construction of standpipes and low-cost connections; and (v) implementation and monitoring of ESMP.		Component A: UA 227.059 million (of which 17% by ADF) ;		Sources of Financing: ADF Loan : UA 50 000 000 Other Donors : UA 172 505 000 GVT : UA 16 438 000 TOTAL : UA 238 943 000
		Component B: Institutional Support and Project Management: (i) Support to MEA; (ii) Support to CREE; and (iii) Project Management and Coordination.		Component B: UA 11.884 million (of which 36% by ADF).		

REPORT AND RECOMMENDATION OF MANAGEMENT TO THE BOARD OF DIRECTORS CONCERNING A PROPOSAL TO GRANT A LOAN TO MALI TO FINANCE THE PROJECT TO SUPPLY DRINKING WATER TO BAMAKO FROM THE KABALA LOCALITY (PAEP – BAMAKO/KABALA)

Management hereby submits this report and recommendation concerning a proposal to grant a UA 50 million ADF loan to Mali to finance the Bamako DWS Project.

I. STRATEGIC THRUST AND RATIONALE

1.1 Project Linkages with Country Strategy and Objectives

1.1.1 The priority operations contained in Mali's Growth and Poverty Reduction Strategic Framework for the 2012-2017 period (GPRSF 2012-2017) seek to ensure sustainable growth and poverty reduction. Top among the priority strategic thrusts of the framework is "*the long-term reinforcement of the development base and equitable access to quality social services*", including water and sanitation in urban and rural areas, to ensure the achievement of the Millennium Development Goals (MDGs). This project, which seeks to contribute to improving access to drinking water by the population of Bamako's municipal councils and vicinity, is squarely in line with this GPRSF 2012-2017 strategic thrust. Moreover, the project addresses one of the priorities of the Government's Emergency Priority Action Plan for the period 2013-2014 (PAPU 2013-2014).

1.1.2 The Bamako DWS project is in keeping with the Bank's intervention strategy in Mali as outlined in the Transition Management Support Strategy Paper (TMSSP 2013-2014). The strategy is hinged on the following two pillars: (i) Pillar 1: Mitigate the Impact of the Crisis and Strengthen the Population's Resilience; and (ii) Consolidate the Stability of the Rule of Law and the Bases for Economic Recovery. This project, which seeks to contribute to improving the population's access to drinking water, plugs into the first pillar of the Strategy Paper. It also aligns with the Bank's Urban Development Policy. Lastly, given its impact on improving the income of some social categories (thanks to jobs to be created by the significant quantity of works), and on the social and health conditions of Bamako's population, this operation to develop drinking water infrastructure interlaces with the Bank's long-term strategy (2013-2022), which also prioritizes green and inclusive growth.

1.2 Rationale for Bank's Involvement

1.2.1 The Bank's involvement is justified by the fact that this project addresses the Government's urgent concern to curb Bamako's current water stress. Indeed, water shortage has become so acute that the outbreak of serious shortage-related tensions is common in some neighbourhoods of the capital. This phenomenon is compounded by the influx of part of the population of the North into Bamako in the wake of the political and security crisis. This situation accounts for the low rate of access to drinking water by Bamako's population (36%), below the general average rate of above 65% in other African capital cities South of the Sahara.

1.2.2 To address this stressful situation, the Government appealed to AfDB, AFD, EU, EIB, WB, IsDB and Italian Cooperation, which agreed to support it in financing the project, with AfDB contributing 21% and the other six donors 72% of the required funding. Within this financing arrangement, AfDB, EU, EIB and WB have already appraised their components while IsDB and Italian Cooperation plan to do same before October 2013. Expected to produce an additional 144 000 cubic metres of water a day, this operation is the first phase of

the project. The second phase is scheduled for 2020 and should produce an additional 96 000 cubic metres of water a day. Once the structures of the first phase are set up and running, the city’s water access rate should increase from 36% to 60%, pending the implementation of the second phase. However, the resolution of the issue of drinking water for the population should not mask sanitation-related issues. Consequently, the Bank will also support the preparation of sanitation projects by updating Bamako’s Sanitation Master Plan, which it financed in 2008. Some donors have already expressed an interest to participate in implementing such projects.

1.3 Aid Coordination

1.3.1 Overall sector coordination is done through the Water and Sanitation Sector Programme - PROSEA (see Annex A.5). External resources cover 85% of Mali’s water supply and sanitation sector financing. Public spending in the sector for the period 2012-2014 is estimated at UA 193 million. There are 14 major donors¹ currently operating in the sector in Mali. Besides its dynamism in the DWSS sector, the Bank is currently the lead donor in the energy and private sectors. For this project, the Bank has been very active in donor coordination, going as far as financing the April 2013 Donors’ Round Table.

Stakeholders – Annual Public Spending in the Sector (Average) **		
Government	Donors	
UA 29 million (15%)	AfDB*, AFD, EU, EIB, WB, IsDB, Italian Cooperation, KFW, BOAD, ABEDA, BIDC, WAEMU, UNICEF, UNDP	UA 164 million (85%)
Aid Coordination		
Existence of thematic working groups		Yes
Existence of a comprehensive sector programme		Yes
AfDB’s role in aid coordination		Lead

1.3.2 During PROSEA annual reviews that bring together sector players, including donors, a programming exercise is undertaken to prepare a programme budget (PBO) and a Medium-Term Expenditure Framework (MTEF) for a three-year rolling period for water and sanitation. The sector currently has a PBO and an MTEF for water and sanitation, which include both access to drinking water and aspects of integrated water resource and sanitation management validated during annual water and sanitation sector reviews held between March and June.

¹ Major donors: AfDB, World Bank, European Union (EU), Islamic Development Bank (IsDB), French Development Agency (AFD), KFW, European Investment Bank (EIB), Italian Cooperation, West African Development Bank (WADB), BADEA, EBID, WAEMU and such United Nations agencies as UNICEF and UNDP.

II. PROJECT DESCRIPTION

2.1 *Project Components*

2.1.1 The project comprises the following components:

Number	Component Name	Estimated Cost in UA million and %	Component Description
A	Development of Drinking Water Infrastructure.	227.059 - (95%)	(i) Construction of a pumping station on the banks of River Niger; (ii) construction of a 144 000 m ³ /day capacity water treatment plant with a warning mechanism for quality monitoring; (iii) laying of large-diameter transfer pipes; (iv) construction of water storage tanks with capacity ranging from 2 000 m ³ to 10 000 m ³ ; (v) construction of 880 km of drinking water distribution networks, of which 50 km to be rehabilitated; and (vi) construction of 1 108 standpipes, 66 144 low-cost connections and 44 000 normal home connections.
B	Support to Project Operation and Management Structures.	11.884 - (5%)	(i) Studies to update Bamako's Sanitation Master Plan (SDAB) and design of a related priority sanitation project; (ii) study of urban sanitation-related organizational, institutional and pricing aspects; (iii) standpipe water pricing regulation study; (iv) establishment of the SOMAPEP-s.a. GIS and strengthening of the monitoring/evaluation system; (v) training of SOMAGEP-s.a. staff assigned for the repair and maintenance of facilities operated; and (vi) project management and coordination.

2.2 *Technical Solutions Adopted and Alternatives Explored*

2.2.1 The project's technical design is mainly based on benchmark technical solutions for supply from the surface waters of River Niger, which flows through the capital Bamako. Groundwater currently harnessed through boreholes at a rate of 4000 m³/day to partially supply the city has reached its exploitation limit. Given the huge needs to be met, the groundwater thus solicited is gradually being exhausted. In the long run, this may cause an imbalance in the local ecosystem.

2.2.2 Consequently, within Bamako's current context, the benchmark or "technical package" of possible project solutions for drinking water supply are: (i) the construction of a pumping station on the right bank of the river; (ii) the construction of a treatment plant with a 144 000 m³ daily production capacity; (iii) the construction of a warning station to control the fluctuation and quality of available water resources; (iv) the construction of storage tanks with capacity ranging from 2 000 m³ to 10 000 m³; (v) the construction of 880 km of treated water distribution networks; and (vi) the construction of standpipes to supply inaccessible neighbourhoods, normal home connections and low-cost connections (subsidized) for vulnerable households.

2.3 *Project Type*

This operation will be carried out using the project loan approach. This choice is dictated by the fact that Mali is yet to have an appropriate system for budget support within the framework of a common basket. In addition, the approach started under PROSEA has not yet reached the stage where a sector financing method could be adopted.

2.4 Project Cost and Financing Arrangements

2.4.1 The project is estimated to cost UA 238.943 million, net of taxes, of which UA 200.169 million in foreign exchange (84%) and UA 38.774 million in local currency (16%). It includes provisions for physical contingencies (10%) and annual price escalation (3% for foreign exchange and 6% for local currency). The detailed cost by component is shown in Annex B.2.8.

*Table 2.1:
Project Cost by Component*

Components	CFAF Million			UA Million		
	L.C.	Foreign Exchange	Total	L.C.	Foreign Exchange	Total
A. Development of Drinking Water Infrastructure						
Network Extension and Right Bank Standpipe Construction Works	941.844	5 337.116	6 278.960	1.244	7.048	8.292
Low-cost Connections, Meters and Leakage Detection Equipment	1 481.915	8 397.521	9 879.436	1.957	11.090	13.047
Sikoro Tank and Related Left Bank Network Construction Works (Lot No.1)	883.528	5 006.658	5 890.186	1.167	6.612	7.779
Ntomikoro Tank and Related Left Bank Network Construction Works (Lot No.2)	830.796	4 707.842	5 538.637	1.097	6.217	7.314
Warning and Pumping Stations and Treatment Plant Construction Works (EIB, AFD and EU Lot)	8 825.883	49 981.673	58 807.556	11.663	66.000	77.663
Facilities and Network Construction Works (World Bank Lot)	4 827.609	27 355.785	32 183.394	6.376	36.127	42.503
Facilities and Network Construction Works (IsDB Lot)	2 245.250	12 723.086	14 968.336	2.965	16.802	19.767
Facilities and Network Construction Works (Italian Cooperation-IC Lot)	8 21.393	4 654.559	5 475.952	1.085	6.147	7.232
Right and Left Bank Works Studies and Control	567.111	3 213.629	3 780.740	0.749	4.244	4.993
Sub-total Development of DWS Infrastructure	21 418.330	121 384.867	14 2803.197	28.289	160.302	188.591
C. Support to Project Operation and Management Structures						
Support to the Ministry of Environment and Sanitation (MEA)						
- Updating of SDAB and Design of Priority Project for Kabala	204.330	1157.870	1362.200	0.270	1.529	1.799
- Organizational, Institutional and Price Studies for MEA	98.888	560.363	659.250	0.131	0.740	0.871
Support to the Electricity and Water Regulatory Commission (CREE)						
- Standpipe Water Pricing Regulation Study	7.500	42.500	50.000	0.010	0.056	0.066
Project Management and Coordination	1 431.800	5059.600	6491.400	1.887	6.684	8.571
Sub-total Support to Project Operation and Management Structures	1 742.518	6 820.333	8 562.850	2.298	9.009	11.306
Total Base Cost	23 160.847	128 205.200	151 366.047	30.587	169.310	199.897
Physical Contingencies	2 316.085	12 820.520	15 136.605	3.059	16.931	19.990
Price Escalation	3 883.727	10 545.880	14 429.607	5.129	13.927	19.056
TOTAL PROJECT COST	29 360.659	151 571.600	180 932.259	38.774	200.169	238.943

*Table 2.2:
Project Cost by Expenditure Category*

Expenditure Category	CFAF Million			UA Million		
	L.C.	Foreign Exchange	Total	L.C.	Foreign Exchange	Total
A. GOODS	1 011.247	5 730.397	6 741.644	1.335	7.568	8.903
B. WORKS	19 839.972	112 440.841	132 280.813	26.205	148.490	174.695
C. SERVICES	1 174.228	5 123.961	6 298.190	1.551	6.767	8.318
D. PROJECT MANAGEMENT AND OPERATION	1 135.400	4 910.000	6 045.400	1.496	6.486	7.982
Total Base Cost	23 160.847	128 205.200	151 366.047	30.587	169.310	199.897
Physical Contingencies	2 316.085	12 820.520	15 136.605	3.059	16.931	19.990
Price Escalation	3 883.727	10 545.880	14 429.607	5.129	13.927	19.056
TOTAL PROJECT COST	29 360.659	151 571.600	180 932.259	38.774	200.169	238.943

Table 2.3
Sources of Financing

Sources of Financing	UA Million			% Total
	L.C.	Foreign Exchange	Total	
ADF Loan	5.728	44.272	50.000	21
European Investment Bank (EIB)	4.188	39.312	43.500	18
French Development Agency (AFD)	3.265	30.648	33.913	14
European Union (EU)	1.540	14.460	16.000	7
World Bank (WB)	4.718	44.286	49.004	21
Islamic Development Bank (IsDB)	2.121	19.908	22.029	9
Italian Cooperation (IC)	0.776	7.283	8.059	3
Government	16.438	0.000	16.438	7
TOTAL PROJECT COST	38.774	200.169	238.943	100

2.4.2 The project will be financed by: (i) a UA 50 million ADF loan: 21 %; (ii) the French Development Agency (AFD) to the tune of UA 33.913 million: 14%; (iii) the European Union (EU) with UA 16.000 million: 7%; (iv) the European Investment Bank (EIB) with UA 43.500 million; (v) the World Bank (WB) with UA 49.004 million: 21%; (vi) the Islamic Development Bank (IsDB) with UA 22.029 million; (vii) Italian Cooperation (IC) with UA 8.059 million: 3%; and (viii) the Government to the tune of UA.16.438 million: 7%.

2.4.3 The ADF financing will help to: (i) construct 600 km of water distribution network out of the projected 880 km; (ii) construct 708 standpipes out of the 1 108 planned; (iii) construct 46 144 low-cost connections out of the 66 144 earmarked; (iv) construct 30 000 normal home connections out of the 44 000 planned; (v) construct two water storage tanks with capacity of 2 000 m³ and 2 500 m³, respectively; and (vi) carry out all the works control and studies financed by the Bank.

Table 2.4
Expenditure Schedule by Component

Components	2014	2015	2016	2017	Total
A. Development of Drinking Water Infrastructure					
Network Extension and Right Bank Standpipe Construction Works	0.000	3.631	3.061	3.222	9.915
Low-cost Connections, Meters and Leakage Detection Equipment	1.371	4.562	4.720	4.885	15.537
Sikoro Tank and Related Left Bank Network Construction Works (Lot No.1)	0.000	4.502	3.947	0.737	9.186
Ntomikoro Tank and Related Left Bank Network Construction Works (Lot No.2)	0.000	3.546	3.669	1.473	8.688
Warning and Pumping Stations and Treatment Plant Construction Works (EIB, AFD and EU Lot)	0.000	30.293	31.414	32.577	94.284
Facilities and Network Construction Works (World Bank Lot)	0.000	16.478	17.067	17.677	51.222
Facilities and Network Construction Works (IsDB Lot)	0.000	7.628	7.892	8.167	23.687
Facilities and Network Construction Works (Italian Cooperation-IC Lot)	0.000	2.791	2.887	2.988	8.666
Right and Left Bank Works Studies and Control	1.465	1.458	1.509	1.443	5.875
Sub-total Development of DWS Infrastructure	2.836	74.888	76.166	73.169	227.059
C. Support to Project Operation and Management Structures					
Support to the Ministry of Environment and Sanitation (MEA)					
- Updating of SDAB and Definition of "Priority Project for Kabala"	0.834	1.220	0.000	0.000	2.054
- Organizational, Institutional and Pricing Studies for MEA	0.379	0.615	0.000	0.000	0.995
Support to the Electricity and Water Regulatory Commission (CREE)					
- Standpipe Water Pricing Regulation Study	0.000	0.076	0.000	0.000	0.076
Project Management and Coordination	0.406	2.851	2.745	2.757	8.759
Sub-total Support to Project Operation and Management Structures	1.619	4.762	2.745	2.757	11.884
TOTAL PROJECT COST	4.455	79.650	78.911	75.927	238.943

2.5 *Project Target Area and Beneficiaries*

2.5.1 This project will concern Bamako and its vicinity. It will help to significantly improve drinking water supply to close to 1.6 million people, that is about 64% of the city's population (of which 50.4% women). In particular, the project will help to significantly offset the drinking water supply infrastructure deficit in neighbourhoods such as Kalabankoro. Water will be supplied mainly through standpipes, normal home connections and subsidized low-cost connections. Bamako's current low drinking water supply rate (36%) largely justifies the implementation of such a project, which will help to increase the rate to 60%.

2.5.2 In addition to improving drinking water supply and the social and health conditions of the population, the project will: (i) build the institutional capacity of Société Malienne de Patrimoine d'Eau Potable (Mali Drinking Water Heritage Corporation - SOMAPEP-s.a.), Société Malienne de Gestion d'Eau Potable (Mali Drinking Water Management Corporation - SOMAGEP-s.a.) and the Electricity and Water Regulatory Commission (CREE); (ii) support the Ministry of Environment and Sanitation (MEA) in updating SDAB, designing a priority sanitation project for Bamako and initiating an institutional and pricing study for the sub-sector; and (iii) create direct and indirect jobs owing to the large quantity of project works and the execution of some of such works using the labour-intensive approach.

2.6 *Participatory Approach for Project Identification, Design and Implementation*

2.6.1 This project was the subject of a broad-based consultation between donors and Malian authorities right from its design stage. Several round tables and meetings were organized in Mali and in France on sector reform and project design, resulting in the finalization of project financing. In addition, for ESIA preparation needs, a series of public consultations were organized with the beneficiary population to take into account their different points of view in project design. At the same time, meetings were held with the representatives of Bamako municipal councils as well as those of water user associations. It should also be noted that the decentralization policy adopted by Mali encourages the involvement of Bamako's councils, grass-roots organizations (NGOs and others) and the beneficiary population in project implementation, and subsequent monitoring through their various associations.

2.6.2 At the current stage of project study, consultations already held have helped to note the following key issues of concern to the beneficiary population: (i) a favourable reception of the project, given the current acute water shortage and the resulting tough task of fetching water, notably by women and children; (ii) the need for increased involvement of women's associations in the management and operation of standpipes, while also building their capacity to manage this type of facility; (iii) the wish for the involvement of a major proportion of Bamako's jobless labour force, notably the many unemployed youths, in facility construction works, given the fact that this component takes up about 95% of project financing and that a significant part of the works will be executed using the labour-intensive approach.

2.6.3 Thus, the adoption of a participatory approach as a means of achieving project objectives will enable all stakeholders to participate actively in the Steering Committee comprising all stakeholders (State and others). The Steering Committee will be set up to ensure the proper design and implementation of project activities, as well as its auto-evaluation. The participatory approach adopted by the Government through the effective involvement of grassroots communities in project design and implementation will enhance their sense of ownership, thus ensuring the sustainability of facilities built. This public consultative mechanism will continue during project study and implementation.

2.7 Bank Group Experience and Lessons Reflected in Project Design

The following key lessons reflected in the project design were drawn from the Bank's experience in the sector in Mali: (i) the need to reduce the timeframe for loan effectiveness and to lift conditions precedent to first disbursement: to this end, *from the project preparation phase, the Malian party was apprised of the conditions precedent to loan effectiveness, helping it to anticipate their fulfilment. Furthermore, the Bank's Field Office will assist the Government to avoid any delays;* (ii) the need to improve quality at project entry in order to reduce procurement time and accelerate works execution: *the project design is based on reports on the preliminary design of all project facilities and reports on the final design of facilities located upstream of networks (pumping stations and treatment plants), thus helping to design the project using quality inputs;* and (iii) the need to build the capacity of project implementation structures, particularly with regard to procurement: *to this end, the capacity of project implementation structures will be built, notably through skills transfer by technical assistance staff to be recruited and the organization of seminars to train the staff of such structures for efficient and rapid project implementation.*

2.8 Key Performance Indicators

2.8.1 The contractual arrangements put in place for urban water sector reform, namely the SOMAPEP-s.a. Programme Contract, the SOMAGEP-s.a. Performance Contract and the Electricity and Water Regulatory Commission (CREE) financial model provide a suitable framework for monitoring the drinking water access rate, service quality and sector financial balance, which are the project's key performance indicators. SOMAGEP-s.a. will carry out monitoring and evaluation, in collaboration with CREE. SOMAPEP-s.a. will be responsible for providing information to the monitoring and evaluation system. This information will also be used to establish a geographic information system (GIS) and produce various thematic maps. The capacity of the structures charged with the monitoring and evaluation system will be strengthened within the project framework to gradually improve the overall performance of the system and ensure its adequate and continuous updating. All donors concerned and the Government will monitor and analyse indicators generated by the system during the two joint annual reviews. The following project indicators will be monitored, among others:

Indicators of the Effectiveness of Project Achievements by 2017	
Existence and effectiveness of a system for monitoring the quality and level of River Niger water resources	
Existence and effectiveness of a system for monitoring the construction of DWS infrastructure	
Quality warning station built (1)	
Water treatment plant built (1)	
Networks established (880 Km)	
Number of storage facilities with a capacity of between 2 000 and 10 000 m ³ constructed (8)	
Number of standpipes constructed (1 108)	
Number of home connections made (44 000)	
Number of low-cost connections made (66 144)	
Rate of loss in the networks drops from 30.5% to 20%	
The drinking water access rate increases from 36% to 60% on average in Bamako (1.6 million people supplied with water)	
Number of women or women's associations managing standpipes set up and trained (30% standpipes)	
Number of standpipe managers set up (1 108)	
Number of cholera and diarrhoea cases drops from 34 850 to 11 278 in 2017	
Number of jobs created by the project before 2017	
Indicators of Project Effectiveness in Terms of Impact on Development	
Infant mortality rate decreases from the current average level of 175 per thousand to 133 per thousand in 2020	
Average consumption of drinking water per capita in Bamako reaches 20 litres/day/person per standpipe and 100 litres/day/person per individual connection	

III. PROJECT FEASIBILITY

3.1 Economic and Financial Performance

Table 3.1
Key Economic Data

Financial Return		Economic Return	
FIRR		EIRR	NPV (10%) in CFAF million
3.28%		24 %	6 386.78

3.1.1 *Financial analysis.* The project is financially viable. The financial internal rate of return (FIRR), calculated over a forty-year period, is estimated to be 3.28%, which is more than the 0.80% weighted average cost of financial resources. Regarding operation, the projected operating account presented in Table A4 in the Annex shows a positive gross margin from the second year, whose cumulative amount over ten years stands at CFAF 90.365 billion. This will help to finance new extension or replacement investments on the one hand, and contribute to ensuring sub-sector balance on the other hand, since the Government has decided to repay the debt.

3.1.2 *Economic analysis.* The economic rate of return, calculated over a forty-year period and based on the assumptions presented in the Annex, is 24% with a net present value (NPV) of CFAF 96 028 million. This indicates a strong project impact from the social standpoint. It will provide numerous benefits, particularly: (i) improved access to drinking water for about 1.6 million people; (ii) a better lifestyle for the population, particularly women, who will cover shorter distances and carry less weight, and may engage in other income-generating activities; (iii) reduced prevalence of waterborne diseases, particularly infant diarrhoea for which Bamako has the highest disease rate (18 cases per 1 000 children, against a national average of 14 cases per 1 000); (iv) improved school enrolment of girls, which was 70% against 84% for boys between 2007 and 2010; and (v) improved income for the population, thanks to the involvement of local SMEs and SMIs in project works, construction of more than 1 000 standpipes and the subsequent recruitment of workers to manage them on a daily basis.

3.1.3 *Sensitivity.* The sensitivity analysis was carried out with respect to: (i) a 10% and 20% increase in investment costs; (ii) a 10% and 20% increase in operating costs; and (iii) a 10% and 15% drop in revenue. This analysis shows that the project is sensitive, in order of importance, to change in revenue, investments and operating costs, making pricing and collection essential for coverage of operating expenses and for DWS sub-sector balance (see details in Annex B.7). In all these scenarios, the financial return, which varies from 3.28% to 1.52%, is assured.

3.2 Environmental and Social Impact

3.2.1 *Environmental aspects.* Given the nature of the works to be carried out and the ensuing potential direct and indirect impacts, the project is classified under Environmental Category 2, in accordance with the Bank's rules and procedures. Accordingly, an Environmental and Social Management Plan (ESMP) has been finalized based on the Environmental and Social Impact Assessment (ESIA) already available. The ESMP provisions will be an integral part of work contractors' specifications. The ESMP implementation will help to mitigate potential adverse impacts. In this regard, the environmental expert of the Project Implementation Unit, supported by the works control firm, will monitor the implementation of social mitigation and compensation measures recommended by the ESMP. Overall, the project will provide many environmental, social and health benefits, while its environmental impact will be more easily cushioned through the

implementation of appropriate mitigation measures. Besides increasing access to drinking water for the population, the main expected positive impacts are: (i) the creation of direct and indirect jobs for several occupational groups during construction works; (ii) the reduction in the prevalence of waterborne diseases; and (iii) the significant lessening of the burden of fetching water for women and children. The main anticipated negative impacts are: the decline in the river water level due to its exploitation and climate change, water quality-related risks, interruption of public services, obstruction of movement and urban activities during the execution of works, spread of communicable diseases, site waste and noise-related nuisance. However, these environmental impacts will be limited, reversible and controllable through the implementation and monitoring of appropriate mitigation measures proposed in the ESMP. In addition, the potential nuisance caused during works execution will be mitigated by establishing a mechanism to inform the population about public service interruptions due to work execution, at least one day before such interruption.

3.2.2 *Climate change.* Climate change manifests itself in Mali through: (i) a higher variability of and reduction in rainfall; (ii) a continuous downward slide of isohyets towards the South; and (iii) increased frequency of heavy rainfall and drought. The main potential impacts on the water resources of River Niger are: (i) high fluctuation of the water level of the river, accompanied by lack of predictability; and (ii) the deterioration of water quality. The options of resilience and adaptation to climate change considered under the project concern the monitoring of water resources from the quantitative and qualitative standpoints, resulting in: (i) the construction of a warning station upstream of the pumping station on the river for hydrological monitoring, the monitoring of the level of potential pollution and management of related data; and (ii) the training of SOMAPEP-s.a. and SOMAGEP-s.a. senior officers in charge of operating the station.

3.2.3 *Social aspects.* Socially, the most important project challenge is to improve the population's water-related health situation. The range of infrastructure to be built under the project will significantly improve access to drinking water, thus reducing the prevalence of waterborne diseases. The project will help to increase the water access rate in Bamako from 36% to 60%. To facilitate access to water by the most vulnerable social segments, the project will undertake approximately 66 144 subsidized low-cost connections intended primarily for poor households.

3.2.4 Another project stake is its contribution to the creation of direct and indirect jobs for several occupational groups, particularly many young underemployed workers. In fact, much of the work will be done by using the labour-intensive method. Furthermore, the management of the 1 108 standpipes built under the project will be a source of income for their operators.

3.2.5 *Gender aspects.* One of the major project impacts for women and children will be the time saved (about 3 hours per day) from the chore of fetching water by bringing water points closer to homes (standpipes), notably in neighbourhoods suffering water shortage and still inadequately served with respect to drinking water. With such time saved, women will become more involved in income-generating activities. In particular, girls will record improved school attendance and academic performance. In addition, the approach which promotes gender mainstreaming and empowerment of women and vulnerable social groups (e.g. the disabled and youths in jobs related to the management of standpipes constructed under the project) will help to focus on the specific constraints that they face, to better integrate them in society. Thus, the project will provide permanent jobs, notably related to the management of standpipes, for women and disadvantaged social groups. These population segments will be given priority in managing about 30% of the 1 108 standpipes built. Specific training seminars will be organized to build the capacity of associations in accounting, hygiene and sanitation around water points, basic maintenance and routine repairs, to avoid a high rate of interruption in the operation of the standpipes. Furthermore, as part of the

extension of standpipes, Bamako will be sanitized. Washing points operated by the structures managing the standpipes will also be built within the project framework. This will help to diversify sources of income for these categories of beneficiaries.

3.2.6 *Forced resettlement*: on the river water catchment site, the project will affect persons who extract sand from the river for sale. These project works exclusively concern the lots financed by AFD, EU and EIB. The displacements caused are not of a nature to require conditionalities for ADF financing. In addition, it is worth noting that as compensation, the Government has already resettled individuals affected on a new production site. This activity has been preserved in its entirety and operators are carrying on their activity normally.

IV. PROJECT IMPLEMENTATION

4.1 Implementation Arrangements

4.1.1 *Executing Agency*: the Ministry of Energy and Water Resources (MEE) will serve as project owner through SOMAPEP-s.a., which will be responsible for technical and financial implementation. This structure has enough experienced staff in project implementation. It already enjoys technical assistance support financed by AFD, pending various planned support operations by other donors during project implementation.

4.1.2 SOMAPEP-s.a. will establish a Project Implementation Unit (PIU) consisting exclusively of its staff. The PIU will be headed by a coordinator, assisted by five other experts to monitor project implementation. The Ministry in charge of sanitation will also designate a focal point (engineer specialized in wastewater collection and treatment) to the PIU to monitor the project's sanitation component. SOMAPEP-s.a. already has an implementation procedures manual that has been validated by donors involved in the project. The SOMAPEP-s.a. Director of Planning and Investment will coordinate the project. Besides the coordinator, the PIU will be comprise SOMAPEP-s.a. staff with the following profiles: hydraulic engineer or civil engineer for the technical supervision of works, a procurement expert, an environmentalist, an administrative and finance officer, an expert in internal control and support staff, including an accounting officer and a secretary. The designation of all PIU experts will be a condition precedent to first disbursement. All PIU activities will be executed under a performance contract for each of its members, covering the project implementation period.

4.1.3 *Steering Committee*. Given the nature of project outcomes and the different stakeholders involved in its implementation, a steering committee specific to the Bamako DWS project will be established within the PROSEA framework. This committee will ensure the proper coordination and implementation of project activities, therefore it's monitoring and auto-evaluation. Experience shows that such a committee would not only benefit from bringing together all stakeholders without exception, but would also hold regular half-yearly meetings with the relevant representatives. At any rate, the committee should include a representative of the Ministries of Economy, Finance, Environment, Sanitation, Local and Regional Authorities, Health, Transport, Town Planning, State Property and Telecommunications, as well as a representative of DNH, DNACPN, DNR, ANGESEM, SOMAPEP-s.a., SOMAGEP-s.a., CREE, EDM, NGOs, the Bamako District City Council and the Bamako District Governorate.

4.1.4 *Procurement arrangements*. Procurements through International Competitive Bidding (ICB) and selection from a shortlist of consulting firms will be undertaken in accordance with the Bank's "Rules and Procedures for the Procurement of Goods and Works", (May 2008 Edition, revised July 2012), and "Rules and Procedures for the Use of Consultants" (May 2008 Edition, revised July 2012), using Bank standard bidding documents,

in keeping with the provisions set forth in the financing agreement. Procurements through Local Competitive Bidding (LCB) will be undertaken in accordance with national regulations on public procurement (Decree No. 8-485/P-RM of 11 August 2008 setting forth the procedures governing public and para-public procurement, execution and payment), using the country's standard bidding documents, as per provisions set forth in the financing agreement. Details of procurements provided for under the project are presented in the table in Annex B.5

4.1.5 *Disbursement procedures.* ADF resources will be disbursed through the following three methods: (i) the special account method; (ii) the direct payment method; and (iii) the reimbursement method. Under the special account method, a special account will be opened in a local bank acceptable to the ADF as soon as the loan becomes effective. This account will function under the double signature of two authorized officials. It will receive Bank resources as working capital. The direct payment method will be used for works and control expenditure as well as other consulting services, particularly accounts auditing, etc. The reimbursement method will be used only for repayment to the project of eligible expenditure whose pre-financing with counterpart contributions is authorized beforehand by the Bank. Disbursements under counterpart contributions will be done through a special counterpart contribution account opened in a local bank and functioning under the double signature of two authorized officials. This account will receive funds to pay for expenditure eligible under counterpart contributions.

4.1.6 *Financial management arrangements.* The project executing agency - *Société Malienne de Patrimoine de l'Eau Potable* (the Mali Drinking Water Heritage Corporation - SOMAPEP-s.a.) - will set up a Project Implementation Unit composed, among others, of: (i) a Coordinator; (ii) an Administrative and Finance Officer (AFO); (iii) an Internal Auditor; and (iv) an Accounting Officer. The PIU will be provided with sufficient technical, human and material resources to enable it to: (i) keep proper and detailed accounts of all transactions during the project's life cycle; (ii) ensure the safekeeping of project financial data and assets; and (iii) inform on and audit the financial resources provided. In this respect, an evaluation of the current financial management system was carried out. It deemed the system as fairly satisfactory as presented above, and able to meet the Bank's expectations in this regard. The system is based on: (a) an integrated management software adapted to fully operational development projects; (b) a project implementation procedures manual covering all the administrative, accounting and financial procedures used; and (c) staff trained on the use of the software and hence having the necessary technical and academic competence to use it. However, the following actions are recommended to improve the existing system: (1) train the project management team on the Bank's procurement, disbursement and financial management rules and procedures at the latest by the project launch date; and (2) recruit an independent external audit firm based on terms of reference acceptable to the Technical and Financial Partners (TFPs) involved in the project latest within three months following the effectiveness of the financing agreement. Ultimately, in light of the foregoing, the financial management risk, broken down into inherent and non-control risks, was deemed moderate.

4.1.7 *Audit arrangements.* The project accounts will be audited by an independent audit firm recruited on a competitive basis and in accordance with the terms of reference agreed upon with all the Technical and Financial Partners involved in the project, within three months following the effectiveness of the financing agreement. It will produce a report in accordance with the terms of reference referred to above and validated by all stakeholders. The report will be submitted to the Bank latest six months following the end of the financial year audited.

4.2 *Monitoring*

4.2.1 *Implementation schedule.* The project will be implemented over 48 months, starting January 2014. Works will begin in July 2014 and span 36 months, up to May 2017. To monitor project implementation, the Bank will field a launching mission as well as regular supervision missions, in accordance with the provisions in force. The indicative project implementation schedule is summarized below:

<u>Activity</u>	<u>Responsibility</u>	<u>Date /Period</u>
Approval of financing	ADF	Early October 2013
Effectiveness and fulfilment of conditions	GVT/ADF	November 2013
Preparation and launching of BDs	SOMAPEP-s.a./ADF	October 2013 to March 2014
Signing of contracts	SOMAPEP-s.a.	January to May 2014
Start-up of service delivery Works	SOMAPEP-s.a.	February 2014
	SOMAPEP-s.a./Contractors	July 2014
Project's physical completion	SOMAPEP-s.a.	December 2017

4.3 *Governance*

4.3.1 The latest assessments of the public finance system (Public Expenditure Management and Financial Accountability Review - PEMFAR) and Public Expenditure and Financial Accountability - PEFA) carried out in 2010 showed progress in budget preparation, implementation and control, although there are still weaknesses in internal and external control. The mitigation of these weaknesses is taken into account as part of implementation of the Government's Action Plan to Modernize and Improve Public Finance Management (PAGAM-GFP) by operationalizing the National Internal Control Strategy (SNCI) and building the capacity of the Audit Bench of the Supreme Court. Economic and financial governance residual risks at the central and project level remain linked to the political and security crisis experienced by the country since March 2012, but now being resolved. However, it should be noted that despite the crisis, the country's fiduciary framework has not deteriorated and that the Government has succeeded in maintaining some degree of budgetary discipline. Furthermore, although the defence budget increased by 37% in 2013, it is controlled by the Ministry of Finance.

4.4 *Sustainability*

4.4.1 The key sustainability factors of the drinking water services provided by the project can be measured by: (i) the capability of SOMAPEP-s.a. and SOMAGEP-s.a. to repair and maintain the works built; (ii) the willingness of municipal councils to entrust the management of standpipes to trained and competent structures; and (iii) judicious management (water pricing regulation, repair and maintenance) of standpipes to guarantee quality and continuity of services provided to the public by these water points, which are crucial in areas experiencing severe water shortage. In this regard, the project will provide targeted support to various structures concerned (SOMAPEP-s.a., SOMAGEP-s.a., CREE, municipal councils and structures responsible for operating standpipes). The following support operations may be listed, among others, within the project framework: (a) procurement of equipment for detecting leakages in buried pipes, replacement of defective water meters (32 500) and rehabilitation of part of the dilapidated water network (about 50 km); these actions will be carried out to improve the overall performance of the DWS system in Bamako, thus significantly reducing water losses estimated at about 30% of the volume currently distributed; (b) training of SOMAGEP-s.a. workers responsible for works repair and

maintenance; (c) conduct of a study to identify ways and means of regulating and standardizing standpipe water pricing in order to keep prices at acceptable levels; and (d) training of structures responsible for the management of standpipes in accounting, repair and minor maintenance.

4.5 Risk Management

4.5.1 *Risks*: to attain its objectives, the project faces five main risks: (i) the weak implementation capacity of SOMAPEP-s.a. and the weak management capacity of SOMAGEP-s.a.; (ii) the uncertainty over the financial viability of the institutional set up; (iii) the non-implementation of the project's sanitation component; (iv) inadequate financial resources to finance the project; and (v) the fiduciary risk related to the mobilization of Government's counterpart contributions to the project, following the country's current political crisis.

4.5.2 *Mitigation measures*: (i) the risks associated with the capacity of SOMAPEP-s.a. and SOMAGEP-s.a. will be mitigated by the fact that: (a) technical assistance to the project owner has already been sent to SOMAPEP-s.a.; (b) an implementation manual is available; (c) two senior officers of SOMAPEP-s.a. have already been trained in procurement and a procurement plan is being prepared; and (d) the project will build the capacity of these structures; (ii) the risk associated with financial viability will be mitigated by: (a) the determination of the remuneration of SOMAPEP-s.a. and SOMAGEP-s.a. and the validation of modelling, which will be consistent with the setting of contract objectives; and (b) the clear setting of an objective to restore and maintain the sector's financial balance; (iii) the risk associated with the non-implementation of the project's sanitation component is mitigated by the fact that the Bank is currently financing the design of a wastewater collection and treatment project related to Kabala, within the framework of Component B. Furthermore, besides the Bank, other donors like IsDB have already expressed interest in financing the project; (iv) the roundtable organized in April 2013 confirmed the availability of the financing package. Some donors have already approved their financing, thus limiting the risk related to the financing package; and (v) the fiduciary risk associated with counterpart contributions will be mitigated by: (a) all the precautionary measures adopted by the Government to maintain budgetary discipline, following the political crisis. Furthermore, the Government adopted a Revised Budget in October 2012 to ensure macro-economic stability and public finance sustainability. All these measures enabled the Government to maintain its spending under the Revised 2012 Budget, despite financial difficulties; (b) the implementation of activities to build capacity and provide technical assistance under the Emergency Economic Recovery Support Programme (PUARE) being financed by the Bank.

4.6 Knowledge Building

4.6.1 The project will support the establishment and updating of a Geographic Information System (GIS) developed within SOMAPEP-s.a. This GIS will be an important medium for summarizing all data, in real time, to ensure the long-term monitoring of the status of works built as well as their immediate environment. The GIS data will be obtained from various technical, environmental and other studies initiated by donors financing the project. Concurrent with setting up the GIS, a similar system will also be deployed for the Ministry of Environment and Sanitation (MEA) and fed by data obtained from the following studies financed under the project: (i) Update of the Bamako City Sanitation Master Plan (SDAB); (ii) Design of a Priority Sanitation Project related to the Kabala Project, accompanied with the preparation of an ESIA as well as a Compensation and Resettlement Plan (CRP); and (iii) an Organizational, Institutional and Pricing Study of the Urban Sanitation Sub-sector. Furthermore, a study to regulate the fluctuating price of water at standpipes will be initiated to support CREE.

4.6.2 Besides consolidating the knowledge built through the systems and studies listed above, the project will also help to train: (i) SOMAPEP-s.a. and SOMAGEP-s.a. workers involved in project implementation; and (ii) standpipe management structures in accounting, repair and minor maintenance of works. Furthermore, all the data obtained from these initiatives will be used to produce project quarterly progress reports and supervision reports.

V. LEGAL FRAMEWORK

5.1 *Legal Instrument*

The project will be financed with an ADF loan.

5.2 *Conditions Associated With Bank's Involvement*

5.2.1 Conditions Precedent to ADF Loan Effectiveness. The effectiveness of the loan agreement shall be subject to fulfilment by the Borrower of the conditions set forth in Section 12.01 of General Conditions.

5.2.2 Conditions Precedent to First Disbursement. Besides the effectiveness of the loan agreement, the first disbursement of loan resources shall be subject to fulfilment by the Borrower, to the satisfaction of the Fund, of the following conditions:

- (i) Provide evidence of the appointment of the following members of the Project Implementation Unit (PIU): (a) from among SOMAPEP-s.a. staff: (1) a hydraulic engineer or civil engineer for works monitoring; (2) a procurement expert; (3) an administrative and financial officer; (4) an environmentalist; and (5) an internal controller; and (b) from among MEA staff : an engineer to act as a focal point. The professional qualifications and experience of the designated officers shall be approved beforehand by the Bank; and
- (ii) Provide evidence of opening: (a) a special account in the name of the Project into which ADF loan resources will be deposited and bearing the full bank account credentials; and (b) a bank account into which the Government's counterpart contributions will be deposited.

5.2.3 Other condition. The Borrower shall, to the satisfaction of the Fund, also:

- (i) Provide, latest six months following the first disbursement, evidence of the establishment of the Project Steering Committee comprising at least one representative each of the Ministries of Economy, Finance, the Environment, Sanitation, Regional and Local Authorities, Health, Transport, Urban Development, State Property and Telecommunications; a representative of DNH, DNACPN, DNR, ANGESEM, SOMAPEP-s.a., SOMAGEP-s.a., CREE, EDM, NGOs, the Bamako District City Council and Bamako District Governorate.

5.2.4 Commitments. The Borrower shall undertake to:

- (i) Implement the Project and the Environmental and Social Management Plan (ESMP) and ensure their implementation by its contractors, in accordance with national laws, recommendations, provisions and procedures contained in the ESMP, as well as the relevant rules and procedures of the Fund; and
- (ii) Provide to the Fund quarterly reports on the implementation of the ESMP, including weaknesses and corrective measures to be taken, where applicable.

5.3 *Compliance with Bank Policies*

This project is in line with all applicable Bank policies.

VI. RECOMMENDATION

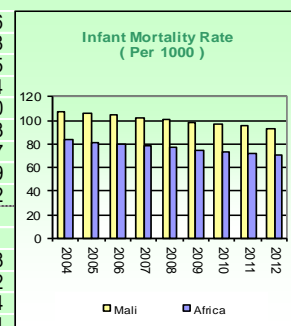
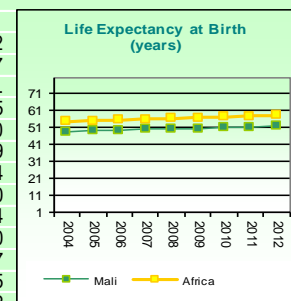
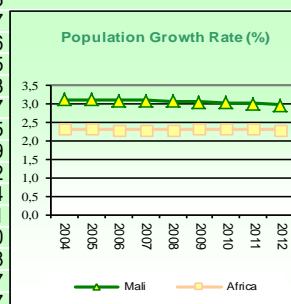
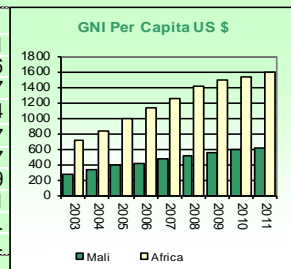
Management hereby recommends that the Board of Directors approve the proposal to grant a UA 50 million ADF loan to the Republic of Mali for the purpose and under the conditions set forth in this report.

Country Comparative Socio-economic Indicators

Mali

COMPARATIVE SOCIO-ECONOMIC INDICATORS

	Year	Mali	Africa	Developing Countries	Developed Countries
Basic Indicators					
Area ('000 Km ²)	2011	1 240	30 323	98 458	35 811
Total Population (millions)	2012	16,3	1 070,1	5 807,6	1 244,6
Urban Population (% of Total)	2012	37,4	40,8	46,0	75,7
Population Density (per Km ²)	2012	12,8	34,5	70,0	23,4
GNI per Capita (US \$)	2011	610	1 609	3 304	38 657
Labor Force Participation - Total (%)	2012	27,7	37,8	68,7	71,7
Labor Force Participation - Female (%)	2012	35,2	42,5	39,1	43,9
Gender-Related Development Index Value	2007-2011	0,353	0,502	0,694	0,911
Human Develop. Index (Rank among 186 countries)	2012	182
Popul. Living Below \$ 1.25 a Day (% of Population)	2010-2011	50,4	40,0	22,4	...
Demographic Indicators					
Population Growth Rate - Total (%)	2012	3,0	2,3	1,3	0,3
Population Growth Rate - Urban (%)	2012	5,1	3,4	2,3	0,7
Population < 15 years (%)	2012	47,1	40,0	28,5	16,6
Population >= 65 years (%)	2012	2,2	3,6	6,0	16,5
Dependency Ratio (%)	2012	97,3	77,3	52,5	49,3
Sex Ratio (per 100 female)	2012	100,1	100,0	103,4	94,7
Female Population 15-49 years (% of total population)	2012	22,7	49,8	53,2	45,5
Life Expectancy at Birth - Total (years)	2012	51,9	58,1	67,3	77,9
Life Expectancy at Birth - Female (years)	2012	52,9	59,1	69,2	81,2
Crude Birth Rate (per 1,000)	2012	45,3	33,3	20,9	11,4
Crude Death Rate (per 1,000)	2012	13,8	10,9	7,8	10,1
Infant Mortality Rate (per 1,000)	2012	93,1	71,4	46,4	6,0
Child Mortality Rate (per 1,000)	2012	175,0	111,3	66,7	7,8
Total Fertility Rate (per woman)	2012	6,2	4,2	2,6	1,7
Maternal Mortality Rate (per 100,000)	2010	540,0	417,8	230,0	13,7
Women Using Contraception (%)	2012	10,4	31,6	62,4	71,4
Health & Nutrition Indicators					
Physicians (per 100,000 people)	2004-2010	4,9	49,2	112,2	276,2
Nurses (per 100,000 people)*	2004-2009	29,7	134,7	187,6	730,7
Births attended by Trained Health Personnel (%)	2006-2010	49,0	53,7	65,4	...
Access to Safe Water (% of Population)	2010	64,0	67,3	86,4	99,5
Access to Health Services (% of Population)	2000	40,0	65,2	80,0	100,0
Access to Sanitation (% of Population)	2010	22,0	39,8	56,2	99,9
Percent. of Adults (aged 15-49) Living with HIV/AIDS	2011	1,1	4,6	0,9	0,4
Incidence of Tuberculosis (per 100,000)	2011	62,0	234,6	146,0	14,0
Child Immunization Against Tuberculosis (%)	2011	89,0	81,6	83,9	95,4
Child Immunization Against Measles (%)	2011	56,0	76,5	83,7	93,0
Underweight Children (% of children under 5 years)	2006-2011	27,9	19,8	17,4	1,7
Daily Calorie Supply per Capita	2009	2 624	2 481	2 675	3 285
Public Expenditure on Health (as % of GDP)	2010	5,0	5,9	2,9	8,2
Education Indicators					
Gross Enrolment Ratio (%)					
Primary School - Total	2010-2012	81,7	101,9	103,1	106,6
Primary School - Female	2010-2012	76,4	98,4	105,1	102,8
Secondary School - Total	2010-2012	39,5	42,3	66,3	101,5
Secondary School - Female	2010-2012	32,7	38,5	65,0	101,4
Primary School Female Teaching Staff (% of Total)	2011	28,1	43,2	58,6	80,0
Adult literacy Rate - Total (%)	2010	31,1	67,0	80,8	98,3
Adult literacy Rate - Male (%)	2010	43,4	75,8	86,4	98,7
Adult literacy Rate - Female (%)	2010	20,3	58,4	75,5	97,9
Percentage of GDP Spent on Education	2008-2011	4,8	5,3	3,9	5,2
Environmental Indicators					
Land Use (Arable Land as % of Total Land Area)	2011	5,6	7,6	10,7	10,8
Annual Rate of Deforestation (%)	2000-2009	0,7	0,6	0,4	-0,2
Forest (As % of Land Area)	2011	10,2	23,0	28,7	40,4
Per Capita CO2 Emissions (metric tons)	2009	0,0	1,2	3,1	11,4



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

last update :

May 2013

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

Note : n.a. : Not Applicable; ... : Data Not Available.

Appendix II

Table of Bank's Active Portfolio in Mali as at 26 August 2013

PROJECT	Approval Date	Signature Date	Effectiveness Date	Closing Date	Amount Approved (UA M)	Amount Disbursed (UA M)	Disbursement Rate	IP	DO	Average
Bani and Sélingué Basin Irrigation Development Programme	27/5/2009	17/6/2009	12/11/2009	31/12/2016	44.00	8.58	19.51%	2.86	2	2.43
Kayes Sud Livestock Production Development Project	18/4/2009	17/5/2007	14/11/2007	31/12/2014	15.00	7.05	47.05%	1.93	2	1.97
Cotton Sector Support Project, Mali	29/11/2006	1/2/2007	23/1/2008	31/12/2013	10.00	3.92	39.29%	2.07	2.25	2.16
Sustainable Ruminant Livestock Management Project, Mali	25/1/2006	16/10/2006	18/1/2008	31/12/2013	5.32	3.36	63.13%	2.07	2.25	2.16
RURAL DEVELOPMENT (4)					74.32	22,91	30.83%	2.23	2.12	2.18
Bamako Urban Road Project	27/9/2010	14/10/2010	15/3/2011	31/12/2013	12.00	7.77	64.82%			Not indicated
TRANSPORT (1)					12.00	7.77	64.82%			
Gao, Koulikoro and Segou DWSS Project	11/6/2008	30/7/2008	6/2/2009	31/12/2014	31.42	9.25	29.43%	2.15	2	2.08
IWRM Plan Support Project	7/1/2010	28/5/2010	22/10/2010	30/6/2013	1.66	0.61	36.49%	1.36	2	1.68
WATER & SANITATION					33.08	9.86	29.8%	1.75	2	1.88
Community Development Support Project	3/5/2006	2/6/2006	30/10/2006	31/12/2012	15.00	12.29	81.97%	2.23	2.67	2.45
Emergency Humanitarian Assistance	12/7/2012	6/9/2012	6/9/2012	30/11/2012	0.65	0.65	100%			
SOCIAL (2)					15.65	12.94	82.68%	2.23	2.67	2.45
Guinea-Mali Interconnection Study	12/1/2011	2/6/2011	19/11/2012	30/6/2014	0.83	0.0	0%			
SREP Investment Plan	15/11/2011	24/1/2012	24/1/2012	30/9/2013	0.13	0.13	100%			
ENERGY (2)					0.96	0.13	13.54%			
TOTAL ACTIVE PORTFOLIO (11)					136.01	53.61	39.41%	2.09	2.17	2,13

Appendix III

Major Related Projects Financed by the Bank and Other Development Partners of Mali

GPRSF 2012-2017 Priority Thrusts	Sector Priority Thrusts	Project	Estimated Cost	Period	Donor
Infrastructure development	<ul style="list-style-type: none"> - Drinking water - Liquid sanitation (sludge management) 	Gao, Koulikoro and Segou Region Drinking Water Supply and Sanitation Project: this project will enable adequate access by about 567 000 people to DWSS services in rural areas	UA 36 315 million	2007-2014	AfDB
		Bamako Drinking Water Supply Improvement Project	CFAF 9 406 million	2010-2013	IsDB
		National Water Resource Mobilization Programme	CFAF 21 318 million	2010-2016	KFW
		Danish-Swedish Support for the Water and Sanitation Sector Programme (PADS-PROSEA) – Koulikoro	CFAF 35 997 million	2010– 2014	Denmark, Sweden
		DWS Security in Bamako - SCP Missabougou	CFAF 8 199 million	2010-2013	AFD
		DWSS Project in 18 Municipal Councils in Mopti Region: drilling of 157 boreholes, 102 of which are positive boreholes and 4 tank wells	CFAF 7 907 million	2008-2013	AFD
		Project for the Extension of the Compact Plants at Bacodji-Corona and Magnambougou (Bamako): increase the drinking water supply capacity of the neighbourhoods situated on the right bank with 2 compact plants of 1 10m ³ /hour, 53 BF, 2 BP, 38 km pipeline	CFAF 11 410 million	2010 - 2013	National Budget
		Dogon Plateau Village Water Supply Project, Phase II: construction of 95 tank wells, 157 boreholes and 172 public latrines	CFAF 4 040 million	2007- 2014	WADB

Map of Project Area

PROJET DE KABALA - ZONES D'INTERVENTION
REPUBLIQUE DU MALI

DISTRICT DE BAMAKO

