

# AFRICAN DEVELOPMENT BANK GROUP



**PROJECT : YAOUNDE SANITATION PROJECT- PHASE II  
(PADY.2)**

**COUNTRY : CAMEROON**

## **PROJECT APPRAISAL REPORT**

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**OWAS DEPARTMENT**

June 2013

*Translated document*

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## **CURRENCY EQUIVALENTS**

(March 2013)

UA 1 : CFAF 756.843

UA 1 : EUR 1.1538

UA 1 : USD 1.514

## **FISCAL YEAR**

1 January to 31 December

## **LIST OF ABBREVIATIONS**

ABEDA	:	Arab Bank for Economic Development in Africa
ADF	:	African Development Fund
AFD	:	French Development Agency
AfDB	:	African Development Bank
C2D	:	Debt Relief and Development Contract
CUY	:	Yaounde City Council
DC	:	District Council
EQB	:	Equipment-based
EU	:	European Union
FD	:	Final Design
GEF	:	Global Environment Fund
GESP	:	Growth and Employment Strategy Paper
HYSACAM	:	Hygiene and Sanitation Company of Cameroon
ILO	:	International Labour Office
LI	:	Labour-Intensive
MAETUR	:	Urban and Rural Land Development Authority
MCC	:	Monitoring and Consultation Committee
MDGs	:	Millennium Development Goals
MINDAF	:	Ministry of State Property and Land Tenure
MINEE	:	Ministry of Water Resources and Energy
MINEPAT	:	Ministry of the Economy, Planning and Regional Development
MINEPDED	:	Ministry of the Environment, Nature Protection and Sustainable Development
MINHDU	:	Ministry of Housing and Urban Development
MINSANTE	:	Ministry of Public Health
NGO	:	Non-Governmental Organization
PADY	:	Yaounde Sanitation Project
PD	:	Preliminary Design
PEFA	:	Public Expenditure and Financial Accountability
RBCSP	:	Results-Based Country Strategy Paper
SME/SMI	:	Small and Medium-sized Enterprise/Small and Medium-sized Industry
SNEC	:	Cameroon National Water Corporation
UNDP	:	United Nations Development Programme
WSS	:	Water Supply and Sanitation

## **PROJECT INFORMATION**

### **Client Information**

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**BORROWER** : Republic of Cameroon

**EXECUTING AGENCY:** Yaounde City Council (CUY)  
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Yaounde - CAMEROON  
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### **Financing Plan**

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<b>Source</b>	<b>Amount (UA)</b>	<b>Instrument</b>
ADF	20.990 million	ADF Loan
Global Environment Facility (GEF)	2.914 million <sup>1</sup>	GEF Grant
French Development Agency (AFD)	68.292 million	AFD
GVT	10.252 million	-
<b>TOTAL COST</b>	<b>102.448 million</b>	-

### **Timeframe - Milestones (expected)**

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Concept Note Approval	7 March 2013
Project Approval	June 2013
Effectiveness	November 2013
Last Disbursement	December 2018
Completion	December 2017
Last Repayment Date	December 2067

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<sup>1</sup> This GEF grant amounts to USD 4.4 million at the exchange rate for March 2013.

## **PROJECT SUMMARY**

### **Project Overview**

1. Phase 2 of the Yaounde Sanitation Project (PADY.2) is a continuation of Phase 1 financed by the Bank, which had helped to develop 20% of the main river canal (Mfoundi) and its four tributaries crossing the city of Yaounde. PADY 2 will help to develop the remaining canal, thus strengthening the positive impacts of the first phase in terms of health and urban poverty reduction. Its cost, estimated at UA 102 448 000, will be jointly financed with the AFD, the GEF and the Government. It will be implemented over 48 months.

2. The project will benefit a population of 1.8 million people, or about 75% of the Yaounde population 49% of whom are women. Besides the construction of: (i) a 6-km long drainage canal along the Mfoundi river's main bed, with two towpaths and crossings in some places, (ii) four 8-km long drainage canals along the tributaries, and (iii) a pilot domestic waste sludge disposal and treatment plant, the project will finance landscaping around the main canal and contribute to enhancing the vector control capacity of health centres in the project area. It will also support capacity building for the Yaounde City Council (CUY) and seven District Councils (DC). With the use of labour-intensive works (LI), it will also help to reduce urban poverty.

### **Needs Assessment**

3. This operation is justified by the current situation of the drainage network in the city of Yaounde which is inadequate and operating poorly, causing frequent floods after heavy rainfall (about 2000 mm per year). PADY.1 helped to scale down the number of floods from 15 to 3 annually. The project will definitely address the issue of floods, and thereby help to improve the health conditions of the population. This is also why the project has been designed in full coordination between the Bank's departments in charge of sanitation and health.

### **Bank's Value Added**

4. The Bank supported the Government in implementing Phase 1 which recorded excellent results in terms of reducing floods and improving the Yaounde populations' living conditions. Indeed, these results aroused the interest of other donors in the project. The experience already gained and the need to consolidate the results of PADY1 make this Bank intervention crucial. The lessons learnt from phase 1 informed the project's design.

### **Knowledge Building**

5. The project implementation will generate a wealth of knowledge through: (i) the monitoring and evaluation system established for the project, (ii) monitoring and works control reports, and (iii) the flood risks monitoring system. These data will be consolidated, processed and disseminated by the CUY urban observatory and the monitoring and evaluation expert. They will be reflected in the quarterly project progress reports and the Bank's supervision reports. Similarly, with the project impact assessment to be conducted, the Bank will draw lessons for the design of future operations.

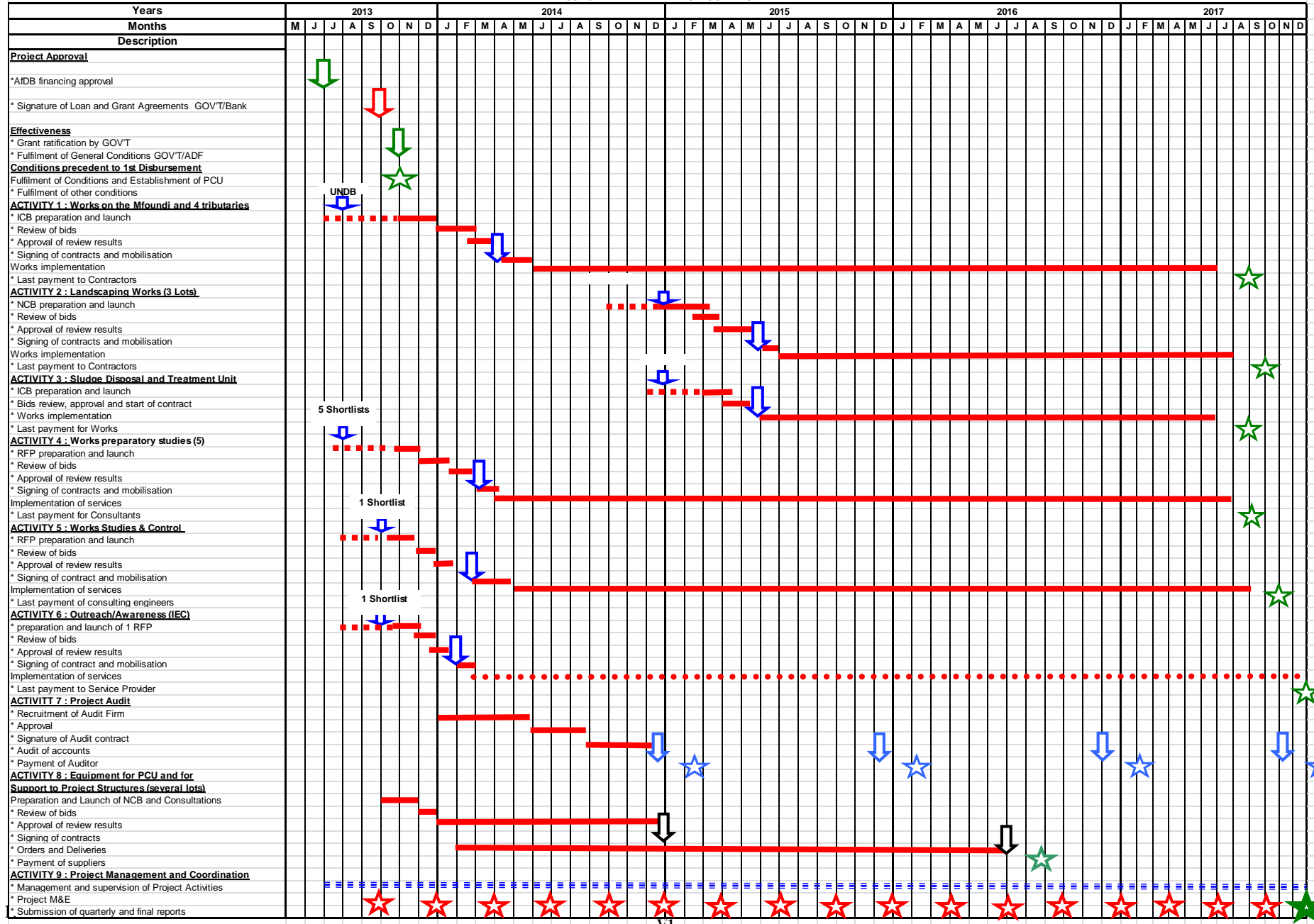
## RESULTS-BASED LOGICAL FRAMEWORK

COUNTRY AND PROJECT NAME:		Cameroon - Yaounde Sanitation Project (Phase 2)			
PROJECT GOAL:		Sustainably improve the stormwater drainage, hygiene and health conditions of the Yaounde population.			
RESULTS CHAIN	PERFORMANCE INDICATORS			MEANS OF VERIFICATION	RISKS/ MITIGATION
	Indicator (including ISC)	Baseline	Target		
IMPACT	Improved living conditions of the Yaounde urban population	1) Infant mortality rate; 2) Maternal mortality rate; 3) Poverty index in Yaounde.	1) 141‰ in 2011; 2) 690‰ in 2011; 3) 39.9% in 2011.	1) 47‰ in 2020 ; 2) 173‰ in 2020; 3) 28.7% in 2020.	Sources: MINDUH, MOH and CUY Observatory reports Method: NIS Surveys
	- Flood control methods significantly improved;  Population's health preserved against water-borne diseases  - Unemployment reduced through promotion of labour-intensive works  Positive hygiene attitudes adopted.	1) Urban sanitation coverage rate 2) Decrease in the number of floods; 3) Drop in the prevalence of water-borne diseases: -Malaria: -Diarrhoea: -Typhoid):	1) 17% in 2011 2) 3 per year in 2011 3) Water-borne diseases in 2011 (11.84% for malaria, 2.7% for diarrhoea, 3.06% for typhoid) 4) 0 in 2012 5) 500,000 persons in 2012	1) 59% in 2020 2) 1 per year in 2017; 3) Water-borne diseases: - 5% for malaria in 2017; -1.05% for cholera in 2017; -0.5% for typhoid in 2017. 4) 2,500 jobs created in 2017. 5) 2,300,000 people (+1.8 million), 49.96% of whom are women in 2017.	
OUTCOMES	- Flood control methods significantly improved;  Population's health preserved against water-borne diseases  - Unemployment reduced through promotion of labour-intensive works  Positive hygiene attitudes adopted.	1) Urban sanitation coverage rate 2) Decrease in the number of floods; 3) Drop in the prevalence of water-borne diseases: -Malaria: -Diarrhoea: -Typhoid):	1) 17% in 2011 2) 3 per year in 2011 3) Water-borne diseases in 2011 (11.84% for malaria, 2.7% for diarrhoea, 3.06% for typhoid) 4) 0 in 2012 5) 500,000 persons in 2012	1) 59% in 2020 2) 1 per year in 2017; 3) Water-borne diseases: - 5% for malaria in 2017; -1.05% for cholera in 2017; -0.5% for typhoid in 2017. 4) 2,500 jobs created in 2017. 5) 2,300,000 people (+1.8 million), 49.96% of whom are women in 2017.	Sources: MINDUH, MOH and CUY Observatory reports Method: Urban surveys - NIS.
	- Unemployment reduced through promotion of labour-intensive works  Positive hygiene attitudes adopted.	1) Urban sanitation coverage rate 2) Decrease in the number of floods; 3) Drop in the prevalence of water-borne diseases: -Malaria: -Diarrhoea: -Typhoid):	1) 17% in 2011 2) 3 per year in 2011 3) Water-borne diseases in 2011 (11.84% for malaria, 2.7% for diarrhoea, 3.06% for typhoid) 4) 0 in 2012 5) 500,000 persons in 2012	1) 59% in 2020 2) 1 per year in 2017; 3) Water-borne diseases: - 5% for malaria in 2017; -1.05% for cholera in 2017; -0.5% for typhoid in 2017. 4) 2,500 jobs created in 2017. 5) 2,300,000 people (+1.8 million), 49.96% of whom are women in 2017.	
OUTPUTS	<b>Component A</b> 1) Drainage canals built ; 2) Wastewater disposal and treatment plant built 3) Towpaths built and landscaping carried out ;	1) Length of drainage canals; 2) Number of units 3) Length of towpaths and landscaping; 4) Percentage of health centres in the area; 5) Number of female relays (ISC);	1) 3.5 Km; 2) 0 unit; 3) 3.5 Km; 4) 0 MCH ; 5) 0 female relays;	1) 17.5 km of rainwater canals; 2) 1 wastewater treatment unit; 3) 17.5 km of roadways and landscaping; 4) 5 MCH rehabilitated and equipped; 5) 300 female relays put in place and trained;	Sources: MINDUH, MOH and CUY Observatory reports Method: Urban surveys
	<b>Component B</b> 4) District council mother and child health centres rehabilitated and equipped; 5) female relays put in place and trained in DC areas; 6) Individuals, associations and NGOs trained; 7) Populations sensitized.	6) Number of individuals and structures trained (ISC): - Individuals trained: - Associations and NGOs trained: 7) Populations sensitized (ISC).	6.1) 10 individuals; 6.2) structure; 7) 500,000 persons;	6.1) 350 individuals, including 50 women, trained ; 6.2) 20 Associations and NGOs trained in techniques of LI works ; 7) 2,300,000 persons, 50.5% of whom are women	

<b>OUTPUTS</b>	<p><b>Component C:</b> CUY and DC capacity building in maintenance and project monitoring provided</p> <p>9) Pre-collection facilities established;</p>	<p>8.1) Number of persons trained (ISC); 8.2) Number of maintenance equipment procured; 8.3) Number of studies carried out in support of the CUY</p> <p>9) Number of devices : - Number of garbage bins; - Number of waste pre-collection and sorting platforms</p>	<p>8.1) 5 persons; 8.2) 0 equipment ; 8.3) 0 study ;</p> <p>9.1) 0 bin ; 9.2) 0 platform ;</p>	<p>8.1) 30 persons trained; 8.2) 20 maintenance equipment units; 8.3) 5 studies conducted: flood prevention, operational waste management, updating of stormwater master plan; PADY.2 impact assessment and preparation of PADY.2 manual 9.1) 360 waste bins put in place ; 9.2) 73 platforms built.</p>	NTR
	<b>KEY ACTIVITIES</b>	<b>COMPONENTS</b>		<b>RESOURCES</b>	
<p><b>Component A:</b> Sanitation infrastructure development</p> <p>1) Drainage works ; 2) Domestic wastewater treatment 4) Landscaping works ; 3) Studies and works control.</p> <p><b>Component B :</b> Strengthening of Hygiene and Health activities</p> <p>5) Reinforcement of health centres 6) Strengthening of water-borne diseases control means 7) IEC in hygiene / health</p> <p><b>Component C :</b> Institutional Support and Project Management</p> <p>8) Support to structures involved in the project and Project Management</p>		<p><b>Component A :</b> UA 92.544 million, of which 18% is provided by the AfDB Group ;</p> <p><b>Component B:</b> UA 4.377 million, of which 100% is provided by the AfDB Group ;</p> <p><b>Component C:</b> UA 5.586 million, of which 58% is provided by the AfDB Group.</p>			<p><b>Financing Sources:</b></p> <p>ADF Loan      UA 20,990,000 AFD            :      UA 68,292,000 GEF            :      UA 2,973,000 Government: UA 10,252,000 <b>TOTAL : UA 102,507,000</b></p>

CAMEROON: YAOUNDÉ SANITATION PROJECT - PHASE II

PROJECT IMPLEMENTATION SCHEDULE





# **REPORT AND RECOMMENDATION OF MANAGEMENT TO THE BOARDS OF DIRECTORS FOR A PROPOSED LOAN TO CAMEROON FOR THE FINANCING OF PHASE TWO OF THE YAOUNDE SANITATION PROJECT (PADY.2)**

Management hereby submits this report on a proposed ADF loan of UA 20.99 million and the implementation of a GEF Grant of USD 4.4 million to finance the second phase of PADY.

## **I. Strategic Thrust and Rationale**

### **1.1. Project Linkages with Country Strategy and Objectives**

1.1.1 Cameroon's Growth and Employment Strategy Paper for the period 2010-2019 (GESp-2010/2019) aims to promote sustained development with the creation of wealth and employment so as become an emerging country by 2035. The main thrusts of this strategy include infrastructure development, particularly water and sanitation infrastructure, with a view to achieving the Millennium Development Goals (MDGs). On the basis of this overall strategy, sector strategies have been identified, including those relating to the urban sub-sector, with the development of the Mfoundi River canal and its tributaries constituting one of the priority actions.

1.1.2 PADY 2 is also part of the Bank's medium-term intervention strategy for Cameroon, as defined in the Results-Based Country Strategy Paper (RBCSP) for the period 2010-2014 which builds on two pillars: (i) Pillar 1: Strengthening of governance with a view to improving central government's strategic management, and (ii) Pillar 2: Infrastructure development, including that for sanitation and water in urban and rural areas. Similarly, this project is consistent with the Bank's Urban Development Policy. Lastly, through its impact on improving the quality of life and socio-sanitary conditions of Yaounde's poor population, this operation targeting sanitation infrastructure development is part of the Ten-Year Strategy (2013 - 2022), which focuses on green and inclusive growth.

### **1.2. Rationale for the Bank's Involvement**

1.2.1 The Bank's involvement is justified first by the fact that this project builds on the achievements of the first phase of PADY, mainly the construction of a 3.5-km canal on the Mfoundi river bed, out of a total length of 17.5 km, including four tributaries. This first operation helped to: (i) reduce the annual frequency of floods caused by the Mfoundi from 15 to 3 between 2006 and 2011, and (ii) reduce the prevalence of water-borne diseases caused by frequent floods (malaria, typhoid and diarrhoea) by 47%, 47% and 36% respectively during the period 2007 -2011. Despite these positive results, the portion of the river crossing the city of Yaounde that is yet undeveloped (80%) continues to experience floods which still cause significant loss of life and property. To enhance the achievements of PADY 1 and its positive impacts, the Government submitted a request to the AfDB and AFD. These two institutions have agreed to provide support amounting to 67% and 20% respectively of the project financing. The appraisal mission was conducted jointly with the AFD, and the aide-memoire co-signed by the AfDB, AFD and Government.

1.2.2. This project is also justified by the need to build the institutional and logistical capacity of the Yaounde City Council to enable it to properly ensure the upkeep and maintenance of the city's drainage system. Indeed, inadequate maintenance of the network is partly behind the flooding affecting the population. Lastly, training, education and awareness activities proposed in this project will help to improve the management of household waste and impact positively on sanitation network maintenance and the population's health.

**1.3 Donor Coordination**

1.3.1 The water supply and sanitation sector in Cameroon is financed up to 75% by external resources. The average annual public sector spending for the last three years is estimated at UA 227 million.

There are 11 main donors<sup>2</sup> for the sector in Cameroon. The World Bank is the leading donor for the "energy, water and sanitation" thematic group.

Stakeholders - Annual public sector expenditure (average) **	
Government	Donors
UA 57 million (2013);	AfDB, AFD, EU, JICA, Chinese Cooperation, World Bank * / WSP, IDB, CIDA, BTC, UNICEF, UNDP
	UA 170 million (75%)
Level of aid coordination	
Existence of Thematic Working Groups	Yes
Existence of a global sector programme	No
AfDB role in aid coordination	Active Member

1.3.2 Despite the existence of this thematic group, donor coordination in the sector needs to be strengthened through regular meetings. In this context, the Bank's role in the coordination has been strengthened by the presence of the Country Office, which holds bilateral consultations with the other partners. The meeting which culminated in the formulation of this project is eloquent proof. The Country Office is also expected to support the Government towards rapid implementation of PADY.

**II. Project Description**

**2.1 Project Components**

2.1.1 The project will have the following components:

Number	Component Name	Cost Estimates in UA million and %	Component Description
A	Sanitation Infrastructure Development	92.544 - (90.3%)	(i) construction of a main canal of about 6 km, (ii) development of drainage canals on four tributaries over a distance of 8 km, (iii) development of towpaths, (iv) construction of access ramps for maintenance and transition structures at the confluence points of the canal, (v) construction of vehicle crossings as well as canal support and crossing structures, (vi) landscaping works, and (vii) domestic sludge disposal and treatment infrastructure.
B	Strengthening of Hygiene and Health Activities	4.377 - (4.3%)	(i) Strengthening of water-borne disease control mechanisms, (ii) IEC campaigns on hygiene, health and the effects of climate change, (iii) rehabilitation and equipment of five (5) district hospitals in the project area.

<sup>2</sup> The main donors: AfDB, World Bank, Japanese Cooperation (JICA), Chinese Cooperation, European Union, Islamic Development Bank (IDB) French Development Agency (AFD), KFW, Belgian Technical Cooperation (BTC), Canadian International Development Agency (CIDA) and United Nations Agencies such as UNICEF and UNDP.

Number	Component Name	Cost Estimates in UA million and %	Component Description
C	Institutional support for intervention structures and project management	5.586 - (5.4%)	(i) construction of solid waste pre-collection and sorting platforms, (ii) supply of equipment and materials for maintenance and upkeep of structures and for opening access for waste collection vehicles to inaccessible neighbourhoods, and (iii) supply of flood monitoring and observation equipment (gauges), (iv) studies on flood prevention and mapping of major risk areas; updating of the stormwater component of the Yaounde sanitation master plan and operationalization of solid waste management.

## **2.2 Technical Solutions Retained and Other Alternatives Explored**

2.2.1 The infrastructure built under the first phase of the project is a reference for sanitation in Yaounde. The design and construction of structures under the first phase were conducted in a participatory manner. The technical option for PADY 1 would be maintained, in particular the open canal variation in reinforced concrete instead of a canal covered by reinforced concrete slabs. This choice is primarily due to the instability of the loose bank soil coupled with the strong water currents during floods which cause heavy soil erosion. Subsequently, this phenomenon is likely to ultimately threaten the overall stability of the drains and adjacent landscaping works. In addition, apart from the prohibitive cost of covering the canals with reinforced concrete slabs and the maintenance challenges, free-surface water flow would also be jeopardized, thereby creating a huge disharmony with their natural environment.

2.2.2 The landscaping works along the canals (creation of towpaths or paved footpaths, planting of trees, public gardens, public lighting, social facilities, etc.) help to place structures within their socio-economic and environmental context and contribute to beautifying the city. This option was preferred to the building of homes in the immediate outskirts of the canal.

## **2.3. Project Type**

This operation will be implemented following the project lending approach. This choice stems from the fact that Cameroon does not yet have an appropriate budget support system within the framework of a common basket. In addition, there is no sector approach either.

## **2.4 Project Cost and Financing Arrangements**

2.4.1 The estimated project cost, exclusive of taxes, is UA 102.448 million, comprising UA 85.032 million in foreign exchange (83%) and UA 17.416 million in local currency (17%). It includes provisions for physical contingencies (10%) and annual price escalation (3% for foreign exchange and 5% for local currency). The detailed costs by component are provided in Annex B.2.8.

**Table 2.1**  
**Project Costs by Component**

Components	CFAF million			UA million		
	Local Currency	Foreign Exchange	Total	Local Currency	Foreign Exchange	Total
<b>A. Sanitation Infrastructure Development</b>						
Mfoundi Downstream Development (Lot No. 1)	5644.735	31986.832	37631.567	7.458	42.264	49.722
Upstream Development of Mfoundi and 4 tributaries (Lot No. 2)	2240.910	12698.490	14939.400	2.961	16.778	19.739
Faecal Sludge Discharge and Treatment	319.847	1812.467	2132.314	0.422	2.395	2.817
Development of Green Spaces	99.843	565.774	665.617	0.131	0.748	0.879
Public Lighting	124.376	704.795	829.171	0.165	0.931	1.096
Social Facilities	82.170	465.630	547.800	0.109	0.615	0.724
Monitoring and Control of Development Works	221.408	1254.647	1476.055	0.292	1.658	1.950
Studies and Control of Sludge Discharge/Treatment Works	64.001	362.675	426.676	0.085	0.479	0.564
<b>Sub-total Infrastructure Development</b>	<b>8797.290</b>	<b>49851.310</b>	<b>58648.600</b>	<b>11.623</b>	<b>65.868</b>	<b>77.491</b>
<b>B. Strengthening of Hygiene and Health Activities</b>						
Strengthening of Water-borne Disease Control Mechanisms	208.186	1179.722	1387.908	0.275	1.559	1.834
Outreach, Awareness and IEC Campaigns	210.475	1192.690	1403.165	0.278	1.576	1.854
<b>Sub-total Strengthening of Hygiene and Health Activities</b>	<b>418.661</b>	<b>2372.412</b>	<b>2791.073</b>	<b>0.553</b>	<b>3.135</b>	<b>3.688</b>
<b>C. Support for Intervention Structures and Project Management</b>						
Support for neighbourhood NGOs, associations and SMEs	13.862	78.551	92.413	0.018	0.104	0.122
Support for the 7 District Councils (DC) in Yaounde	90.885	515.015	605.900	0.120	0.681	0.801
Support for the Yaounde City Council (CUY)	324.789	1659.136	1983.925	0.429	2.192	2.621
Project management and coordination	707.345	231.115	938.460	0.935	0.305	1.240
<b>Sub-total Support and Project Management</b>	<b>1136.881</b>	<b>2483.817</b>	<b>3620.698</b>	<b>1.502</b>	<b>3.282</b>	<b>4.784</b>
<b>Total Base Costs</b>	<b>10,352.832</b>	<b>54707.539</b>	<b>65060.371</b>	<b>13.678</b>	<b>72.285</b>	<b>85.963</b>
Physical Contingencies	1035.953	5474.549	6510.502	1.369	7.233	8.602
Price Escalation	1436.816	4528.800	5965.616	1.899	5.984	7.883
<b>TOTAL PROJECT COST</b>	<b>12825.601</b>	<b>64710.888</b>	<b>77536.489</b>	<b>16.946</b>	<b>85.502</b>	<b>102.448</b>

**Table 2.2**  
**Project costs by Expenditure Category**

Expenditure Categories	CFAF million			UA million		
	Local Currency	Foreign Exchange	Total	Local Currency	Foreign Exchange	Total
A. GOODS	431.127	2443.054	2874.181	0.570	3.228	3.798
B. WORKS	8569.383	48559.836	57129.219	11.321	64.162	75.483
C. SERVICES	685.762	3704.649	4390.411	0.906	4.895	5.801
D. OPERATING COSTS	666.560	0.000	666.560	0.881	0.000	0.881
<b>Total Base Costs</b>	<b>10,352.832</b>	<b>54707.539</b>	<b>65060.371</b>	<b>13.678</b>	<b>72.285</b>	<b>85.963</b>
Physical Contingencies	1035.953	5474.549	6510.502	1.369	7.233	8.602
Price Escalation	1436.816	4528.800	5965.616	1.899	5.984	7.883
<b>TOTAL PROJECT COST</b>	<b>12825.601</b>	<b>64710.888</b>	<b>77536.489</b>	<b>16.946</b>	<b>85.502</b>	<b>102.448</b>

2.4.2 The project will be financed by: (i) an ADF loan of UA 20.99 million: 20%; (ii) a Global Environment Facility (GEF) Grant to the tune of UA 2.914 million: 3%, (iii) the French Development Agency (AFD) for UA 68.29 million: 67%, and (iv) the Government for an amount of UA 10.252 million (10%).

2.4.3 ADF financing will cover: (i) 65% of lot 2 of the development works upstream the Mfoundi and the four tributaries, (ii) 100% of the rehabilitation of health centres, (iii) 66% of mechanical equipment for the seven District Councils, (iv) 100% of all support for health facilities (equipment, services and training); (v) 50% of the outreach/IEC and awareness

campaigns, (vi) 100% of the equipment for the PIU, (vii) 100% of procedures preparation services, PADY.2 impacts assessment, training of CUY maintenance teams and auditing of project accounts, (viii) 50% of each of the following equipment items: pre-collection platforms, pre-collection equipment, garbage bins and gauges.

2.4.4 AFD funding will cover: (i) 100% of lot 1 of Mfoundi downstream development works, (ii) 100% of the faecal sludge discharge and treatment unit, (iii) 50% of public lighting, (iv) 100% mechanical equipment for the CUY, (iv) 100% of the following services: monitoring and control of development works on the Mfoundi and its tributaries, institutional study and control of wastewater discharge and treatment works, and study on the operationalization of solid waste management; and (v) 50% of each of the following equipment items: pre-collection platforms, pre-collection equipment, garbage bins and gauges.

2.4.5 GEF funding will cover: (i) 100% of development of green spaces, (ii) 100% of the flood prevention study and landscaping works, (iii) 100% updating of the stormwater component of Yaounde's master plan; and (iv) 50% of the outreach/awareness and IEC campaigns.

**Table 2.3**  
**Sources of Financing**

Sources of Financing	UA million			% total
	Local Currency	Foreign Exchange	Total	
ADF Loan	1.623	19.367	20.990	20
GEF Grant	0.495	2.419	2.914	3
AFD	10.379	57.913	68.292	67
Government	4.439	0	10.252	10
<b>TOTAL PROJECT COST</b>	<b>22.749</b>	<b>79.699</b>	<b>102.448</b>	<b>100</b>

**Table 2.4**  
**Expenditure Schedule by Component**

Components	2014	2015	2016	2017	Total
<b>A. Sanitation Infrastructure Development</b>					
Mfoundi Downstream Development (Lot No. 1)	0.000	19.144	19.777	20.433	59.354
Upstream Development of Mfoundi and 4 tributaries (Lot No. 2)	0.000	7.600	7.851	8.112	23.563
Faecal Sludge Discharge and Treatment	0.000	1.085	1.121	1.158	3.364
Development of Green Spaces	0.000	0.342	0.353	0.366	1.061
Public Lighting	0.000	0.422	0.436	0.450	1.308
Social Facilities	0.000	0.279	0.288	0.297	0.864
Monitoring and Control of Development Works	0.327	0.698	0.775	0.498	2.298
Studies and Control of Discharge/Treatment Works	0.000	0.217	0.224	0.232	0.673
<b>Sub-total Infrastructure Development</b>	<b>0.327</b>	<b>29.787</b>	<b>30.825</b>	<b>31.546</b>	<b>92.585</b>
<b>B. Strengthening Hygiene and Health Activities</b>					
Strengthening of Water-borne Disease Control Mechanisms	0.000	0.794	0.725	0.665	2.184
Outreach, Awareness and IEC Campaigns	0.260	0.643	0.672	0.618	2.193
<b>Sub-total Strengthening of Hygiene and Health activities</b>	<b>0.260</b>	<b>1.437</b>	<b>1.397</b>	<b>1.283</b>	<b>4.377</b>
<b>C. Support for Intervention Structures and Project Management</b>					
Support for neighbourhood NGOs, associations and SMEs	0.000	0.097	0.027	0.019	0.143
Support for the 7 District Councils (DC) in Yaounde	0.000	0.925	0.000	0.000	0.925
Support for the Yaounde City Council (CUY)	0.086	2.697	0.160	0.095	3.038
Project Management and Coordination	0.517	0.306	0.322	0.335	1.480
<b>Sub-total Support and Project Management</b>	<b>0.603</b>	<b>4.025</b>	<b>0.509</b>	<b>0.449</b>	<b>5.586</b>
<b>TOTAL PROJECT COST</b>	<b>1.190</b>	<b>35.249</b>	<b>32.731</b>	<b>33.278</b>	<b>102.448</b>

## **2.5. Project Area and Beneficiaries**

2.5.1 Located mainly in the Mfoundi catchment basin (including its four tributaries), the project area covers almost the entire city of Yaounde (capital of Cameroon). Mfoundi's hydrographical network which defines the backbone of the sanitation system is extremely dense and accounts for most of the city's stormwater drainage. The total population of Yaounde is estimated at about 2.4 million inhabitants, 49.96% of whom are women. The project will more directly affect about 1.8 million people in this city, representing 75% of its population.

2.5.2 In addition to improving the population's social and health conditions, the project will help to: (i) build the institutional capacity of seven (7) district councils and the Yaounde City Council (CUY); (ii) support the design and implementation capacity of small and medium-sized enterprises (SMEs) and consulting firms through local training and their participation in subcontracting, studies and works; (iii) build the capacity of NGOs and neighbourhood associations, which will be formed and revitalized in order to significantly improve solid waste pre-collection and recycling operations, implementation of labour-intensive works, as well as maintenance of landscaping works, and (iv) strengthen the activities of traders and industrialists, who will no longer suffer property losses and the effects of inaccessibility caused by floods.

## **2.6. Participatory Process for Project Identification, Design and Implementation**

During the preparatory update studies for this operation, public consultations were held with the beneficiaries to get their opinions following the completion of PADY.1 and expectations in the design of the second phase. During the preparation and appraisal missions, meetings were also held with representatives of the seven Yaounde District Councils and neighbourhood NGOs and associations, as well as SMEs operating in the sector. This participatory approach was also made inevitable by the decentralization policy adopted by Cameroon, which upholds beneficiary consultations to elicit their support for implementation and greater ownership of the outputs. The consultations helped to define the activities to meet the specific needs expressed, including support for pre-collection NGOs, DC maintenance teams, and strengthening of the IEC component targeting the population. In addition, as in Phase 1, all stakeholders will be represented in the Monitoring and Consultative Committee, which is the project's steering body.

## **2.7. Bank Group Experience and Lessons Reflected in the Project Design**

2.7.1 Thanks to the Bank's experience in the sector within the country, and more specifically phase 1 of PADY whose completion report has been prepared, four major lessons were drawn and reflected in the project design: **(i)** the need to enhance public awareness and the capacity of various sector stakeholders to be involved in garbage pre-collection: to this end, *sufficient resources have been allocated to IEC campaigns to strengthen this aspect under this second phase. A consulting firm specializing in this area will be recruited for this purpose and will work with local NGOs;* **(ii)** the need to implement the solid waste collection strategy: the project will support *CUY and DC in providing the technical resources for operationalizing waste management;* **(iii)** the need to improve project quality at entry, particularly regarding the development of quality technical documents as well as accurate assessment of the costs involved: *as part of project preparation, a consulting firm has been hired to update the final design, the works cost estimates and preparation of related bidding files;* and **(iv)** the need to build the capacity of project implementing structures, particularly with regard to procurement: *in this regard, in addition to reinstating part of the implementing staff of Phase 1, training sessions are planned for the main stakeholders.*

## 2.8. Key Performance Indicators

2.8.1 A monitoring and evaluation system, including readily quantifiable performance indicators, has been established in the CUY thanks to PADY.1. This also makes it possible to generate thematic maps of the project environment. The project will provide support to the CUY to help update and improve this system. The entire system will thus, in real time, help to: (i) monitor the operating status of structures put in place, in order to prevent maintenance problems, (ii) monitor water level fluctuations along the main river (Mfoundi) through measuring devices (gauges) financed by the project, and (iii) monitor the areas around the Mfoundi and four tributaries once developed, to prevent any discharge of domestic waste. In addition, the towpaths optimization study currently being conducted by the CUY, as well as those planned under the project, in particular: (i) downstream flood prevention; (ii) operationalization of solid waste management; (iii) updating of the Yaounde stormwater master plan, including institutional and organizational aspects of the wastewater sub-sector; and (iv) assessment of the outcomes of PADY.2 will all help to update the GIS indicators database of the CUY. The CUY observatory will address this aspect through certain indicators as follows:

<b><u>Project effectiveness indicators by 2017</u></b>	
Existence and effectiveness of a system for monitoring water levels along the Mfoundi and tributaries	
Existence and effectiveness of a system for monitoring the construction of drainage infrastructure and the establishment of a solid waste pre-collection mechanism	
Length of the drainage canal built (14 km)	
Pilot wastewater disposal and treatment plant built	
Length of towpaths and landscaping works implemented (14 Km)	
Number of garbage bins placed (360)	
Number of solid waste pre-collection and sorting platforms set up (73)	
Number of people trained on hygiene, safety and health prevention issues (150)	
Number of people organized and trained to improve waste pre-collection and recycling (200)	
Number of female workers in place to sustain awareness on hygiene and sanitation of the living environment (300)	
Number of people affected by the awareness campaign, including during the 1st phase (2 million).	
<b><u>Project effectiveness indicators in terms of development impact</u></b>	
Annual flood frequency has dropped from 3 to 1 in 2017	
Average prevalence of water-borne diseases has dropped from: (i) 11.84% to 5% for malaria, (ii) 2.7% to 1.05% for diarrhoea, and (iii) 3.06% to 0.5% for typhoid in 2017	
Number of jobs created by the labour-intensive or equipment-based approach 2017 (2500)	

## III. Project Feasibility

### 3.1. Economic and Financial Performance

Table 3.1: Key Economic Figures

ERR and ENPV	(20.31 % ; CFAF 102.1 billion)
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3.1.1 *Economic Analysis:* The economic costs used to calculate the economic rate of return are those relating to investment costs, exclusive of taxes and price escalation as well as maintenance costs and other operating expenses. The main economic benefits are: (i) reduction in health costs due to a decline in water-borne diseases, (ii) reduction of material losses for households and businesses due to the decline in the frequency of flooding, and (iii) the value of dewatered land, and (iv) temporary and permanent jobs created by the construction works and the organization of solid waste management. On this basis, the project's economic rate of return is estimated at 20.32%, well above the opportunity cost of capital of 10% and the net present value at CFAF 102.1 billion. The project is therefore economically viable.

3.1.2 *Sensitivity:* The sensitivity analysis was conducted with respect to: (i) 10% increase in investment costs, (ii) reduction of 10% of health benefits; (iii) 10% decrease or annulment of the value of dewatered land. It follows from this analysis that: (i) the internal rate of return has remained higher than the opportunity cost of capital, ranging from 19.90 to 11.7% in the extreme case of annulment of the value of dewatered land. NPV remains positive, ranging from CFAF 66.27 billion to 9 billion (see details in Annex B.7).

### 3.2. *Environmental and Social Impact*

3.2.1 *Environmental Aspects:* Given the nature of the works to be undertaken and the potential direct and indirect impacts that may result, the project is classified under Category 2 pursuant to the Bank's relevant rules and procedures. On this basis, an Environmental and Social Management Plan (ESMP) has been prepared and posted. It will be part and parcel of the contractors' specifications for its effective implementation in order to mitigate potential hazards. The project provides many environmental and health benefits, while its mitigated environmental impacts will be easily addressed by the implementation of appropriate measures. Positive impacts will essentially relate to: decline in the frequency of flooding, reduction of water-borne diseases and improvement of the living conditions and environment of the local population, poverty reduction as a result of the involvement of part of the population in paid garbage pre-collection activities and landscaping works. In addition, measures to mitigate some negative impacts (interruption of public services, interruption of traffic and urban activities during the works, spread of AIDS, waste from construction companies, noise pollution, wildlife destruction, etc.) will be addressed by way of social engineering and outreach/awareness campaigns to be developed under the project.

3.2.2 *Climate Change:* Climate change in Cameroon is manifested by: (i) greater rainfall variability, (ii) continued isohyets shift to the south, and (iii) increase in the frequency of more or less long episodes of heavy rainfall alternating with periods of drought. The likely principal impact on surface waters is the lack of predictability of rising water levels in the drainage canals of the Mfoundi and its tributaries; this could cause more or less significant overflows downstream of the structures put in place. Therefore, the resilience and adaptation options taken into account in the project concern the monitoring of water level changes in the project water bodies. This translates into: (i) the procurement of hydrological (gauges) and IT (GIS software and computers) equipment for hydrological monitoring and data management, (ii) training of the CUY Urban Observatory (OUY) workers in GIS database updating, and (iii) support to CUY to conduct a study on flood prevention and update the stormwater component of the Yaounde sanitation master plan.

3.2.3 *Social Aspects:* From a social standpoint, the project's most important goal is to improve the health status of the population. The various types of infrastructure to be established by the project will reduce flooding in areas where stormwater tends to stagnate, thus promoting the proliferation of mosquitoes that spread malaria (the leading cause of mortality in countries south of the Sahara). Moreover, in addition to wastewater, the project plans to develop vector control activities to eliminate breeding sites. Outreach, education and awareness campaigns in the area of hygiene and health will seek the adoption of hygiene- and health-friendly behaviour by nearly 1.8 million people. In addition, the strengthening of health structures will allow for better patient care.

3.2.4 Based on the PADY1 impact assessment, the project is expected by 2017 to help reduce the prevalence of water-borne diseases in proportions estimated as follows: from 11.84% to 5% for malaria; from 2.7% to 1.05% for diarrhoea; from 3.06% to 0.5% for typhoid fever. Children under the age of 5, who are the most vulnerable segment and most affected by these diseases, will be the main beneficiaries.



3.2.5 The project will also contribute to the creation of jobs for young people in the disadvantaged neighbourhoods bordering the canal. To this end, using the labour-intensive approach in the canal works and related developments will create almost 2,500 jobs (2,130 temporary and 370 long-term jobs).

3.2.6 *Gender Aspects:* In the project area, women represent close to 49% of the beneficiaries. As concerns associations, about 60% of women are at least members of an association, and 27% have a position of responsibility in an association. Women play an important economic role and therefore constitute a prime target. In fact, activities related to the pre-collection of solid household waste and drainage works and the cleaning of sanitation facilities in which they are heavily involved alongside youths will boost their incomes and substantially improve their living conditions. With the IEC component, 300 female workers will be included in neighbourhood hygiene committees to ensure sensitization for behaviour change. A reduction in the prevalence of water-borne diseases will scale down household health expenditure and the time spent by women to seek related care for their children. The combination of these factors and the proximity of the project site will give women and youths, as was observed at the end of the Phase 1, the opportunity to immediately set up small businesses (90% of food market sellers are women) such as the sale of flowers, catering and, ultimately, to organize themselves into associations capable of self-financing larger-scale activities. Construction of the Women and Youth Centre for recreational activities and the promotion of small trades will also improve the welfare of women and youths in the project area.

*Involuntary Resettlement:* The project will affect three (3) homes with a total of seven (7) persons. The total compensation estimated at CFAF 15,016,040 (UA 20,000) will be fully borne by the Yaounde City Council. Payment of this compensation is a condition precedent to the disbursement of financing.

## **IV. Implementation**

### **4.1. Implementation Arrangements**

4.1.1 *Executing Agency:* As was the case for PADY 1, the Yaounde City Council will be the Project Executing Agency. PADY 2 will be managed on a daily basis by the Project Implementation Unit (PIU) within the Department of Technical Services (DST) of the CUY. This Department is mainly responsible for urban planning, roads, sanitation, environment, hygiene and the management of public parks and gardens. It has a staff strength of 25 officers for works monitoring. It will be responsible for monitoring the project's technical aspects in association with the Department of Financial and Economic Affairs (DAFE) for the project's financial management and the Yaounde Urban Observatory (OUY) for monitoring and evaluation of the project outcomes and impacts.

4.1.2 The CUY will appoint from among its staff an officer in charge of coordinating the PIU activities. The latter will be selected on the basis of three CVs and terms of reference prepared for this purpose. His/her appointment will become effective after approval by the AfDB and AFD. In addition to his/her qualification as hydraulics and/or civil engineer, he/she must have at least 10 years' experience, including 5 in project management. The PIU will also include six (6) CUY officers, in particular: a monitoring and evaluation expert, a procurement expert, an environmentalist, a civil engineer, an accountant, and a hydraulics engineer. The PADY.1 environmentalist and socio-economist will be reinstated. CUY will appoint the Civil Engineering, Accountant, Hydraulics Engineer and Procurement Expert on the basis of CVs submitted to the Bank for prior approval. The Procurement Expert will have 5 years'

experience, including 2 years in projects funded by international donors. The MoH and MINEPDED will respectively assign a health expert and a Global Environment Facility focal point (GEF). Based on lessons learnt from the implementation of PADY 1 particularly with respect to financial management shortcomings, the project will recruit, as local technical assistant, an Administrative and Financial Officer to supervise a DAFE accountant assigned to the project by the CUY and thus promote skills transfer. Evidence of the reappointment of the two PADY.1 experts as well as the assignment of the other experts to the PIU will constitute a condition precedent to the first disbursement. The performance of PIU members will be evaluated annually on the basis of relevant criteria defined at project start-up.

4.1.3 A monitoring and consultation committee (CSC) responsible for ensuring consistency and monitoring the smooth implementation of the various operations carried out under the project will also ensure the proper functioning of the coordination structure. The already existing CSC for the first phase will be reinstated and expanded to include the other structures involved.

4.1.4 Procurement Procedures: All the procurement of goods and works through ICB and consulting services financed by ADF resources will be conducted in accordance with its *Rules and procedures for the procurement of goods and works (May 2008 Edition, revised in 2012)* or, as appropriate, its *Rules and Procedures for the Use of Consultants (May 2008 Edition, revised in 2012)*, using the Bank's appropriate standard bidding documents. For the procurement of goods and works through national competitive bidding (NCB) and shopping, national procedures will be used subject to consideration of the divergences identified by the Bank in the National Procurement Code and national standard procurement documents, as set out in Appendix III of the Loan Agreement. In fact, Cameroon's national procurement procedures were evaluated by the Bank in 2010, with the conclusion that these procedures and NSPD could be used for Bank-financed projects provided the divergences identified in these national procedures and standard documents are addressed, including the taking of risk mitigation measures.

4.1.5 An assessment of the implementation unit's capacity concluded that the risk level is moderate. Indeed, the PIU has the necessary experience and skills acquired during the implementation of PADY 1. The following risks were identified: (i) the absence of ex ante public procurement control at national level, (ii) the absence of a mechanism for the management of non-autonomous and non-independent complaints, (iii) limitation of the role of the implementation unit in the evaluation committees, which does not allow it to qualitatively influence evaluation reports to be submitted, (iv) the non-application of prerequisites for the use of country procedures for NCB. In light of the foregoing, the following mitigation measures have been proposed: (i) ex ante review by the Bank of the first three goods and works contracts submitted to an ex post review and ex ante review of the first three service contracts submitted to ex post review, (ii) participation of the PIU's procurement specialist as a member of the evaluation committees, (iii) consideration of identified discrepancies in national standard bidding documents and prior review by the Bank of the said BDs before launching the first procurements, (iv) approval of a procurement plan covering at least the first 18 months of project implementation. Details of the procurements planned under the project are set out in the Table under Annex B.5.

4.1.6 Disbursement Procedures: The disbursement of ADF resources will be conducted in accordance with the AfDB disbursement manual. The direct payment method will be used for the procurement of goods and works, as well as for studies and consultancy services. However, the reimbursement and reimbursement guarantee methods may also be used if necessary. Loan resources earmarked for the PIU's operation and for support to structures involved in the project will be disbursed through a special account opened for this purpose. The special account will be funded and replenished in accordance with the Bank's relevant rules and procedures. The special account will be opened and managed by the Autonomous

Sinking Fund of Cameroon (CAA), and expenditures will be authorized by the PIU. The Government will also open a separate bank account to receive the counterpart funds. Evidence of the opening of these two accounts by the CAA will be a condition precedent to first disbursement.

4.1.7 *Financial Management and Project Audit:* An evaluation of CUY led to the conclusion that it has some financial management weaknesses (see Appendix B.4). These weaknesses can prevent it from providing, with reasonable assurance, accurate, complete and timely information on the status of the project, as required by the AfDB. To address these shortcomings and facilitate the management of PADY 2, in particular for greater ownership of the project's financial management arrangements, support will be provided to CUY for: (i) updating the administrative, budgetary, financial and accounting procedures manual; and (ii) updating the integrated computerized management system (TOMPRO - TOMATE). In addition, the PIU and CUY fiduciary staff will be trained in project management procedures and the use of TOMPRO software. The project accounts will be audited annually by independent external auditors, recruited on a competitive basis and following terms of reference agreed upon with the Bank. The Coordinator will see to the implementation of audit recommendations to improve the project's governance.

**4.2 Monitoring**

4.2.1 *Implementation Schedule:* The project will be implemented over a period of 48 months as from January 2014. Work will begin in June 2014 and last for 36 months until May 2017. For implementation monitoring, the Bank will conduct a launching mission and regular supervision missions, in accordance with the regulations in force. The indicative project implementation timetable is summarized below:

<u>Milestone</u>	<u>Monitoring Timeframe</u>	
Financing approval	ADF	June 2013
Effectiveness and lifting of conditions	GV'T/ADF	November 2013
Preparation and launch of CB	PIU/ADF	Sept. 2013 to March 2014
Signing of contracts	PIU	January-March 2014
Commencement by Consultants	PIU	February 2014
Works	PIU/Contractors	June 2014
Physical completion of the project	PIU	December 2017

**4.3 Governance**

4.3.1. Economic and financial governance risks, both at central and project levels, remain high, particularly in administrative bodies with management autonomy such as city councils. Conscious of this situation, beyond the repressive measures against senior officials, the Government has taken a series of preventive measures, including: (i) adoption of the law on new financial regulations, (ii) implementation of recommendations of the Public Expenditure and Financial Accountability (PEFA), particularly those relating to the public finance modernization plan, (iii) revision of the Procurement Code, and (iv) establishment, at the Presidency of the Republic, of the Ministry in charge of Procurement.

4.3.2. This new Ministry was established to address delays in the procurement process and attempts to violate the principle of transparency. The Bank will ensure strict compliance with the procurement rules and procedures. In addition, technical and financial partners expect that further efforts will be made to establish special procurement commissions. This will help to

reduce the delays currently noted. During the year 2013, the Bank plans to provide, in consultation with the other TFPs, institutional support to improve the operation of this new Ministry.

4.3.3. Bank supervision and audit missions, with particular focus on the procurement process, will help to ascertain compliance with acceptable transparency standards and AfDB rules and procedures.

#### **4.4 Sustainability**

4.4.1 The major sustainability factors of the project relate to: (i) the capacity of CUY to ensure the upkeep and maintenance of the structures built, (ii) the determination of DCs to contract household refuse pre-collection services and improve collection in hitherto inaccessible neighbourhoods, and (iii) guarantee to pay neighbourhood NGOs and associations for garbage pre-collection services rendered. In this regard, the project will provide targeted support to the abovementioned structures. The contracting of pre-collection by DCs with NGOs is a guarantee for pre-collection sustainability. In addition, awareness campaigns planned under the project will ensure ownership of the project structures by the local population and authorities. Lastly, the recruitment of women relay workers will help to sustain the awareness campaign outputs long after project completion.

#### **4.5 Risk Management**

4.5.1 *Risks*: Three major risks to the achievement of project objectives have been identified: (i) the weak capacity of the CUY and District Councils (DC) to ensure the system's sustainability (maintenance of structures, solid waste pre-collection and collection), (ii) lack of contribution by beneficiaries to household refuse pre-collection, (iii) governance issues related to delays in fulfilling the conditions precedent to the first disbursement and in the project's goods, works and services procurement process, as well as the weak financial management capacity observed during the implementation of PADY 1.

4.5.2 *Mitigation Measures*: (i) Regarding the risks relating to the capacity of CUY and DCs, the project intends to strengthen the operational maintenance and household refuse pre-collection mechanisms for CUY and DCs; (ii) As concerns the contribution of beneficiaries to garbage pre-collection, the consulting firm hired for IEC campaigns will also be tasked with eliciting the population's support and their determination to contribute to the mechanism set up. In addition, the Consultant hired to study the operationalization of solid waste management will, depending on the population's income levels, propose contribution levels acceptable to the people. In addition, the project will finance the purchase of equipment to improve solid waste management; (iii) To ensure a quick project start-up, as from the project its preparation stage the loan conditions were discussed with the Government. Country Office monitoring and support will facilitate the fulfilment of these conditions. As regards speeding up the procurement process, the project aims to build the capacity of the Project Implementation Unit (PIU) in procurement, building on the experience gained from the implementation of PADY 1. Negotiations with the Ministry of Public Contracts should help to devolve the procedure to the CUY. As regards financial management, the project will build the PIU's capacity by financing the update of management tools (procedures manual and management software), recruiting a RAF Consultant, as well as upgrading the skills of the PIU fiduciary staff.

## **4.6 Knowledge Building**

4.6.1 The project will support the updating and improvement of the Geographic Information System (GIS) developed within the CUY and managed by the Yaounde Urban Observatory. The GIS will be an important medium for processing all the data in real time, allowing for long-term monitoring of the status of structures built as well as their immediate environment. To provide data and updates to the GIS, the project will finance the following studies: (i) flood prevention study and establishment of an Integrated Water Resources Management (IWRM) strategy for the Mfoundi and Méfou watersheds and the design of landscaping works to be executed along the canal. This study will make recommendations relating to activities on climate change adaptation and resilience, as well as the prevention and management of flood risks; (ii) study to update the stormwater component of the Sanitation Master Plan, which will complement existing tools and/or those being updated (Wastewater Master Plan financed by the AFD, Solid Waste Management Strategy adopted in 2012) so as to have a consistent and holistic vision of the sanitation sub-sector in Yaounde, (iii) study on the operationalization of household solid waste collection and recycling, and (iv) PADY 2 impact assessment.

4.6.2 In addition to the data obtained from the PADY 1 impact assessment, these studies will generate a body of knowledge that will be consolidated, processed and disseminated by the OUY. The data will be included in quarterly progress reports and project supervision reports.

## **V. Legal Framework**

### **5.1 Legal Instrument**

The project will be financed by an ADF Loan and a GEF Grant.

### **5.2 Conditions for Bank Intervention**

5.2.1 Conditions for ADF loan and GEF grant effectiveness: Effectiveness of the loan agreement will be subject to fulfilment by the Borrower of the conditions defined in Section 12.01 of the General Conditions Applicable to Loan, Guarantee and Grant Agreements. The GEF Grant Agreement will be effective on the date of its signature.

5.2.2 Conditions precedent to the first disbursement: In addition to the effectiveness of the financing agreements, the first disbursement of the loan and grant resources will be subject to fulfilment by the Borrower/Donee, to the satisfaction of the Bank and Fund, of the following conditions:

- i. Evidence of: (a) the appointment, from among the CUY staff, of members of the Project Implementation Unit (PIU) as follows: (a) a Coordinator who is a Water Engineer or Civil Engineer with at least 10 years' experience, including five in the conduct of similar projects; (b) a Water Engineer; (c) a Civil Engineer; (d) a Procurement Expert with 5 years' professional experience, including two in the monitoring of projects financed by international donors; (e) a Health Expert, and (f) an Accountant with a least a postgraduate certificate in financial management and accounting, with at least 3 years of professional experience. The qualifications and professional experience of these officers will be submitted to the Bank and Fund for prior approval;

- ii. Evidence of the reappointment of the Socio-Economist and Environmentalist, who were members of the PIU of PADY 1, in the PIU of PADY.2;
- iii. Evidence of assignment by the Yaounde City Council (CUI) of functional premises for the Project Implementation Unit;
- iv. Evidence, in original or certified copy, of the opening, by the Autonomous Sinking Fund of Cameroon (CAA), of: (a) two special accounts in the name of the project, one for the ADF loan and the other for the GEF Grant, to receive the loan and grant resources, and bearing the full bank details of each account; and (b) a bank account to receive the Government counterpart funds;
- v. Evidence of expansion of the Project Monitoring and Consultative Committee (CSC) of PADY1 to include a representative of the Ministry of Public Health, CAMWATER, Cameroon Water Corporation (CDE), AES-SONEL, CAMRAIL, MAGZI, National Directorate of the Environment, National Weather Service, the 7 District Councils of Yaounde, NGOs, neighbourhood associations, and donors; and
- vi. [For the ADF loan alone] Evidence of GEF Grant approval by the GEF Board Chair, or any other evidence of coverage of the financing gap for activities to be financed by the GEF.

Other Conditions: The Borrower/Donee shall also, to the satisfaction of the Bank and the Fund:

- (i) Provide, no later than twelve (12) months after the first disbursement, evidence of compensation to the project affected persons in accordance with the Bank's relevant policies and guidelines, the Environmental and Social Management Plan (ESMP) and the report of the property assessment advisory committee (RCCCEB).
- (ii) Provide, no later than twenty-four (24) months after the first disbursement, evidence of the signing of seven tripartite agreements between CUI, the District Councils and neighbourhood associations involved in garbage pre-collection in each district council.

Undertakings: The Borrower/Donee undertakes, to the satisfaction of the Bank and the Fund, to:

- (i) implement the Project, ESMP and RCCCEB and have them implemented by its contractors in accordance with national laws, recommendations, requirements and procedures contained in the ESMP, RCCCEB and the relevant rules and procedures of the Bank and Fund;
- (ii) refrain from starting works in any area concerned without fully compensating the persons affected in the area; and
- (iii) submit quarterly reports on ESMP implementation, including, as appropriate, the shortcomings and corrective actions taken or to be taken.

### **5.3 Compliance with Bank Policies**

(X) This project complies with all applicable Bank policies. However, although the GEF Grant has been approved by the GEF Committee, it must still be approved by the Chair of the GEF Board of Directors. To avoid submitting a project twice to the Boards of Directors of the Bank and the Fund, the Boards are requested to approve the implementation, by the Bank, of the GEF-financed Project subject to final approval of the grant by the GEF authorities.

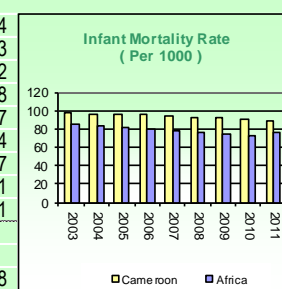
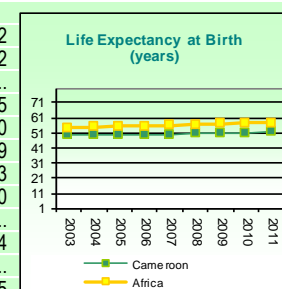
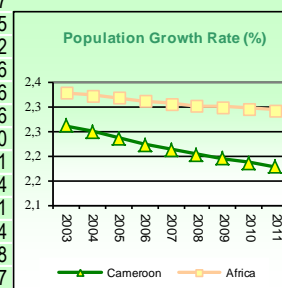
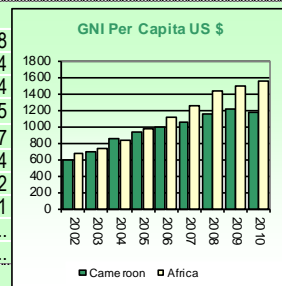
## **VI. Recommendation**

Management recommends that: the Boards of Directors approve (i) the proposed ADF loan of an amount not exceeding UA 20.99 million to the Republic of Cameroon, and (ii) the implementation of the project funded by GEF to the tune of USD 4.4 million, for the purpose and subject to the conditions stipulated in this report.

## Cameroon

### COMPARATIVE SOCIO-ECONOMIC INDICATORS

	Year	Cameroon	Africa	Developing Countries	Developed Countries
<b>Basic Indicators</b>					
Area ( '000 Km <sup>2</sup> )	2011	475	30 323	80 976	54 658
Total Population (millions)	2011	20,0	1 044,3	5 733,7	1 240,4
Urban Population (% of Total)	2011	59,2	40,4	45,5	75,4
Population Density (per Km <sup>2</sup> )	2011	42,4	36,1	59,9	36,5
GNI per Capita (US \$)	2010	1 180	1 549	3 304	38 657
Labor Force Participation - Total (%)	2011	99,4	74,7	65,0	60,4
Labor Force Participation - Female (%)	2011	46,0	42,5	49,2	50,2
Gender -Related Development Index Value	2007	0,515	0,502	0,694	0,911
Human Develop. Index (Rank among 187 countries)	2011	150	...	...	...
Popul. Living Below \$ 1.25 a Day (% of Population)	2007	9,6	40,0	22,4	...
<b>Demographic Indicators</b>					
Population Growth Rate - Total (%)	2011	2,2	2,3	1,3	0,4
Population Growth Rate - Urban (%)	2011	3,5	3,4	2,3	0,7
Population < 15 years (%)	2011	40,5	40,4	28,7	16,5
Population >= 65 years (%)	2011	3,5	3,4	5,9	16,2
Dependency Ratio (%)	2011	78,6	78,1	53,0	48,6
Sex Ratio (per 100 female)	2011	99,7	99,5	103,4	94,6
Female Population 15-49 years (% of total population)	2011	24,3	24,4	26,2	23,6
Life Expectancy at Birth - Total (years)	2011	51,6	57,7	77,7	67,0
Life Expectancy at Birth - Female (years)	2011	52,6	58,9	68,9	81,1
Crude Birth Rate (per 1,000)	2011	35,7	34,5	21,1	11,4
Crude Death Rate (per 1,000)	2011	13,9	11,1	7,8	10,1
Infant Mortality Rate (per 1,000)	2011	88,0	76,0	44,7	5,4
Child Mortality Rate (per 1,000)	2011	141,2	119,5	67,8	7,8
Total Fertility Rate (per woman)	2011	4,4	4,4	2,6	1,7
Maternal Mortality Rate (per 100,000)	2010	690,0	530,7	230,0	13,7
Women Using Contraception (%)	2007-09	29,2	28,6	61,2	72,4
<b>Health &amp; Nutrition Indicators</b>					
Physicians (per 100,000 people)	2007-09	19,0	57,8	112,0	276,2
Nurses (per 100,000 people)*	2007-09	160,0	134,7	186,8	708,2
Births attended by Trained Health Personnel (%)	2007-09	63,0	53,7	65,3	...
Access to Safe Water (% of Population)	2010	77,0	65,7	86,3	99,5
Access to Health Services (% of Population)	2007-09	...	65,2	80,0	100,0
Access to Sanitation (% of Population)	2010	49,0	39,8	56,1	99,9
Percent of Adults (aged 15-49) Living with HIV/AIDS	2009	5,3	4,3	0,9	0,3
Incidence of Tuberculosis (per 100,000)	2010	177,0	241,9	150,0	14,0
Child Immunization Against Tuberculosis (%)	2010	96,0	85,5	95,4	...
Child Immunization Against Measles (%)	2010	79,0	78,5	84,3	93,4
Underweight Children (% of children under 5 years)	2007-09	16,6	30,9	17,9	...
Daily Calorie Supply per Capita	2007	2 269	2 462	2 675	3 285
Public Expenditure on Health (as % of GDP)	2009	1,6	2,4	2,9	7,4
<b>Education Indicators</b>					
Gross Enrolment Ratio (%)					
Primary School - Total	2010	119,8	101,4	107,8	101,4
Primary School - Female	2010	110,9	97,6	105,6	101,3
Secondary School - Total	2010	42,2	47,5	64,0	100,2
Secondary School - Female	2010	38,4	44,3	62,6	99,8
Primary School Female Teaching Staff (% of Total)	2010	48,0	44,3	60,7	81,7
Adult literacy Rate - Total (%)	2007	70,7	67,0	80,3	98,4
Adult literacy Rate - Male (%)	2007	78,9	75,8	86,0	98,7
Adult literacy Rate - Female (%)	2007	63,0	58,3	74,9	98,1
Percentage of GDP Spent on Education	2010	3,5	4,6	4,1	5,1
<b>Environmental Indicators</b>					
Land Use (Arable Land as % of Total Land Area)	2009	12,6	7,6	10,7	10,8
Annual Rate of Deforestation (%)	2007-09	0,9	0,6	0,4	-0,2
Forest (as % of Total Land Area)	2010	42,1	23,0	28,7	40,4
Per Capita CO2 Emissions (metric tons)	2009	0,4	1,1	2,9	12,5



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

last update : June 2012

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

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



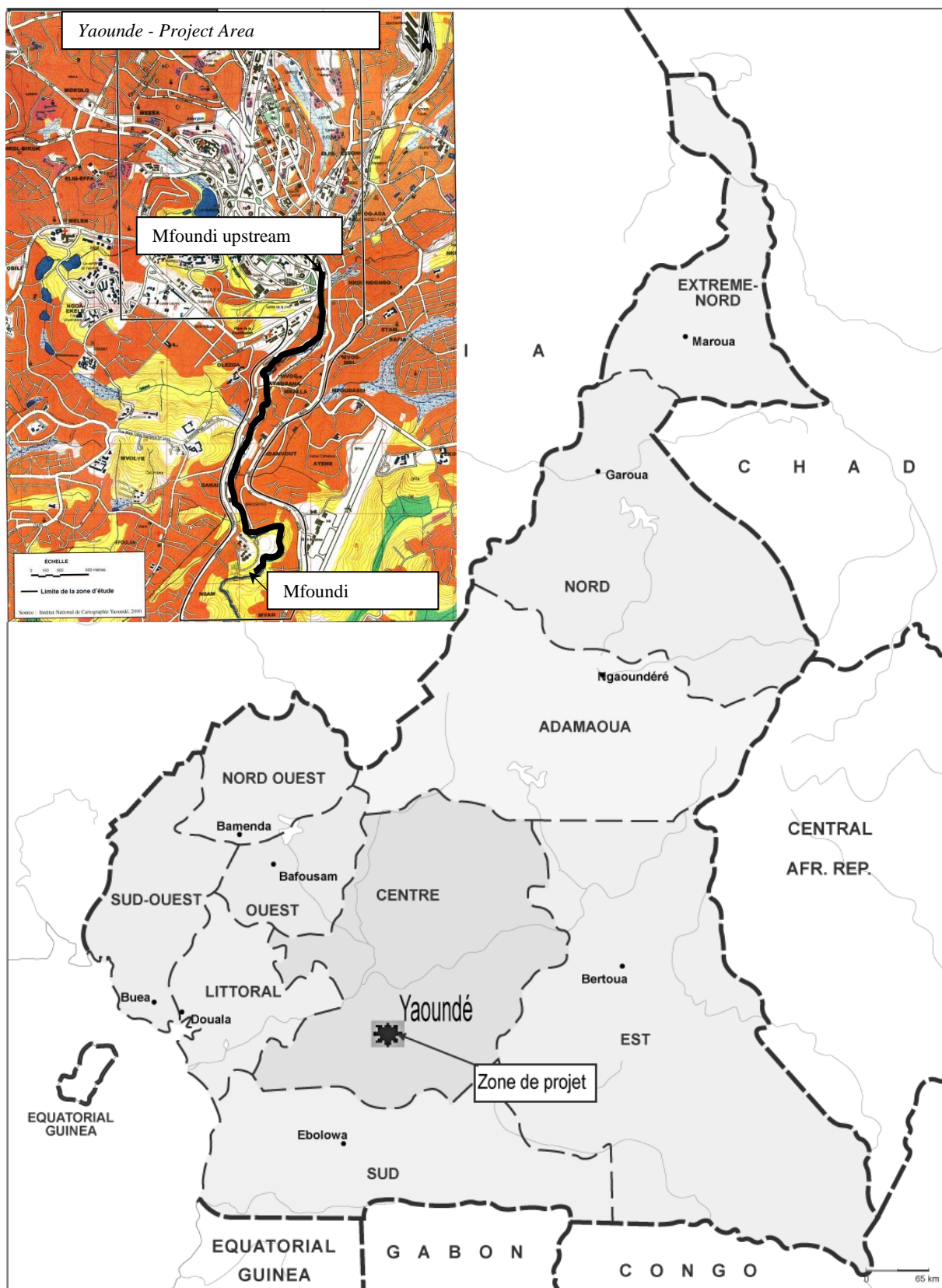
Table of AfDB Current Portfolio in Cameroon

Portefeuille Courant du Cameroun												
N°	Div.	Titre Projet	Code SAP	Statut	Task Manager	Source Financement	Secteur	Date approbation	Age (année)	Montant approuvé (UC)	Décaissé au 03/04/13	Taux décais.
1	CBFF	PROJET DE RÉHABILITATION ET DE GESTION D	P-CM-C00-035	APVD	TSHIMBALANGA Mbombo	CBFF	Environnement	26/04/12	-112,4	51 834,59	0,00	0,00
2	OITC1	AMÉNAGEMENT ROUTE NUMBA-BACHUO AKAGBE	P-CM-DB0-009	OnGo	N'GUESSAN Joseph Kouassi	ADF loan	Transport	15/11/06	-106,9	44 700 000,00	32 145 427,26	71,91
3	OITC1	ETUDE ROUTE BATCHENGA-YOKO-TIBATI-NGAOUN	P-CM-DB0-010	OnGo	N'GUESSAN Joseph Kouassi	ADF loan	Transport	14/10/09	-109,9	3 360 000,00	494 340,04	14,71
4	OITC1	PROJET DE ROUTE KUMBA-MAMFE	P-CM-DB0-011	APVD	N'GUESSAN Joseph Kouassi	ADF loan	Transport	21/11/12	-113,0	47 260 000,00	0,00	0,00
5	OITC1	CAMEROUN - FACILITATION DU TRANSPORT	P-Z1-DB0-045	OnGo	N'GUESSAN Joseph Kouassi	ADF loan	Transport	05/07/07	-107,6	48 000 000,00	38 686 545,97	80,60
6	OITC1	CAMEROUN/GONGO: ROUTE KETTA-DJOUM	P-Z1-DB0-048	OnGo	KARANGA Augustin	ADF loan	Transport	25/09/09	-109,8	59 270 000,00	15 502 088,59	26,16
7	ONEC1	RENFORCEMENT EXTENSION RESEAUX ELECTRIQ	P-CM-FA0-003	OnGo	NGUEMA-OLLO Jean-Baptiste	ADF loan	Power	15/09/10	-110,8	31 640 000,00	126 234,79	0,40
8	ONEC1	AMENAGEMENT HYDROELECTRIQUE LOM PANGAR	P-CM-FA0-006	OnGo	NGUEMA-OLLO Jean-Baptiste	ADF loan	Power	10/11/11	-111,9	44 930 000,00	0,00	0,00
9	OPSM4	GOWETA AND CAPACITY BULIDNG(FAPA)	P-CM-HAB-001	OnGo	MACHARIA Lilian Wanjiru	FFPSA	Finance	27/12/07	-108,1	353 039,13	353 039,13	100,00
10	OPSM5	CHANTIER NAVAL ET INDUS DU CAMEROUN CNIC	P-CM-D00-004	OnGo	TRAORE Adama	ADB loan	Transport	12/12/02	-103,0	30 241 465,45	12 600 652,79	41,67
11	OPSM5	PROGRAMME D'INVESTISSEMENT AES SONEL	P-CM-FA0-002	OnGo	TIHNGANG Joseph Mbi	ADB loan	Power	10/05/06	-106,4	51 317 139,92	51 317 139,92	100,00
12	OPSM5	KRIBI POWER PROJECT	P-CM-FA0-005	OnGo	SYLLA RUMSEY Fatoumata	ADB loan	Power	15/07/11	-111,6	25 658 569,96	21 185 087,24	82,57
13	OPSM5	DIBAMBA POWER PROJECT	P-CM-FAA-002	OnGo	SYLLA RUMSEY Fatoumata	ADB loan	Power	28/04/10	-110,4	19 048 922,34	19 048 922,34	100,00
14	OSGE1	PROJET DE MODERNISATION DU CADASTRE	P-CM-KF0-003	OnGo	EKPO Alain Fabrice	ADF loan	Multi-Sector	15/11/10	-111,0	7 000 000,00	483 913,13	6,91
15	OWAS1	PROJET D'AEPA EN MILIEU SEMI URBAIN	P-CM-E00-002	OnGo	HORUGAVYE Patrice	ADF loan	Water Sup/Sanit	28/01/09	-109,2	40 000 000,00	1 589 104,68	3,97
16	OWAS1	AEPA EN MILIEU RURAL	P-CM-E00-006	OnGo	HORUGAVYE Patrice	ADF loan	Water Sup/Sanit	12/05/10	-110,4	10 000 000,00	1 286 789,59	12,87
				OnGo	HORUGAVYE Patrice	RWSSI TF	Water Sup/Sanit	12/05/10	-110,4	4 575 778,31	1 032 331,32	22,56
										467 406 749,70	195 851 616,79	41,90

## Key Related Projects Financed by the Bank and other Development Partners in the Country

Priority Thrusts of the GESP	Sector Focus Areas	Project	Cost Estimates	Period	Stakeholders
Sanitation infrastructure development	<ul style="list-style-type: none"> <li>- Drinking water</li> <li>- Stormwater drainage</li> <li>- Sewage treatment (sludge management)</li> </ul>	<b>Urban and Water Development Support Project:</b> This project allowed for the construction of roads with stormwater canals in some towns, including Yaounde. It also helped to extend the water network in these towns	USD 108.7 million	2007-2013	World Bank
		<b>Sanitation Project in Cameroon.</b> It covers both urban and rural areas, with 60% of the resources allocated to urban areas. It involves, in particular, sludge management infrastructure development, awareness campaigns and updating of the Yaounde Sanitation Master Plan	USD 30 million	201-2015	World Bank
		Yaoundé Sanitation Project (PADY). This project allowed for: (i) construction of the Mfoundi canal over 3.5 km, (ii) organization of cleaning operations for underground collectors in the Yaounde city centre, (iii) support to garbage pre-collection associations, and (iv) hygiene awareness campaigns.	UA 25.6 million	2006-2012	African Development Bank

**Administrative Map and Project Area**



This map was provided by the staff of the AfDB Group exclusively for use by the readers of the report to which it is attached. The names used and the borders shown do not imply on the part of the AfDB Group and its members any judgement concerning the legal status of a territory nor any approval or acceptance of these borders.