

AFRICAN DEVELOPMENT BANK



ETHIOPIA

FOUR TOWNS WATER SUPPLY AND SANITATION IMPROVEMENT PROGRAM

OWAS DEPARTMENT

December 2015

TABLE OF CONTENTS

PROJECT SUMMARY	IV
RESULTS BASED LOGICAL FRAMEWORK	V
I. STRATEGIC THRUST & RATIONALE	1
1.1. PROJECT LINKAGES WITH COUNTRY STRATEGY AND OBJECTIVES	1
1.2. RATIONALE FOR BANK’S INVOLVEMENT	2
1.3. DONOR COORDINATION	3
II. PROJECT DESCRIPTION	4
2.1 DETAILED PROJECT COMPONENTS	4
2.2 TECHNICAL SOLUTION RETAINED AND OTHER ALTERNATIVES EXPLORED	4
2.3 PROGRAM TYPE	5
2.4 PROJECT COST AND FINANCING ARRANGEMENTS	5
2.5 PROJECT’S TARGET AREA AND POPULATION	7
2.6 PARTICIPATORY PROCESS FOR PROJECT IDENTIFICATION, DESIGN AND IMPLEMENTATION	7
2.7 BANK GROUP EXPERIENCE, LESSONS REFLECTED IN PROJECT DESIGN	9
2.8 KEY PERFORMANCE INDICATORS	9
III. PROJECT FEASIBILITY	9
3.1 FINANCIAL & ECONOMIC PERFORMANCE.....	9
3.2 ENVIRONMENTAL AND SOCIAL IMPACTS.....	10
IV. IMPLEMENTATION	13
4.1 IMPLEMENTATION ARRANGEMENTS	13
4.2 MONITORING	15
4.3 GOVERNANCE	16
4.4 SUSTAINABILITY	16
4.5 RISK MANAGEMENT	17
4.6 KNOWLEDGE BUILDING	18
V. LEGAL INSTRUMENTS AND AUTHORITY	18
5.1 LEGAL INSTRUMENT	18
5.2 CONDITIONS ASSOCIATED WITH BANK’S INTERVENTION	19
5.3 COMPLIANCE WITH BANK POLICIES.....	20
VI. RECOMMENDATION.....	20
APPENDIX 1: MAP OF ETHIOPIA AND PROGRAM LOCATIO	
APPENDIX 2: ETHIOPIA’S COMPARATIVE SOCIO-ECONOMIC INDICATORS	
APPENDIX 3: TABLE OF ADB’S PORTFOLIO IN THE COUNTRY	
APPENDIX 4: SIMILAR PROJECTS FINANCED BY THE BANK AND OTHER DEVELOPMENT	
PARTNERS IN THE COUNTRY	
APPENDIX V – JUSTIFICTION FOR FINANCING MORE THAN 50% OF COST BY AfDB	

Currency Equivalents

May 2015

1UA	=	US Dollar (USD)	1.40642
1UA	=	ETB	28.74046
1USD	=	ETB	20.43519

FISCAL YEAR:

08 July – 07 July

WEIGHTS AND MEASURES

1 metric tonne	=	2204 pounds (lbs)
1 kilogramme (kg)	=	2.200 pounds (lbs)
1 metre (m)	=	3.28 feet (ft)
1 millimetre (mm)	=	0.03937 inch (“)
1 kilometre (km)	=	0.62 mile
1 hectare (ha)	=	2.471 acres

ACRONYMS AND ABBREVIATIONS

ADB	African Development Bank	MDG	Millennium Development Goal
ADF	African Development Fund	MoE	Ministry of Education
AFD	Agence Francaise du Developpment	MoFED	Ministry of Finance & Economic Development
CIFA	Country Integrated Fiduciary Assessment	MoH	Ministry of Health
CPAR	Country Procurement Assessment & Review	MOU	Memorandum of Understanding
CPI	Corruption Perceptions Index	MoWIE	Ministry of Water, Irrigation and Energy
CPPR	Country Portfolio Performance Review	MSF	Multi-stakeholder Forum
CRGE	Climate Resilience Green Economy	M&E	Monitoring and evaluation
CSP	Country Strategy Paper	NAMA	National Appropriate Mitigation Measure
CSO	Civil Society Organisations	NBE	National Bank of Ethiopia
DAG	Development Assistance Group	NCB	National Competitive Bidding
DFID	UK, Department for International Development	NPP	National Procurement Procedure
DP	Development Partners	NAMA	Nationally Appropriate Mitigation Action
EA	Executing Agency	NGO	Non-Governmental Organisation
EIB	European Investment Bank	NRW	Non-Revenue Water
EIRR	Economic Internal Rate of Return	OFAG	Office of the Federal Auditor General
ENPV	Economic Net Present Value	OWNP	One WaSH National Program
ESAP	Environmental and Social Action Plan	PAP	Project Affected Person
ESMF	Environmental and Social Management Framework	PBS	Protection of Basic Services
ESMP	Environmental and Social Management Plan	PEFA	Public Expenditure and Financial Accountability
ETB	Ethiopian BIRR	PFM	Public Financial Management
EU	European Union	PMU	Project Management Unit
FHH	Female Headed Households	RAP	Resettlement Action Plan
FIRR	Financial Internal Rate of Return	RBLF	Result Based Log Framework
FM	Financial Management	RMC	Regional Member Country
FNPV	Financial Net Present Value	RWB	Regional Water Bureau
FPPA	Federal Public Procurement Administration Agency	SESA	Strategic Environmental and Social Assessment
GAP	Global Action Plan	SWG	Sector Working Group
GCI	Global Competitiveness Index	TWB	Town Water Board
GDP	Gross Domestic Product	TWU	Town Water Utility
GGI	Gender Gap Index	UA	Units of Account
GoE	Government of Ethiopia	UAP	Universal Access Program
GTP	Growth and Transformation Plan	USD	United States of America Dollars
HDI	Human Development Index	Woreda	District (One of the tiers of Government in the Borrower's Administrative System pursuant to relevant Regional Legislation)
JAS	Joint Assistance Strategy	WRDF	Water Resources Developement Fund
JMP	Joint Monitoring Program	WTWG	Water Technical Working Group
JTR	Joint Technical Review	4TWSSIP	Four Towns Water Supply & Sanitation Improvement Program
IA	Imple menting Agency		
IBEX	Integrated Budget and Expenditure Management		
ICB	International Competitive Bidding		
IDC	Italian Development Cooperation		
IMF	International Monetary Fund		
IFMIS	Integrated Financial Management Information Systems		
IIGA	Ibrahim Index of African Governance		
Kebele	The lowest tier of Government in the Borrower's administrative System pursuant to the relevant Regional Legislation		

LOAN INFORMATION

Client's Information

BORROWER: **FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA (GoE)**

EXECUTING AGENCY: **MINISTRY OF WATER, IRRIGATION AND ENERGY
WATER RESOURCES DEVELOPMENT FUND (WRDF)**

Financing plan

Source	Amount USD Million	Instrument
ADB	76.11 US\$	Loan
GoE	37.84 US\$	GoE Budget
TOTAL COST	113.95US\$	

ADB's Key Financing Information

Loan Currency	United States Dollar (USD)
Interest type	Enhanced variable spread Loan (floating rate with option to fix)
Interest rate spread	Funding margin+60 bps lending spread
Commitment fee	None
Other fees	None
Repayment	Semi-Annual
Tenor	20 years
Grace period	5 Years
FIRR (base case)	11.00% (FNPV ETB 140 million)
EIRR (base case)	44.7% (ENPV ETB 8.6 billion)

Timeframe - Main Milestones (expected)

Concept Note Approval	April 2015
Project Appraisal Mission	May 2015
Project approval	December 2015
Effectiveness	April 2016
Completion	December 2019
Closing Date	December 2020
Last repayment	December 2036

PROJECT SUMMARY

1. PROJECT OVERVIEW: The Four Towns Water Supply and Sanitation Improvement Program (4TWSSIP) aims to improve the health and socio economic development of the residents of four beneficiary towns through increased access to sustainable water supply and sanitation services and improvement in service delivery. The four beneficiary towns are Adama in Oromiya Regional State, Adwa in Tigray Regional State, Bichena in Amhara Regional State and Gode in Somali Regional State of Ethiopia.

2. The Program's main outcomes include (i) increase number of people with access to water and improved sanitation; (ii) improvement in utility revenue collection; and (iii) improvement in continuity of service. At output level, it will result in new infrastructure in terms of constructed pipeline, storage capacity, treatment capacity, water production, public water kiosks, public latrines, number of utility staff (30% being women) trained, microenterprises created and staff trained (50% women). The program is planned to be implemented over 48 months beginning in January 2016 at a cost of US\$ 113.95 million.

3. At completion in 2020, the program will benefit 635,000 people directly in the beneficiary towns from improved services and an additional 227,000 people indirectly, whose administrative, social and economic needs depend on these towns. The Program will have a direct positive health benefit, enabling improved education opportunities for women and school age children, productive/livelihood opportunities created and employment through expanded service and improved private sector activities. All of these will be made possible by the improved service coverage in the program intervention areas. The town water utilities (TWU) are the major beneficiaries of the institutional capacity strengthening interventions, which will be co-ordinated with the other ongoing One WaSH National Program (OWNP) activities.

4. NEEDS ASSESSMENT: Access is currently estimated at an average of 53% for water supply and 76% for sanitation in the project beneficiary towns in accordance with the standard definition of coverage under the OWP. This is lower than the national average of 84.5% coverage for urban water supply by Government of Ethiopia (GoE) standards. The situation is much worse in Gode town which has below 7% access for water supply and presents one of the limiting factors for the improvement of social services and health of the population as well as economic opportunities and growth in multiple sectors. Adama, a transport hub on the route to the port of Djibouti, with a population of 440,000, also faces acute shortage of water (51% access), constraining its development in various sectors such as industry, livestock, and tourism. All of the beneficiary towns are growth centres and hence the proposed interventions will have a significant impact on economic development and unleashing the potential for private sector involvement in development around these towns.

5. BANK'S ADDED VALUE: The African Development Bank's intervention in this program is a continuation of the Bank's traditional support to the sector in Ethiopia. This program will complement the Bank's contribution to the rural component of OWP and expand its dialogue and support to the urban sector. The Bank is uniquely positioned to leverage and support the country's thrust towards cost recovery in urban interventions, hence enhancing financial sustainability.

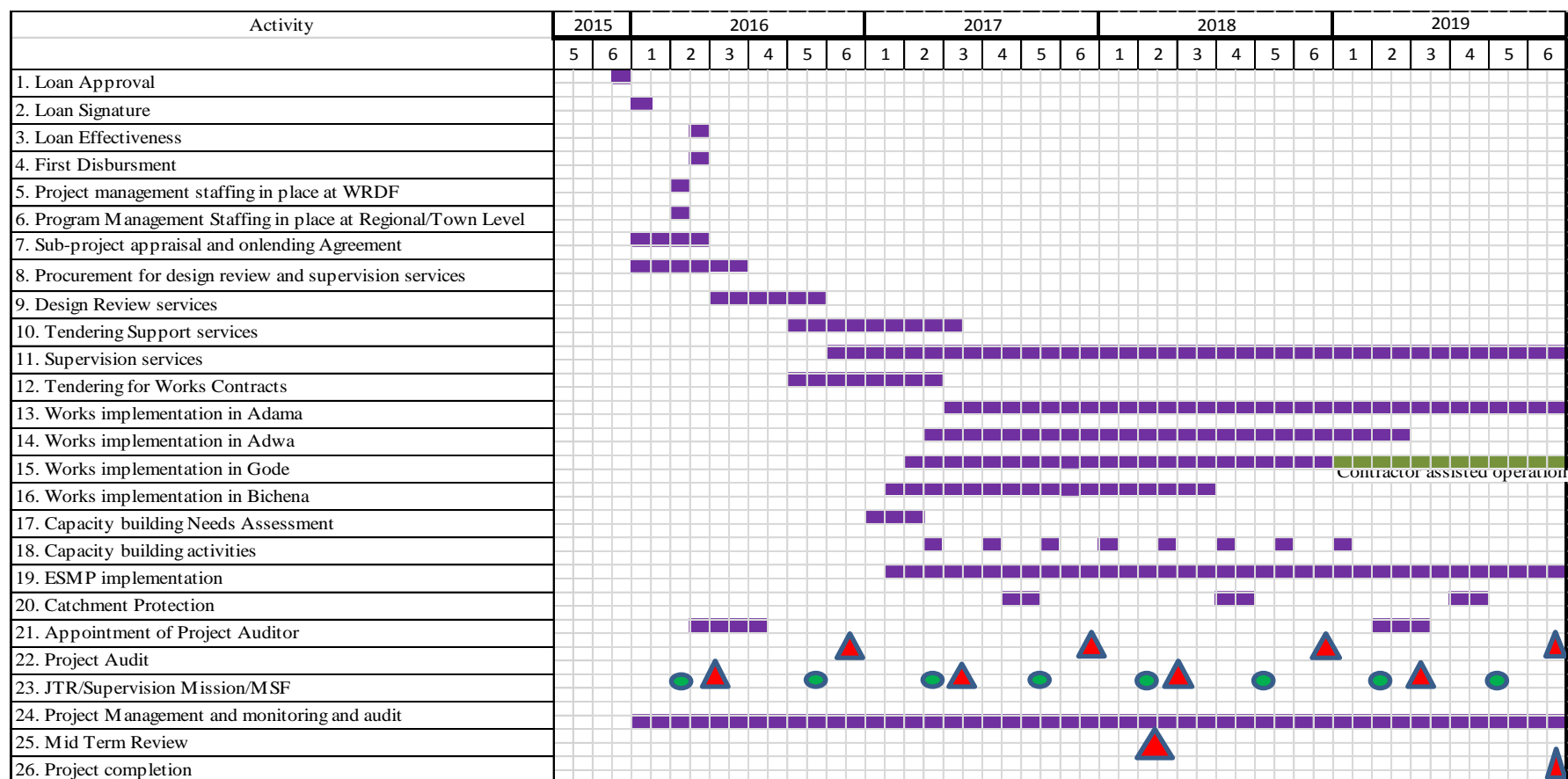
6. KNOWLEDGE MANAGEMENT: The implementation of this program will generate vital knowledge in financing of urban water supply, with emphasis on cost recovery and financial viability, strengthen the capacity of WRDF as a critical institution in the sector. The program will also benefit from the overall knowledge to be generated from the implementation of the OWP and strengthened M&E systems and the dialogue through the Water Sector Working Group and the review mechanisms. The Joint Technical Review (JTR) and Multi-Stakeholder Forum (MSF) are key forums for dissemination and sharing of experience and knowledge to improve sector coordination within government and with development partners.

RESULTS BASED LOGICAL FRAMEWORK

Country and Project Name: ETHIOPIA FOUR TOWNS WATER SUPPLY AND SANITATION IMPROVEMENT PROGRAM: Purpose of the Project: improve the health and socio economic development of the population of the four beneficiary towns of Adama, Bichena, Adwa and Gode towns through increased access to sustainable water supply and sanitation services and improvement in service delivery.

RESULTS CHAIN		PERFORMANCE INDICATORS			MEANS OF VERIFICATION	RISKS/MITIGATION MEASURES		
		Indicator (including CSI)	Baseline (2015)	Target (2020)				
IMPACT	1. Improved health and improved livelihoods of communities	1.1. % of population below poverty line 1.2. Under-5 mortality rate (no/1000)	22% (2015) 64 (2014)	16% 30	CSA, Sector M&E data, Endline survey, utility report			
	1. Increased access to safe water supply and improved sanitation 2. Improved quality of service 3. Improved utility efficiency	1.1 % of people with access to safe water supply in the 4 towns (% are female) 1.2 % of people with access to sanitation facilities in the 4 towns (% are female) 2.1 % of population with continuous service for 24 hrs for 7 days in the 4 towns 3.1 % improvement in revenue collection efficiency in the 4 towns	53% (2014) 76% (2014) 26% (2014) 0	100%, 50% fem 100%, 50% fem 90% 18%				
OUTCOMES	<u>Water and Sanitation Infrastructure</u> 1. Water supply systems constructed 2. Improved sanitation facilities and better hygiene	1.1 Additional volume of potable water developed – m³/day 1.2 No. of Boreholes drilled 1.3 Km of pipeline supplied and laid 1.4 Additional storage reservoirs built - m³ 1.5 No. of water kiosks constructed 2.1 No. of sex disaggregated public sanitation built 2.2.No. of Improved faecal sludge disposal constructed	0 0 0 0 0 0 0	144,296 28 361 55,550 57 30 4			Utility report, project progress report, supervision reports	adjustment and improvement of revenue efficiency. Risk 2: Limited capacity and skill to operate and maintain. Mitigation: capacity strengthened through OWNP and specific TA under the program. Risk 3: Implementation challenges due to varying size of towns and regional locations Mitigation: Use of country system and special TA within Utilities.
	<u>Utility Efficiency and Capacity Development</u> 1. Strengthened utility operation 2. Enhanced private sector participation and regulatory environment improved 3. Gender mainstreamed in the utility business	1.1 utility business plans developed or updated 1.2 No. of utility staff trained, of which -% are female 1.3 % of utilities with performance contracts 2.1 No. of people in microenterprise and community members trained, % female 2.2 No. micro-operators formed and trained (stand pipe/san facilities), %female 2.3 Management contracts in place for water kiosk management and public sanitation facilities, % managed by women 3.1 % of utilities with gender mainstreaming guidelines 3.2 % of new yard or house connection for vulnerable HHs (FHHs, poor...)	0 0 0 0 0 0 0 0	yes by 2018 100 by 2018, 30%fem 4 by 2018 100 by 2018, 50% fem fem 15 by 2019, 50% fem 15 by 2019, 50% fem 100% by 2018 15%				
	<u>Environmental Management</u> 1. Implementation of ESMF/ESMP 2. Implementation of adaptation measures	1.1 100% execution of RAP and ESMP Impelemented 2.1 Catchment management plans in place and implemented 2.2 ground water monitoring procedure and infrastructure in place	0 0 0	Yes by 2016 Yes by 2018 Yes by 2018				
	ACTIVITIES				INPUTS			
	<u>Component 1: Development of Water and Sanitation Infrastructure:</u> Construction of water intakes, boreholes conveyance system, reservoirs, treatment, distribution system, public toilets.				Total Program Cost – US\$ 113.95 million ADB Loan – US\$ 76.11 million GoE – US\$ 37.84 million			
	<u>Component 2: Institutional Capacity Development:</u> need assessments, business plans development, trainings/seminars, manuals/systems development, equipment, etc.							
	Component 3: Environmental Management: implementation of ESMPs, compensation of the project affected people, catchment protection activities							
	<u>Component 4: Program Management:</u> program implementation technical assistance, monitoring and supervision, baseline and endline surveys, auditing, etc							

PROJECT IMPLEMENTATION SCHEDULE



REPORT AND RECOMMENDATION OF THE MANAGEMENT TO THE BOARD OF DIRECTORS ON A PROPOSED LOAN TO ETHIOPIA FOR THE FOUR TOWNS WATER SUPPLY AND SANITATION IMPROVEMENT PROGRAM

Management submits the following Report and Recommendations on a proposed ADB loan not exceeding US\$ 76.11 million (estimated at UA 54 million) to finance the *Four Towns Water Supply and Sanitation Improvement Program*.

I. STRATEGIC THRUST & RATIONALE

1.1. Project Linkages with Country Strategy and Objectives

1.1.1 Ethiopia has made progress in all spheres of development and achieved a stable overall macroeconomic performance and faster growth during the last ten years, which was a clear break from its past history. Its Growth and Transformation Plan (GTP) outlines equitable and inclusive development and envisions the achievement of universal water supply and sanitation services to its citizens by 2020. The GoE's key development objective, outlined in its GTP; 2011-15, is to achieve inclusive, accelerated and sustained economic growth and to eradicate poverty. Water is one of the nine priority sectors in the GTP. The sector is also underpinned through sound policy, legal and strategic framework which includes the National Water Resource Management Policy (1998); Water Sector Strategy (2000); Water and Sanitation Access Plan (UAP) (2005); Climate-Resilient Green Economy (CRGE) Strategy (2011); and the OOWNP which was adopted in 2013 as the new policy framework document that describes the national strategy and action plan for achieving WaSH GTP targets. The special risk note was undertaken in 2015 and this program is within headroom.

1.1.2 In the program beneficiary towns of Adama, Adwa, Bichena and Gode, access to water supply stands at an average of 53% (this computed on GOE standards) and it is a significant factor limiting development and affecting social and health status of the population. This is much below the national average. According to the GTP (4th year) performance report for 2013/14, access to potable water supply reached 76.7% nationally (against 57% in JMP¹), disaggregated at 75.5% for rural and 84.5% for urban areas. The preparation of GTP 2 is in progress covering the period 2015/16 to 2019/20 and it will focus on sustained human development with a clear target of achieving universal coverage for water supply and sanitation by the end of the period. As a result, there is going to be significant emphasis on the sector.

1.1.3 The Country Strategy Paper (CSP) (2011 – 2015) for Ethiopia has two principal pillars: (1) Infrastructure Development - support for improved access to infrastructure, with focus on Energy, Water and Sanitation and Transport and (2) Governance and Accountability. The proposed program is anchored in the first pillar, with contribution to the second pillar as well through its targeted improvements in participatory water governance structures and processes. Furthermore, the program is aligned to the Bank's Ten Year Strategy 2012-2022 through its contribution to the economic infrastructure development through the expansion of the water and sanitation infrastructure, which is a key determinant and input for private sector development around urban growth centres in Ethiopia. The program's focus on service delivery through improvement in utility efficiency and sustainability is well aligned with the objectives of inclusive growth by supporting development and job creation, especially for women and youth, and by prioritizing the specific needs in the underserved peri-urban areas. The program is supported by the Bank's Integrated Water Resource Management (2000) and Urban Development Strategy (2011). The project is also aligned

¹ Joint Monitoring Report is a global report for monitoring progress in water supply and sanitation and prepared by WHO and UNICEF jointly.

with the Bank Gender Strategy (2014 – 2018), as gender equality is an important aspect of Africa’s transition to green growth, the availability of clean, safe and adequate water will open new economic opportunities for women and men.

1.2. Rationale for Bank’s Involvement

1.2.1. Ethiopia has made modest improvements during the last decade in access to water supply and sanitation services². According to the 2014 JMP report, it is on track to meet the MDG target for water supply, but lagging for sanitation owing to the greater proportion of people living in rural areas. It is currently implementing the OOWNP which aims at improving access to water supply and sanitation in both urban and rural areas with the aim of achieving universal access (definition of “improved” different from that of JMP). Multiple development partners are supporting the program (estimated at US\$2.4 billion) and the Bank is currently contributing to the OOWNP’s rural component. In light of the huge financing requirements for expansion of services in urban areas, there is a strong justification for the Bank to complement its existing engagement with financing for the urban sector.

1.2.2. The situation in the four program beneficiary towns is acute. For instance access to water supply in Gode with a population of 57,000 is below 7% and it is one of the limiting factors for the improvement of social services and health of the population as well as economic opportunities and growth in multiple sectors. Adama with an estimated population of 440,000 (inclusive of approximately 89,000 from adjacent rural areas) also faces acute water shortages, constraining its development in various sectors such as industry, livestock, and tourism development. It is also a transport hub for the country, as it is the country’s main gateway to the port of Djibouti and connects several parts of the country³. Investing in the sector in these growth urban centres has significant implications for economic development, including enhancement of private sector growth. Adwa with a population of 65,000 is fast growing with expansion of service industry and a growing number of other industries with a major one being textile. Adwa could not meet the demand from industry expansion and adjacent towns and villages and hence rationed water. Bichena town with a population of 57,000 including about 28,000 immediate rural kebele is also showing signs of rapid growth with improvement of road connectivity recently. Continuity of water supply is a major challenge in Bichena. In all the towns water is a limiting factor for development and therefore the Bank seeks to support GoE to grow these areas.

1.2.3. The Bank has financed multiple urban water supply and sanitation projects in the RMCs including Ethiopia. It financed the Harar Water Supply and Sanitation Project in Ethiopia in the recent past. In light of this experience and recognised comparative advantage and its commitment to support RMCs, the GoE requested the Bank for assistance to scale up its investment for water supply and sanitation service delivery. In this regard the Bank would use its leverage and position to further coordinate and collaborate closely with the other DPs actively involved in the sector.

² WHO/UNICEF Joint Monitoring Report – water supply increased from 13% in 1990 to 57% in 2015; Sanitation increased from 2% in 1990 to 28% in 2015

³ Adama is connected with expressway (toll road) recently with Addis Ababa and connection with railway is about to finish. The Mojo-Hawassa express way to be connected to the Addis-Adama expressway which its construction is about to begin will further boost Adama’s economic prospect.

1.3. Donor Coordination

Sector or subsector*	Size		
	GDP	Budget	Labor Force
Water Sector	N/A	5% (2015/16)**	NA
Water Supply and Sanitation Resource mobilisation in million US (2013-2015)**			
Donors	644 – 40%	<div><div>ADB – 2% WB – 14% UNICEF – 3% China – 4% DFID – 3% Others**** – 14%</div></div>	
Government	989 – 60%		
Total	1,633		
Level of Donor Coordination			
Existence of Thematic Working Groups			Yes
Existence of SWAPs or Integrated Sector Approaches			Yes
ADB's Involvement in donors coordination***			Active

* as most appropriate ** Years [yy1 to yy2] *** for this sector or sub-sector

****Japan, Finland, Italy, Netherlands, AFD, EU, EIB, USAID, Kuwait & NGOs

1.3.1. Ethiopia has a vibrant sector coordination mechanism in the country led by the government. At national level, the Development Assistance Group (DAG), which comprises of 26 multilateral and bilateral partners (including the Bank), serves as the central body for the coordination of the activities of development partners (DPs) providing development assistance within the Paris Declaration principles. At the thematic level, the water and sanitation subsector is coordinated through the Water Technical Working Group (WTWG), a sub-group of the DAG for the sector. It meets monthly to: (i) improve harmonization and alignment of donor activities in WaSH; and, (ii) support the GoE in the effective implementation of sector activities, including the OWNPN.

1.3.2. The Development Partners (DPs) actively participating in the coordination mechanism include the AfDB, the World Bank (WB), United Kingdom Department for International Development (DFID), UNICEF, European Union (EU), Japan International Cooperation Agency (JICA), Italy, United States Agency for International Development (USAID), French Development Agency (AFD), Netherlands and Finland. China is also a significant player in terms of financing. The support by the DPs to the OWNPN uses various instruments including their support through the consolidated WaSH Account, stand alone projects and also support through NGOs. The urban water supply and sanitation sector is notably supported by the WB, EU, AFD, EIB, IDC, JICA, and China. GOE is also negotiating with the EIB, AFD and IDC (joint financing) for mobilising EUR 80 million for financing through WRDF. Kuwait Fund also joined the sector through its commitment of US\$20 million for Axum town.

1.3.3. In the spirit of harmonisation, DPs and Government hold semi-annual Joint Technical Review (JTR) missions and an annual Multi Stakeholders Forum (MSF) in which there is emphasis on policy, strategy and progress tracking including key findings from JTRs.

II. PROJECT DESCRIPTION

2.1 Detailed Project Components

2.1.1 The Program Developmental Objective is to contribute to the improvement of the health and socio-economic development of the population of the four beneficiary towns through increased access to sustainable water supply and sanitation services and improvement in the quality of service delivery. The program will benefit a total population of 635,000 by the end of 2020 when completed.

Table 2.1: Project components

Nr.	Component name	Est. cost (million US\$)	Component description
1	Water Supply and Sanitation Infrastructure	103.41 (70.97)	Water diversion or intake structures, conveyance/transmission/distributions systems (361km), drilling and equipping boreholes (28), service reservoirs (55,506m ³), pumping stations, water treatment systems with overall water production capacity of 144,296m ³ and water kiosks (57). For sanitation it will cover improvement of faecal sludge disposal (4) and public latrins (30)
2.	Utility Efficiency and Capacity Development	3.3 (2.8)	Institutional and capacity assessments; strategic business plan development; Cost of service and Tariff assessment and development of procedures; strengthening of billing, collection, and financial management process and procedure; Social and gender inclusion policy development; Customer care protocols developed; trainings/seminars to water board, utility staff, water vendors, water forums, microenterprises and provision of basic equipment for improving utility efficiency such as billing systems, leak detection as appropriate.
3.	Environmental Management	3.74 (0.16)	Compensation of all project affected people, implementation of ESMF/ESMPs, implementation of climate change adaption measures including catchment protection activities, conservation and water efficiency, and hydrometeorological monitoring (ground and surface water)
4	Project Management	3.50 (2.18)	Technical assistances for program management, program operation costs, baseline validation and project end-line evaluation, and program financial and technical audit.
		113.95 (76.11)	

Note: Figure in bracket are proposed ADB financing.

2.2 Technical Solution Retained and Other Alternatives Explored

2.2.1 The main program sub-project activities have undergone feasibility analysis considering various options for each specific site. These are covered, in greater details, in the specific feasibility studies but included options of using various sources of water, phasing of components, locations or routes, materials and so forth. However the main program development alternatives considered are summarised in table 2.2 below.

Table 2.2: Project alternatives considered and reasons for rejection

Alternative	Brief Description	Reasons for Rejection
Water and Sanitation Project with sewerage and solidwaste infrastructure component	The program has four towns and Adama is the biggest of all with approx. 440,000 inhabitants. There was consideration for including sewerage and solid waste management component.	Though GOE was interested in having a sewerage component to be included, the absence of a detailed feasibility study, the potential large scope of the works and environmental impact were reasons for rejection. It was decided that GOE first complete a detailed feasibility study before consideration of any financing. For the solid waste component, in light of the commercial nature of the financing and cost recovery issues, it was decided to focus on the domain of the water and sewerage utilities.
Joining the pooled fund (CWA) under OOWNP	The OOWNP is for both rural and urban areas. The Bank is already making contribution to OOWNP for the rural component. The program through CWA and it is implemented based on SWAP principles.	The CWA is a consolidated account for rural and urban WASH involving all regions of the country. Whereas this program activity is earmarked for four towns with financing from the ADB credit window in four regions. There is need to design a specific investment program specific to the four towns focused on cost recovery principles and ensuring that there is efficiency in terms of implementation with a focused approach in light of the concentration of the resources and bigger scope of the interventions. These resources will be channelled directly through the WRDF in line with its mandate for financing urban water supply and sanitation interventions.

2.3 Program Type

2.3.1 The program involves multiple projects or interventions to be implemented in four different urban centers located in four regions of Ethiopia. The funding instrument for the proposed intervention is sector investment and it forms part of the OOWNP. The program contributes to the achievement of the OOWNP objectives and its implementation will be aligned to its processes.

2.4 Project Cost and Financing Arrangements

2.4.1 The total cost of the Program for the components defined above is estimated at US\$ 113.95 million, net of taxes and duties, of which US\$ 63.36 million (56%) is in foreign currency and US\$ 50.59 million (44%) in local costs. The table below provides a summary of the Program costs by component. These cost estimates are based on feasibility study conducted and also recent cost estimates for similar activities. The estimates include contingency (physical and price) of 15%.

Table 2.3: Project cost estimates by component

Component	US\$ (million)			UA (million)			%	%
	Foreign	Local	Total	Foreign	Local	Total	Foreign	Total
1. Water and Sanitation Infrastructure	53.95	35.97	89.92	38.36	25.58	63.94	60.0%	90.8%
2. Utility Efficiency and Capacity Development	1.15	1.72	2.87	0.82	1.22	2.04	40.0%	2.9%
3. Environmental Management		3.25	3.25		2.31	2.31		3.2%
4. Program Management		3.05	3.05		2.17	2.17		3.1%
Basic Cost	55.10	43.99	99.09	39.18	31.28	70.46	56%	
Contingency (physical and price)	8.26	6.60	14.86	5.87	4.69	10.56	56%	
Grand Total	63.36	50.59	113.95	45.05	35.97	81.02	56%	

2.4.2 The cost of the program will be financed by an ADB loan and GoE's contribution, as shown in Table 2.4 below. The financing will be US\$ 76.11 million from ADB and GoE will contribute US\$ 37.84 million as counter part contribution to the program activities in cash and in kind on top of tax and duties.

Table 2.4: Sources of financing

Source	US\$ (million)			UA (million)			% Total
	Foreign Currency	Local Currency	Total Amount	Foreign Currency	Local Currency	Total Amount	
ADB	63.36	12.75	76.11	45.05	9.07	54.12	66.8%
GoE		37.84	37.84		26.90	26.90	33.2%
Total	63.37	50.58	113.95	45.05	35.97	81.02	100%

2.4.3 The above cost estimate includes GoE's current commitment of US\$ 17.32 million in the program which presently is ongoing in Adama (ETB 337 million) and Bichena (ETB 17 million). The implementation of these activities, financed by GOE, has started as of January 2015 and it will contribute to the result of this operation as contained in the Project's Logical Framework. These activities are being financed by the respective regional governments and the works contracts were awarded following a competitive process but constitute part of the four towns water supply and sanitation program. This further demonstrates the GoE's commitment to the program. Moreover, the program financing includes additional planned in kind contribution by the regions and WRDF estimated at ETB 30.8 million. The estimate for component 3 for environmental management includes provision for compensation for project affected people, which will be covered by the regional governments contribution. The cost estimates are without taxes and duties, costs which are expected to be covered by counterpart contribution from the Regions.

2.4.4 The overarching OWNPN will require a total of US\$2.4 billion and of this amount US\$ 1.6 billion has been mobilised. The Bank's contribution through the approved lending in 2014 and this operation stands at 9% of the overall financing secured, whereas the Government's contribution is 60% of the financing. The GoE has demonstrated its commitment to development and inclusiveness through its pro-poor sector spending of up to 70% of the country's annual budget which includes investment for water supply and sanitation. This is demonstrated through the fast growth rate witnessed during the last decade. Further information is provided in relation to the justification for the above 50% financing by the ADB loan for the proposed operation in Appendix V.

Table 2.5: Project cost by category of expenditure

Category	US\$ (million)			UA (million)			% foreign
	Foreign Currency	Local Currency	Total	Foreign Currency	Local Currency	Total	
1. Works	47.84	32.23	80.07	34.02	22.92	56.94	60%
2. Goods	4.90	2.10	7.00	3.48	1.49	4.97	70%
3. Services	2.36	5.51	7.87	1.68	3.92	5.60	30%
4. Miscellaneous	-	2.54	2.54		1.81	1.81	0%
5. Operation	-	1.61	1.61		1.14	1.14	0%
Total Base Cost	55.10	43.99	99.09	39.18	31.28	70.46	56%
Contingency (physical & price)	8.26	6.60	14.86	5.87	4.69	10.56	56%
Total Program Cost	63.36	50.59	113.95	45.05	35.97	81.02	56%

Table 2.6: Expenditure by component and source

Component	US\$ (million)			UA (million)		
	GoE	ADB	Total	GoE	ADB	Total
1. Water and Sanitation Infrastructure	28.21	61.71	89.92	20.06	43.88	63.94
2. Utility Efficiency and Capacity Development	0.43	2.44	2.87	0.31	1.73	2.04
3. Environmental Management	3.11	0.14	3.25	2.21	0.10	2.31
4. Program Management	1.16	1.89	3.05	0.82	1.35	2.17
Total Base Costs	32.91	66.18	99.09	23.4	47.06	70.46
Contingencies (Physical and Price)	4.93	9.93	14.86	3.50	7.06	10.56
Total Project Cost	37.84	76.11	113.95	26.90	54.12	81.02

2.4.5 Table 2.7 below shows the disbursement plan during the program implementation period.

Table 2.7: Expenditure schedule by component in million US\$

Component	2016	2017	2018	2019	2020	Total
1. Water and Sanitation Infrastructure	18.61	25.85	41.37	14.48	3.10	103.41
2. Utility Efficiency and Capacity Development	0.17	1.98	0.49	0.66	-	3.30
3. Environmental Management	1.50	1.12	0.56	0.37	0.19	3.74
4. Program Management	1.05	0.70	0.70	0.70	0.35	3.50
Total Projected Disbursement per year	21.33	29.65	43.12	16.21	3.64	113.95

2.5 Project's Target Area and Population

2.5.1 The proposed program is designed to be implemented in four towns located in four administrative regions of the country benefiting 635,000 (>50% women) people directly. These towns are Adama in Oromiya Regional State, Adwa in Tigray Regional State, Bichena in Amhara Regional state and Gode in Ethiopian Somali Regional State. The Program will have a health benefit for the population in these towns, with a spillover in the neighboring towns and villages, through the increased access to clean, safe and adequate water. Women and school going children, who bear the major responsibility for queuing for long hours and transporting water for long distances, will benefit particularly from time savings. The town population will also benefit indirectly from; a) employment/livelihood opportunities to be generated by increased investments; and b) improved social services (health, education) all of which will be made possible by the improved service coverage. It is estimated that an additional 227,000 people (people in neighboring rural villages) will indirectly benefit from the improvement in service in the towns. Government institutions, Non-governmental Organisations (NGOs), private businesses and institutions of higher learning located in the towns are also direct beneficiaries of the service improvement outcome of the program. The town water utilities are the major beneficiaries of the institutional capacity strengthening interventions, which will be co-ordinated with other interventions under the OWNPP and are designed to bring about improved quality and efficiency in their service delivery. The program's emphasis on the promotion of inclusion and transparency in the town water governance is expected to enhance the participation of women and private sector actors in the town water boards and similar structures.

2.6 Participatory Process for Project Identification, Design and Implementation

2.6.1 The program development process entailed extensive consultations with relevant stakeholders including line ministries, town utilities, local administration, CSOs and beneficiaries with diverse social

and economic backgrounds. These consultations were undertaken during the development of the town specific environmental and social impact assessments as well as the preparation and appraisal missions of the Bank and one day stakeholder workshop which covered all the four towns. The discussions with communities were voluntary, gender and inter-generationally inclusive and conducted in good faith. The community meetings highlighted concerns on the benefits and possible impact of the proposed program, compensation, watershed management and other social and environmental safeguard issues which led to definition of component 3 of the proposed program. Discussions of the Bank Missions with zonal, town and village level stakeholders, including NGOs and private sector actors, were focused on the existing service coverage, the extent of the problem, the status of the relevant current interventions and the roles, capacities and gaps of the various stakeholders. The feedback from the consultations has been used to formulate the capacity development aspect of component 2 of the program. Consultation with water users will be an on-going part of the program and will continue throughout the detail design (including ESMP) and implementation of the program. The existing water service users' consultation structure/process in the towns and the villages will be used to facilitate the process and ensure inclusiveness.

2.7 Bank Group Experience, Lessons Reflected in Project Design

2.7.1 The Bank has 17 ongoing operations in Ethiopia with a total value of UA 1.127 billion and the overall performance of the portfolio is highly satisfactory with an average Implementation Progress (IP) rating of 3.1 and Development Objective (DO) of 3.50 as depicted in Appendix 3. Some of the key lessons learnt from the on-going projects under implementation in Ethiopia, as well as those supported by other donors', were taken into account in the formulation and design of the program. The main lessons taken into account include:

- i) The lack of competent project management team coupled with frequent staff turnover and inadequacy in the facilitating institutional structure has in many occasions delayed project implementation. The OWNP will be building capacity at all levels and this will benefit this program and specific targeted program implementation technical assistance will also be provided under the project. Furthermore, the program will hire experienced engineering firms for design review, tendering assistance and supervision of works;
- ii) In Ethiopia's case, strengthening WRDF and channelling resources through it is a necessary condition for scaling up urban water financing and hence for continuously financing the sector. Loans repaid will be utilised to re-finance other projects in the future creating a sustainable financing option. The program therefore channels resources through WRDF in support of the country system.
- iii) Utilities take time to adjust and reach a financially sustainable and viability stage and they need capacity building support to address sustainability of investments. In this regard, the project has included a specific component on utility efficiency and capacity development;
- iv) The weakness in the M&E system and baseline information hampered tracking progress and result, and for this reason the program design will include baseline validation and endline surveys; and
- v) Addressing social and environmental issues has significant bearing on sustainability and impacts on the livelihood of people. The program design has included an environmental management component to address these concerns and strengthen its alignment with green growth.

2.8 Key performance Indicators

2.8.1 The Result Based Logical Framework (RBLF) of the program reflects the performance indicators at input, output and outcome levels. They have been synchronised with the Government's monitoring system for the OWNP. Key among them are (i) at *outcome* level, number of people with access to water

and improved sanitation; improvement in utility revenue collection; and improvement in continuity of service, (ii) at *output* level measures of infrastructure provided in terms of pipelines constructed, storage capacity, treatment capacity, water produced, public water kiosks, public latrines, number of utility staff (gender disaggregated) trained, microenterprises created and staff trained (gender disaggregated). At the beginning of the program, the baseline (disaggregated by gender) for all the indicators will be re-validated. Each utility's performance (technical and commercial) will provide the basis to determine improvements within the utilities. Similarly, the program implementation schedule and procurement plan provide key indicators for monitoring program implementation progress. These will be updated with actual status for evaluation with planned targets.

III. PROJECT FEASIBILITY

3.1 Financial & Economic performance

Table 3.1: Key Financial & Economic Figures

FIRR 11.00% and FNPV ETB 139.6 million (at 10% base case)

EIRR 42.8% and ENPV ETB 8,595 million (at 10% base case)
--

NB: detailed calculations and sensitivity analysis are available in Annex B7

3.1.1 The four beneficiary towns are at differing levels of access to water supply services. The financial and economic analysis has taken into account the assumptions contained in the subsequent paragraphs.

3.1.2 The estimated base total population of the four towns as at 2021 when construction of the interventions is projected to be completed is 659,000 people. Average population growth is estimated at 4% per annum. In addition to the regular population of the four towns, there are residents of adjacent villages who will benefit from the interventions either directly or as day visitors.

3.1.3 The analysis assumes peak average daily per capita water consumption levels of between 60 and 70 litres. Water consumption is estimated to rise as the Utilities expand the reach of the distribution systems. While the ideal situation will be to reach 100% satisfaction of demand in the year the interventions are completed, the process of bringing the distribution closer to unconnected neighbourhoods will be an ongoing exercise. In that light, at the beginning the average per capita daily consumption will be lower than the projected 60 to 70 litres, rising steadily to be within that band approximately 5 years after completion of the program.

3.1.4 Currently, the majority of the utilities are using block tariffs averaging ETB 4/m³ (US\$ 0.20/m³). For financial sustainability of the utilities, and in order to partially comply with the cost recovery principle, a stepped up tariff is assumed, starting with the current block tariff. The tariff is projected to increase at the rate of 3% per annum for the first 10 years, levelling off thereafter. In order to service their loans to WRDF and ensure cost recovery, the utilities are required to undertake regular tariff reviews and the program will assist the utilities to develop their institutional capacity. The GoE is committed to ensuring that the cost recovery policies and expectations are met.

3.1.5 Operating costs are estimated to be 5% of the capital expenditure per annum. Furthermore, the analysis assumes that there will be need for capital reinvestment, amounting to 10% of the capital expenditure) after 10 years of operation to cater for major refurbishments and efficiency enhancements.

3.1.6 The EIRR considers the incremental benefits arising from reduction in health costs due to reduction in waterborne infections. It also considers the time saving benefit, as women and children spend less time fetching water. This will lead to an increase in the focus on other income generating activities, thus improving the livelihoods of the communities.

3.1.7 Sensitivity analysis was undertaken to assess the impact on the FIRR and EIRR of increases in the capital costs and tariff reductions, and the results are reflected in Technical Annex B7. The assessment considered increases in capital costs of 5%, 10% and 15%. The outcome showed that the FIRR is sensitive to increases higher than 10% as it drops to below the discount rate of 10%. This is however mitigated by the contingencies provided in the costing of 15%. The same outcome was observed with respect to the assessed reduction in tariffs by 5%, 10% and 15%. With a 15% reduction of the tariff increment assumption, the FIRR will become 8% and this is still considered reasonable transition to a full cost recovery given the sector's experience in the country. The role of the WRDF in monitoring the tariff setting by the utilities in order to be in line with the cost recovery policies set by the GoE will ensure the tariffs will be maintained in line with the said policies. The EIRR showed minimal sensitivity to the variable tested above, indicating the significant impacts on the wider community of investing in water supply and sanitation.

3.2 Environmental and Social impacts

Environmental Impacts

3.2.1 The 4TWSSIP was validated as Category 2 in line with the Bank's ESAP on 23 March 2015. This classification was justified because the potential environmental and social impacts are localized and can be managed within the sub-project areas by tools proposed through an Environment and Social Management Framework (ESMF) resulting from the Strategic Environment and Social Assessment (SESA). These documents were prepared by the government and the ESMF summary posted on the Bank's website on 22 July 2015.

3.2.2 The Program is expected to bring considerable positive impacts to the population in the four towns by contributing to increased and sustainable access to water supply that will improve health and socio-economic livelihoods as well as address capacity constraints of water utilities that will facilitate improved governance and efficiency of sustainable service delivery. Specifically, the proposed water supply and sanitation improvement program will directly benefit over 635, 000 (50% women) people in the urban and rural communities of Adwa, Adama, Bichena and Gode towns through promoting (i) socio-economic development of the towns, (ii) educational enrolment and attendance for children, (iii) household health status, (iv) time savings to engage in other productive activities (women), (v) climate resilience status of the population and environment, and (vi) improve business development in towns. The program will also leverage the Government of Ethiopia's commitment to fully address the outstanding compensation issue of the 1997 Midmar Dam project⁴ though not part of this program. The consultation process with stakeholders helped for the Regional State of Tigray to initiate the process for the compensation of the PAPs to fully secure the environmental sustainability of the dam.

3.2.3 The potential negative impacts will mostly be associated with the construction phase of the sub-projects with very little operation and post operation effects. Some of the negative environmental and social consequences anticipated from sub-project activities of the Program include loss of vegetation cover during

⁴ Midmar dam was constructed in 1997 by the Tigray Regional Government as a source of water supply for Adwa town. Though built long ago, the dam's immediate catchment has not been fully secured for environmental sustainability.

site clearance for construction, soil erosion, surface and groundwater contamination from construction machinery that could impact water quality, reduced water flow downstream, and potential land loss resulting from land acquisition for construction activities.

3.2.4 All potential impacts shall be mitigated and/or enhanced as per measures elaborated in the sub-projects' ESMPs and in line with the ESMF. Some of these measures will include re-vegetating disturbed lands in construction areas, erosion control, implementing appropriate system to manage solid waste and effluent, and providing full compensation for project-affected populations as elaborated in RAPs in compliance with the Bank's Operational Safeguards 2 and in line with compensation requirements of Ethiopia's Land Tenure Policy and the Proclamation of Land Holding for Public Purposes and Payment of Compensation. The estimated costs of the mitigation and climate change adaption (see next section) measures have been incorporated and captured as part of the Project detailed costing estimated at (USD 3 Million).

Climate Change

3.2.5 Ethiopia's water resources are vulnerable to the complexities of climate change, as shifts in rainfall patterns can affect hydrological processes and potentially impede water availability in river basins and groundwater reserves. Consequently, Ethiopia's water supply being primarily sourced from rivers and groundwater aquifers exposes communities (rural communities in particular) to the threats of climate change and water insecurity. Forecasts of increased precipitation and temperature suggest strong impact on the hydrology of the region.

3.2.6 The 4TWSSIP was assessed as Category I according to the Climate Safeguard Screening system because of the program's vulnerability to climate risk. Following field assessment of the climate risks, adaptation measures were recommended using the Bank's Adaptation Review and Evaluation Procedures. Considering the proposed program is anchored on Ethiopia's OWNPN, it will build on the OWNPN initiative to increase the climate change resilience in the WaSH sector of Ethiopia. The program will ensure the infrastructures are climate proofed to account for projected climatic conditions and prolong the longevity of the infrastructures.

3.2.7 Importantly, the program will explore and promote climate change mitigation and adaptation measures customized to the vulnerability profile of each sub-project town. These measures have been harmonized with Ethiopia's Nationally Appropriate Mitigation Actions (NAMA) objectives and national Climate Resilient Green Economy strategy to include but not limited to: (i) Catchment protection through afforestation and awareness activities (ii) Strengthen hydrometeorological monitoring including groundwater and surface water monitoring. (iii) Capacity building and training of town water utilities and community on water conservation and water-use efficiency.

Social

3.2.8 According to the United Nations Human Development Index (2014) Ethiopia has maintained its rank of 173 out of 187 countries indicated in the 2012 report. The country has met and is on track to meet most of the MDGs by 2015. The pace of poverty reduction in Ethiopia has been such that the overall poverty level is estimated to decline from 29.6 percent in 2010/11 to 26 percent in 2012/13 mainly due to consistent investment in pro-poor sectors (currently 70% of the total government budget). This has been instrumental in ensuring that growth is largely broad based.

3.2.9 The program is designed to contribute to the achievement of the objective of the Ten Year Strategy of the Bank and the GTP of Ethiopia through enhanced and inclusive access to safe drinking water and improved efficiency of service. The program will benefit four towns located in four different Regional States of the country reflecting the effort being made by the government to ensuring geographic inclusion in its development endeavor. The program is expected to address critical gaps in the coverage (estimated to be as low as 7% in Gode for instance) and quality of the water service in the towns triggered mainly by exponential growth in population and increased demand for investments. Considering that most of the targeted towns are zonal administrative and growth centers with investment potential, the program will contribute to employment creation by enabling expansion of existing businesses (industries, hotels, public services) and attracting more. The improved water service will enable Adama to operationalize its aggressive investment plan that capitalizes on its proximity to Addis Ababa and its strategic location on the Addis Ababa – Djibouti corridor and a major tourist route which makes it a hub of hotels and various consumer industries. Likewise, Adwa, which is positioning itself to reap tourism benefits from its location close to the UNESCO World Heritage site of ancient Axum, also expects to triple the size of its main employer textile factory.

3.2.10 The program is also expected to have a major positive social and health impact on the population of the four towns due to a) increased and uninterrupted consumption of clean water, b) improved service from health facilities and schools and c) use of time saved from queuing for and transportation of water. The expansion of the water distribution system of the towns will particularly benefit the poor who are disproportionately impacted during times of shortage (as they tend to resort to use of untreated water sources and cut down on consumption), squatters at the periphery of the towns and rural villages newly incorporated in to the towns which tend to be composed of poorer households. Overall, the increased per capita consumption of water expected to be a reality through the program will contribute to improved standards of living.

3.2.11 Potential negative social impacts include limited involuntary resettlement, conflicts between downstream and upstream users of water sources and increased incidence of HIV/AIDS. The impact mitigation measures include early, mandatory and continuous consultations with the affected communities, development and effective operationalization of ESMP/RAP and capacitated institutional response from the Ministry of Water, Irrigation and Energy (MoWIE).

Gender

3.2.12 Ethiopia's progress towards the achievement of the MDG on Gender Equality and Empowering Women is considered to have been challenging and thus the program's contribution in this regard is critical. While data on the role of urban Ethiopian women in water collection and transportation is scarce, findings of the socio-economic studies undertaken in the four towns indicate that, just like in the rural areas, women and children, particularly girls, are the main collectors of water. For instance, in Adama town the sample study indicated that the share of mothers and children in the collection of water is 77%. Particularly in times of shortage, women and girls are forced to spend a lot of time queuing for and hauling water. As part of its focus on equity, the program will facilitate the prioritization of female headed households (estimated to be more than 25% of all households) in pro-poor schemes designed to enable access to new domestic connections. Due to the common use of untreated and inadequate water for domestic use, water borne diseases are the top or among the top five diseases in these towns. This affects women disproportionately as they have to shoulder the burden of caring for ill household members. The improved adequacy and quality of water will also enable health facilities in the towns and surrounding areas, some of which have no line connection currently, to deliver improved quality of services, particularly in the maternity wards. Thus, the program is expected to have a major positive impact in terms of time and health gains for women.

3.2.13 Increased availability of water in the towns is also expected to trigger expansion of existing investments and arrival of new ones. As in the case of Almeda textile factory in Adwa - a major beneficiary of the program, which employs a large proportion of women, it is expected that employment opportunities for women will increase. In terms of the participation of women in town water governance structure, the program will follow up on and support the effective participation of women in Town Water Boards (TWB), water fountains management and in water users' consultations through capacity strengthening interventions. At least 30% of staff and community members to receive capacity strengthening training will be women. In co-ordination with OOWNP, the program will respond to the capacity gaps of the town utilities in operationalizing gender mainstreaming. The program will require the assignment of a gender focal point by the utilities that will be responsible for the tracking of the gender results of the program at town level. The gender outcome of the program will be tracked through gender sensitive indicators during monitoring.

Involuntary Resettlement

3.2.14 The Program is expected to entail limited land acquisition and possible resettlement particularly in the Adama Town sub-project. Majority of the land in the affected project area are agricultural lands owned and managed by communities in the rural kebeles/Woredas. The details of the land to be acquired and number of people to be compensated will be addressed in the ESIA's , ESMPs and RAPs being prepared for each sub-project. The Environmental Management component of the Program has been specifically earmarked to address, among others, issues pertaining the compensation of population impacted by potential land acquisition.

IV. IMPLEMENTATION

4.1 Implementation Arrangements

4.1.1 The Federal Democratic Republic of Ethiopia, through the Ministry of Finance and Economic Development (MoFED) will be the borrower of the loan. The Ministry of Water, Irrigation and Energy (MoWIE), through the Water Resources Development Fund (WRDF or 'The Fund'), will be the executing agency. The loan proceeds will be transferred as a grant to the WRDF, a state institution established in 2002 through proclamation No. 268/2002, whose mandate is to finance the water supply and sanitation subsector through granting loans to autonomous water supply and sanitation utilities, which will operate on cost recovery principles. The WRDF has to date extended loans of nearly USD 339 million to 49 towns in Ethiopia. The Fund will sign a subsidiary transfer agreement with the MoFED to allow the transfer of the loan proceeds to the Fund for on-lending to the four beneficiary town water utilities (TWU) on terms and conditions acceptable to the ADB.

4.1.2 The country is made up of 11 administrative regions, with water supply issues in each region being the responsibility of Regional Water Bureau (RWB). The RWBs have the responsibility to assist town water utilities in preparing business plans, feasibility studies, detailed designs and other documents required for accessing loans from the WRDF. Due to capacity constraints at TWU level, implementation of the program will rest with the four RWBs of Oromia for Adama town; Tigray for Adwa town; Somali for Gode town; and Amhara for Bichena town. The four RWBs will therefore be the program implementing agencies for their respective towns. For the implementation of the program, WRDF will appoint or recruit a Project Coordinator, Senior Procurement Specialist, Senior Safeguard Specialist and Senior Financial Management Specialist and at Regional level RWBs will appoint or recruit Technical Specialist, Procurement Specialist, Finance Specialist and Safeguard Specialist. The program implementation will be guided by the OOWNP institutional framework. It will receive policy guidance and orientation from the existing WaSH Steering Committees at Town, Regional and National levels.

4.1.3 Operation and maintenance of the water supply systems in the four beneficiary towns lie with the town water utilities (TWU). The TWU are responsible for billing and collection of water charges, and repayment of the loan to the WRDF. The four TWUs are at different levels of capacity, and for the sustainability of the interventions, the TWUs will be supported to build their capacity through targeted interventions. Issues of corporate governance, organisational architecture and configuration, customer care and credit control will feature prominently in the sustainability interventions.

Implementation Schedule

4.1.4 The project will be implemented over a period of 48 months from January 2016. Design reviews and implementation of the capacity building component will begin from May 2016 and works will commence during the first quarter of 2017. Project completion date is set for December 2019. Key aspects affecting the readiness of the implementation of the program have been identified and included in the program loan conditions whereas the Executing Agency is carrying out the necessary start up activities such as the preparation of the procurement plan and terms of reference for supervision services.

Procurement Arrangement

4.1.5 Procurement of Goods, Works and Non-Consultancy Services under the Program that follow the International Competitive Bidding (ICB) procedures will be carried out in accordance with the Bank's Rules and Procedures for Procurement of Goods/Works dated May 2008 (Revised July 2012) using the Bank's Standard Bidding Documents; whilst acquisition of Consultancy Services will be conducted in compliance with the Bank's Rules and Procedures for the Use of Consultants dated May 2008 (Revised July 2012) using the relevant Standard Request for Proposals.

4.1.6 Procurements of Goods, Works and Non-Consultancy Services under National Competitive Bidding (NCB) and Shopping procedures will be undertaken in accordance with the procedures of GOE's Federal Government Procurement and Property Administration Proclamation No. 649/2009 that entered into force on the date of publication in the Federal Negarit Gazet No. 60 on 9th day of September 2009; the Federal Government Public Procurement Directive issued by the Minister of Finance and Economic Development that entered into force on 8th day of June 2010; and the Public Procurement Manual of December 2011 issued by the Ministry of Finance and Economic Development, under conditions described in the Financing Agreement of this program. The summary of the assessment of the national procurement system is contained in the Technical Annex B5 along with the corrective measures required.

4.1.7 Detailed procurement arrangements applicable for the Project including assessments are depicted in the Technical Annex B5.

Financial Management and Audit Arrangements

4.1.8 The MoWIE through WRDF will take the overall responsibility for the financial management of the program and coordinate the program activities. The WRDF has a financial management system that can handle the program financial transactions. In line with the Paris Declaration and the subsequent aid effective declarations, the program's financial management transactions will be managed using WRDF's financial management systems. The financial transactions of the Program will be initiated, processed, recorded and reported in accordance with the WRDF's Accounting Procedures Manual for Loan and other transactions. At the regional level, the four RWBs will implement the program activities and handle the financial transactions on behalf of the four beneficiary towns as Implementing Agencies. All the financial transactions will be handled at the federal and regional levels. Detailed implementation and financial management arrangements will be indicated in the tripartite MoU to be signed among WRDF and the RWBs

and the beneficiary towns. In order to strengthen the financial management systems of WRDF and the four regions, a financial management specialist at WRDF and an accountant for each of the regions will be assigned or recruited. Recruitment or Assignment of a financial management specialist at WRDF will be a condition for first disbursement; and assignment/recruitment of an accountant for each of the four regions will be considered as other condition. The program shall use acceptable accounting softwares that can handle the financial transactions of the program at WRDF and regional levels. The installation of the computerized accounting system will be considered as an undertaking by the WRDF.

4.1.9 The WRDF will produce quarterly interim financial reports for the program, which will be submitted to the Bank no later than forty-five days after the end of each quarter. The program financial statements will be prepared within three (3) months after the closure of every financial year and presented to the auditors.

4.1.10 The program audit will be conducted by the Office of the Federal Auditor General (OFAG) or an audit firm competitively selected and agreed with the Bank based on the Bank's Procurement procedures for consultants. The audit report, complete with a Management Letter, will be submitted to the Bank not later than six months after the end of the financial year. The cost of the audit will be borne by the program.

4.1.11 At federal level, Special Accounts in foreign and local currencies will be opened either at the National Bank of Ethiopia (NBE) or in a commercial bank acceptable to the Bank. Other special accounts in local currency will be opened within the regions for four RWBs, in commercial banks acceptable to the Bank, to pay smaller program operational costs.

4.1.12 All the four disbursement methods of the Bank can be utilized but the program will mainly use the Special Account method and Direct Disbursement method for financing all eligible program costs at Federal and Regional levels. The Reimbursement methods can be used where the need arises, after consultation with the Bank and obtaining prior approval. The four disbursement methods are prescribed in the Disbursement Handbook which can be accessed from the Bank's website. The Bank will issue a disbursement letter, which will provide specific guidelines on key disbursement procedures and practices. The content of the disbursement letter will be discussed during negotiations.

4.2 Monitoring

4.2.1 The MoWIE, through the WRDF, will be responsible for the overall monitoring and supervision of the program activities including ESMP implementation. It will produce regular progress reports on the status of the various program activities, financial and procurement status, asset management, environment, social and gender safeguards, risks and mitigation measures. Once the program approaches substantial completion, a program completion report will be prepared by the EA, that includes details of project implementation, financial, procurement, asset, safeguard, measures of the achievements of the project against the indicators in the log frame and lessons learnt. The program will benefit from the OWNPP capacity building across the multiple tiers of the government for monitoring and evaluation. The program reporting format will be synchronised for harmonisation with the requirement of the OWNPP and it will be on-budget and on-plan.

4.2.2 The Bank shall also conduct regular program monitoring through supervision missions synchronised with the Joint Technical Reviews (JTR) missions (twice per annum) and the Annual Multistakeholders Forum (MSF) for the sector. Furthermore, the Bank will participate in the quarterly OWNPP internal evaluation by the Government when invited. A summary of the main milestones is presented below:

Table 4.1 – Key Project Milestones

Timeframe	Milestone	Monitoring Process/feedback loop
Dec 2015	Board	Loan Approval
Apr 2016	Signing and Effectiveness	Loan signed and declared effective including precedent conditions for first disbursement by the Bank
Apr 2016	Launching	Launching workshop organised
May. 2016	Design Reviews Commenced	Design Reports
Feb. 2017	Construction works start	Works Contract Signed, Monthly Supervision Reports
Jun 2018	Completion of Bichena Works	Commissioning of works
Apr 2019	Completion of Adwa Works	Commissioning of works
Dec 2018	Completion of Gode Works	Commissioning of works
Dec 2019	Completion of Adama Works	Commissioning of works
Feb 2018	Mid Term Review	Comprehensive Review with Recommendations
Dec. 2019	Completion of Project	Project completion report

4.3 Governance

4.3.1 The overall governance rating of the country has improved overtime. It made modest improvements over the years: the Mo Ibrahim Governance Index from 41.5 in 2001 to 48.5 in 2013; the Bank’s CPIA score from 3.77 in 2010 to 4.175 in 2014; the Transparency International CPI is stable for the period 2012-2014 at 110/178; and in the World Bank’s Worldwide Governance Indicators it slightly recovered from its dip in 2005 over the period 2013. Within the broader governance context, decentralization lies at the center of Ethiopia’s efforts to strengthen governance and improve basic service delivery. One of the main instrument of decentralization is the fiscal transfer arrangement from the Federal Government to the Regions and in turn to Woredas in the form of block grants (subsidy). Ethiopia allocates about 70% of its budgetary resources to priority sectors focused on poverty alleviation.

4.3.2 One of the Ethiopia’s OWNPN overarching pillar is creation of enabling environment and good governance in the sector. It is recognised as a foundation for the success of the sector development program and hence a lot of work has been done at all tiers of the government with greater participation of stakeholders. These include legal instruments, policies, strategies and frameworks, institutional arrangements, monitoring and evaluation and access to information. The sector has enacted its water policy in 1999 and developed a comprehensive water sector development program in 2002. There after the GoE unveiled the Universal Access Program (UAP) in 2005. Furthermore, in order to achieve the goals of UAP, the GoE developed the OWNPN in 2013. Service delivery for water and sanitation is at a decentralised level and also its development, implementation and management. For urban areas service delivery is by town utilities whose management is under leadership of water board whose members come from various segments of the stakeholders. The program will strengthen the Board, Utility and Customer relationship in an attempt to strengthen the town level accountability and governance mechanisms. In light of the multiple institutions involved in the delivery of services, Ethiopia has a formalised governance structure that brings key institutions (MoFED, MoWIE, MoH and MoE) under one roof through an MOU for coordination and facilitation. The sector program is evaluated through quarterly within government structures, twice per year joint technical review with development partners, and annual multi-stakeholder forum focusing policy and strategy.

4.4 Sustainability

4.4.1 **Financial Sustainability:** The financing of the interventions in each town will be through loans to the utilities and cost recovery and financial viability is a key element of sustainability. One of the water sector reforms implemented during the last decade was the improvement of the governance structures of the water and sanitation service providers in urban centers. In the reform, utilities were required to be

governed by an autonomous water board composed of members representing various stakeholders including consumer groups. Extensive capacity building was done in rolling out the reform and getting the boards and utilities in a functioning state. The boards are mandated to ensure provision of good quality of service to consumers and at the same time the utility is run efficiently and effectively with a strong incentive for cost recovery. In this regard, the law allows the water boards to approve tariffs reflecting cost recovery and affordability. This is further supported by the country's water policy which promotes cost recovery. The main reason for the establishment of the WRDF is to implement the cost recovery provision of the Ethiopian water policy. In this regard, the program resources are channelled to the utilities through on-lending arrangements administered by the WRDF. The WRDF will assess the utilities to ensure compliance with its internal requirements for accessing loans. Furthermore, the program will assist each utility to develop capacity for determining cost of service and developing tariff.

4.4.2 Affordability of service has been a key consideration in the design of the project and choice of technology such that the majority of households falling within the poor strata of the population are not overburdened by high user charges. In this regard, water-vending kiosks, each serving between 100 and 200 households are included for the poor peri-urban settlements. These will be managed through contracts with small operators. These options are all demand driven and offer appropriate low cost solutions, bringing down operational costs within affordable levels for the peri-urban population. In addition, the progressive tariff structure caters for the needs of low-income households through the social tariff for the lower band of consumption.

4.4.3 **Institutional Sustainability:** The sector instituted a 'stepped approach' to build capacity of utilities and get them ready to receive further assistance. The program participating towns received assistance in the past to build their capacity and put in place the required governance structure as per the legislative reforms stipulated by the regions. There are legally established TWUs along with functioning TWB in each program participating town. The feasibility studies for further financing were supported as part of the stepped approach and they all now have bankable projects. The program will further assist the TWUs and TWBs to build their institutional capacities. The TWUs and TWBs will be assisted to enter into performance contracts.

4.4.4 **Technical Sustainability:** The program through the extensive capacity building and skills development integrated in its design will ensure effective and efficient utility operation and management. These will also be mainstreamed in the construction contracts including contractor's assisted operation to transfer skills and measures will also be taken in the performance agreements.

4.4.5 **Commercial Sustainability:** The program will seek to address challenges in relation to commercial management through targeted support in improving the policies and procedure of the utility to handle and satisfy its customers. It will assist the utilities to implement improved billing and collection systems to enhance the commercial sustainability. The program's capacity development intervention will be enhanced during the operation period through the performance contracts between the TWU and TWB.

4.5 Risk management

4.5.1 The major risks that the program faces are; failure by the utilities to recover full costs in line with the GoE policies; limited capacity and skill to operate and maintain the infrastructure; and implementation challenges due to the varying sizes of the towns and the spread in regional location.

4.5.2 **Failure to meet the cost recovery expectations** – The GoE policies require that utilities borrowing from the WRDF for investment, should operate under cost recovery principles. The utilities will be required

to repay the loans borrowed. The source of resources for the utilities to repay the loans will be from the tariffs charged for the water sold to the consumers. The GoE is committed to ensure that the utilities will be able to charge tariffs that will enable them to cover costs in line with the set policies. The institutional capacity development component of this program will contribute to significant capacity enhancement within the utilities through training and business plan development, which will positively contribute to enhancing financial sustainability of the utilities.

4.5.3 Limited capacity to operate and maintain the infrastructure – The assessment of the utilities showed that not all utilities are adequately configured, in terms of staffing and technically, in order to operate and maintain the envisaged infrastructure sustainably. The GoE through the ongoing OWNPN, undertook a skills and capacity audit in order to determine the staffing requirements across the water sector spectrum. This program will provide specific training in a range of areas to improve the skill of the utility staff and the skill transfer will also be mainstreamed in construction contracts including contractor assisted operation for enhanced training. The program will also encourage the RWBs to involve the utilities in the implementation of the program in order to allow for skills transfer to the utility staff.

4.5.4 Implementation challenges due to varying capacity at TWUs and the spread in regional location – some of the beneficiary towns are small (Gode and Bichena) and are located great distances from the regional capitals. This may create logistical challenges for program implementation, considering that the implementing agencies will be the RWBs. RWBs will designate staff to be located in the beneficiary towns during the implementation of the program.

4.6 Knowledge Building

4.6.1 The implementation of the interventions under this program will generate vital knowledge in financing of urban water supply, with emphasis on cost recovery and financial viability. The WRDF is still a young institution with a far reaching consequences to the future development of the sector in Ethiopia. The program would give leverage and experience to further strengthen the WRDF's capacity with the growing size of its portfolio, increasing resources and more DPs supporting the sector. Furthermore, the utility efficiency and capacity development activities of the program will be useful in strengthening and fine-tuning implementation of urban water supply and sanitation projects/programs in the country and generate knowledge. The program will also benefit from the overall knowledge to be generated from the implementation of the OWNPN and strengthened M&E systems at all levels. The overall lesson and knowledge generated from the program will feed into Forum for Learning and Sharing on Water Supply and Sanitation (FLOWS) established by the MoWIE in collaboration with WASH partners⁵ and the Ethiopian Utilities Forum. The project implementation review, quarterly progress reports, audit, sector M&E and completion reports will also provide information on various aspects of the program for further diagnosis. The JTRs and MSF are also key in dissemination and sharing of experience and knowledge to improve sector implementation within government and with development partners including the Bank.

V. LEGAL INSTRUMENTS AND AUTHORITY

5.1 Legal Instrument

5.1.1 The Project will be financed by an ADB loan.

⁵ Forum for Learning and Sharing on Water Supply and Sanitation was established by the MoWIE in collaboration of Research Inspired Policy and Practice Learning In Ethiopia (RiPPLE)

5.2 *Conditions Associated with Bank's Intervention*

A. Condition Precedent to Entry into Force of the Loans:

The loan agreements shall enter into force subject to fulfilment by the Borrower of the provisions of Section 12.01 of the General Conditions Applicable to Loan Agreements and Guarantee Agreements of the ADB;

B. Conditions Precedent to Disbursements of the Loan

The obligation of the Bank to make the first disbursement of the Loan shall be subject to the entry into force of this Agreement as provided above and the fulfilment by the Borrower, in form and substance satisfactory to the Bank, of the following conditions:

- (i) Provide evidence of the opening of a foreign currency Special Account and a local currency account at the National Bank of Ethiopia (NBE) for the deposit of the proceeds of the Loan ;
 - (ii) Provide evidence of appointment or recruitment, at WRDF, a Project Coordinator, Senior Procurement Specialist, Senior Safeguard Specialist and Senior Financial Management Specialist whose qualifications and experience is acceptable to the Bank; and
 - (iii) Provide evidence of having signed an on-granting agreement between the Borrower and WRDF in which the Borrower agrees to transfer the entire proceeds of the loan on a grant basis to WRDF for purposes of implementation of the program;
- C. Other Conditions:**

The Borrower shall, in form and substance satisfactory to the Bank, fulfil the following conditions:

- (i) Prior to commencement of works in each town of Adama, Bichena, Adwa and Gode, submit the Works Schedule and Compensation Payment Schedule for each town detailing: (A) each section of the lot under the Program and; (B) the timeframe for compensation and resettlement of all Project Affected Persons (PAPs) in respect of each section under the Program;
- (ii) Prior to commencement of works in any section of each lot, in accordance with the Works and Compensation Payment Schedule referred to (a) above, provide evidence of compensation of all Program Affected Persons (PAPs) for the related section in each of the towns of Adama, Bichena, Adwa and Gode;
- (iii) Provide evidence of having signed a Tripartite Implementation Agreement between the Regional Water Bureaus, Town Water Utilities and the WRDF in which the Regional Water Bureaus will act as the implementing Agency of the Program in the respective towns;
- (iv) Provide evidence of having signed an on-lending agreement between WRDF and Water Utilities for Adama, Bichena, Adwa and Gode Towns on terms and conditions acceptable to the Bank;

(v) Provide

- a. Updated designs of Subprojects for Adama, Bichena, Adwa and Gode Towns, as applicable; and
- b. Provide updated Environmental and Social Impact Assessment (ESIA); updated Environmental and Social Management Plan (ESMP); and updated Resettlement Action Plan (RAP) if applicable.

(vi) Provide evidence of recruitment or appointment of a Technical Specialist, Procurement Specialist, Finance Specialist and Safeguard Specialist for each of the Regional Water Bureaus of Oromiya, Amhara, Tigray and Somali Regions of the Borrower.

D. Undertaking

- (i) Carry out, and cause its contractors to carry out, the Program in accordance with: (a) Bank's rules and procedures, in particular Bank's Involuntary Resettlement Policy; (b) national legislation; and (c) the recommendations, requirements and procedures set forth in the Environmental and Social Management Plan (ESMP) prepared for the Program;
- (ii) Finalise the Midmar Dam compensation for all project affected people by 30th June 2017;
- (iii) Report on the implementation of the Environment and Social Management Plan, on a quarterly basis, in a form acceptable to the Bank; and
- (iv) Complete the installation of computerized accounting system at WRDF and the four Regional Water Bureaus of Oromiya, Amhara, Tigray and Somali Regions.

5.3 Compliance with Bank Policies

This project complies with applicable Bank policies.

VI. RECOMMENDATION

Management recommends that the Board of Directors approve the proposed ADB loan of US\$ 76.11 million (estimated at UA 54 million) to the Federal Democratic Republic of Ethiopia for the purposes of the program and subject to the conditions stipulated in this report.

Administrative Regions and Zones of Ethiopia

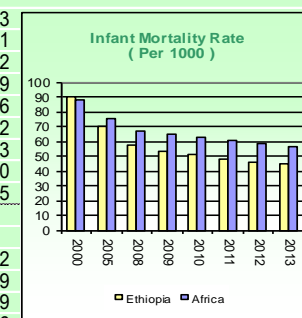
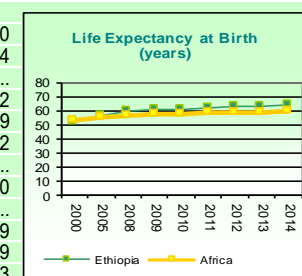
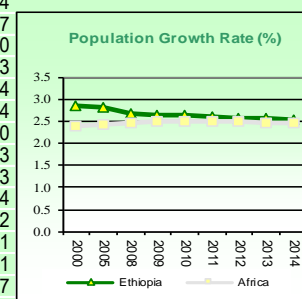
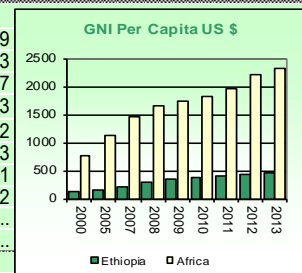
0 150 300
Kilometers

All boundaries are approximate and unofficial
Graphic produced by UN Emergencies Unit for Ethiopia; March 2000

I

APPENDIX 2: ETHIOPIA'S COMPARATIVE SOCIO-ECONOMIC INDICATORS

	Year	Ethiopia	Africa	Developing Countries	Developed Countries
Basic Indicators					
Area ('000 Km²)	2014	1,104	30,067	80,386	53,939
Total Population (millions)	2014	96.5	1,136.9	6.0	1.3
Urban Population (% of Total)	2014	17.8	39.9	47.6	78.7
Population Density (per Km²)	2014	87.4	37.8	73.3	24.3
GNI per Capita (US \$)	2013	470	2 310	4 168	39 812
Labor Force Participation - Total (%)	2014	83.7	66.1	67.7	72.3
Labor Force Participation - Female (%)	2014	47.1	42.8	52.9	65.1
Gender -Related Development Index Value	2007-2013	0.853	0.801	0.506	0.792
Human Develop. Index (Rank among 187 countries)	2013	173
Popul. Living Below \$ 1.25 a Day (% of Populatio	2008-2013	36.8	39.6	17.0	...
Demographic Indicators					
Population Growth Rate - Total (%)	2014	2.5	2.5	1.3	0.4
Population Growth Rate - Urban (%)	2014	4.1	3.4	2.5	0.7
Population < 15 years (%)	2014	42.1	40.8	28.2	17.0
Population >= 65 years (%)	2014	3.5	3.5	6.3	16.3
Dependency Ratio (%)	2014	73.5	62.4	54.3	50.4
Sex Ratio (per 100 female)	2014	100.1	100.4	107.7	105.4
Female Population 15-49 years (% of total populatio	2014	24.0	24.0	26.0	23.0
Life Expectancy at Birth - Total (years)	2014	64.2	59.6	69.2	79.3
Life Expectancy at Birth - Female (years)	2014	66.0	60.7	71.2	82.3
Crude Birth Rate (per 1,000)	2014	32.5	34.4	20.9	11.4
Crude Death Rate (per 1,000)	2014	7.3	10.2	7.7	9.2
Infant Mortality Rate (per 1,000)	2013	44.4	56.7	36.8	5.1
Child Mortality Rate (per 1,000)	2013	64.4	84.0	50.2	6.1
Total Fertility Rate (per woman)	2014	4.4	4.6	2.6	1.7
Maternal Mortality Rate (per 100,000)	2013	420.0	411.5	230.0	17.0
Women Using Contraception (%)	2014	33.8	34.9	62.0	...
Health & Nutrition Indicators					
Physicians (per 100,000 people)	2004-2012	2.5	46.9	118.1	308.0
Nurses (per 100,000 people)*	2004-2012	25.3	133.4	202.9	857.4
Births attended by Trained Health Personnel (%)	2009-2012	10.0	50.6	67.7	...
Access to Safe Water (% of Population)	2012	51.5	67.2	87.2	99.2
Healthy life expectancy at birth (years)	2012	55.0	51.3	57	69
Access to Sanitation (% of Population)	2012	23.6	38.8	56.9	96.2
Percent. of Adults (aged 15-49) Living with HIV/AIDS	2013	1.2	3.7	1.2	...
Incidence of Tuberculosis (per 100,000)	2013	224.0	246.0	149.0	22.0
Child Immunization Against Tuberculosis (%)	2013	71.0	84.3	90.0	...
Child Immunization Against Measles (%)	2013	62.0	76.0	82.7	93.9
Underweight Children (% of children under 5 years)	2005-2013	29.2	20.9	17.0	0.9
Daily Calorie Supply per Capita	2011	2 105	2 618	2 335	3 503
Public Expenditure on Health (as % of GDP)	2013	3.1	2.7	3.1	7.3
Education Indicators					
Gross Enrolment Ratio (%)					
Primary School - Total	2011-2014	87.0	106.3	109.4	101.3
Primary School - Female	2011-2014	80.5	102.6	107.6	101.1
Secondary School - Total	2011-2014	28.9	54.3	69.0	100.2
Secondary School - Female	2011-2014	22.3	51.4	67.7	99.9
Primary School Female Teaching Staff (% of Total)	2012-2014	36.7	45.1	58.1	81.6
Adult literacy Rate - Total (%)	2006-2012	39.0	61.9	80.4	99.2
Adult literacy Rate - Male (%)	2006-2012	49.1	70.2	85.9	99.3
Adult literacy Rate - Female (%)	2006-2012	28.9	53.5	75.2	99.0
Percentage of GDP Spent on Education	2009-2012	4.7	5.3	4.3	5.5
Environmental Indicators					
Land Use (Arable Land as % of Total Land Area)	2012	15.3	8.8	11.8	9.2
Agricultural Land (as % of land area)	2012	0.4	43.4	43.4	28.9
Forest (As % of Land Area)	2012	12.0	22.1	28.3	34.9
Per Capita CO2 Emissions (metric tons)	2012	0.1	1.1	3.0	11.6



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

last update : September 2015

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

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

APPENDIX 3: TABLE OF ADB'S PORTFOLIO IN THE COUNTRY

No	Project	Source	Approval Date	Effective Date	Closing Date	Loan/Grant Amount (UA)	Disb. Ratio	IP	DO	PFI Status	Age Years.
AGRICULTURE SECTOR											
1.	Drought Resilience and Sustainable Livelihoods I	ADF LOAN	19-Dec-12	15-Jul-13	30-Jun-17	30,000,000	2.16%	2	3	PPP	2.3
2.	Drought Resilience and Sustainable Livelihoods II	ADF LOAN	26-Nov-14	-	31-July-20	28,482,000	-	NR	NR		0.4
	Sub-total Agriculture					58,482,000					
TRANSPORT SECTOR											
3.	Jimma-Mizan Road Project	ADF LOAN	13-Dec-06	3-Oct-07	31-Dec-15	65,000,000	80.45%	3.36	2.25	NON-PP/NON PPP	8.3
4.	Mombassa-Nairobi-Addis Road Corridor -Ageremariam - Yabelo Road Project (Phase II)	ADF LOAN	1-Jul-09	6-Apr-11	31-Dec-15	85,000,000	68.08%	3.77	4	NON-PP/NON PPP	5.6
5.	Mombassa-Nairobi- Addis Road Corridor-Hawassa-Ageremariam Road Project (Phase III)	ADF LOAN	30-Nov-11	1-Apr-12	31-Oct-17	105,000,000	28.36%	3	3	NON-PP/NON PPP	3.4
6.	Bedeke-Metu Road Upgrading	ADF LOAN	30-Nov-11	1-Apr-12	31-Dec-16	41,060,000	48.94%	3	3	NON-PP/NON PPP	3.4
7.	Modjo- Hawassa Highway Road Project Phase I	ADF LOAN	6-Nov-13	7-July- 14	31-Dec-20	84,080,000	-	NR	NR	NON-PP/NON PPP	1.4
>>	Modjo- Hawassa Highway Road Project Phase I	ADF GRANT	6-Nov-13	7- July-14	31-Dec-20	1,630,000	-	NR	NR		1.4
	Sub-total Transport					381,770,000					
ENERGY SECTOR											
8.	Rural Electrification II Project	ADF LOAN	20-Dec-06	2-Nov-08	31-Aug-15	87,200,000	77.15%	3.82	3.50	NON-PP/NON PPP	8.3
9.	Electricity Transmission Systems Improvement Project	ADF LOAN	6-Dec-10	19-Aug-11	31-Dec-15	93,750,000	80.98%	3.85	4	NON-PP/NON PPP	4.4
>>	Electricity Transmission Systems Improvement Project	ADF GRANT	6-Dec-10	19-Aug-11	31-Dec-15	58,000,000	90.93%	3.85	4	NON-PP/NON PPP	4.4
10.	Ethiopia-Kenya Electricity Highway Project	ADF LOAN	27-Aug-12	27-May-13	31-Dec-17	150,000,000	0.67%	3	3	NON-PP/NON PPP	2.6
	Sub-total Energy					388,950,000					
WATER SECTOR											
11.	The One WASH National Water Program	ADF LOAN	8-Sept-14	-	30-Jun-19	60,000,000	-	-	-		
>>	The One WASH National Water Program	RWSS-TF	8-Sept-14	-	30-Jun-19	6,800,000	-	-	-		
	Sub-total Water					66,800,000					
MULTI SECTOR											
12.	PBS III	ADF LOAN	18-Jul-12	18-Dec-12	31-Jul-15	166,000,000	100.00%	3	4	NON-PP/NON PPP	2.8
	Subtotal loan Multi sector					166,000,000					
	PUBLIC SECTOR TOTAL					1,061,972,000	51.01%				
OTHER OPERATIONS											
13.	Derba-Midroc Cement Factory	ADB LOAN	16-Apr-08	23-Ju-08	31-Dec-11	36,737,447.48	100%	3.09	3	NON-PP/NON PPP	7.0
14.	Ethiopian Air Lines	ADB LOAN	23-Mar-11	23-May-12	31-Dec-17	25,830,275.56	96.68%	3.77	4	NON-PP/NON PPP	4.1
15.	Solar &Wind for Water	AWF	12-Jan-09		31-Dec-15	1,709,929.69	59%	3.27	3.67	NON-PP/NON PPP	6.2
16.	Assela Wind Farm SREP PPG	CIF	28-Jun-12		31-Mar -15	1,135,521.10	00	3.75	NR	NON-PP/NON PPP	2.8
	Subtotal Other Operations					65,413,173.83					
	TOTAL PORTFOLIO					1,127,385,174					

APPENDIX 4: SIMILAR PROJECTS FINANCED BY THE BANK AND OTHER DEVELOPMENT PARTNERS IN THE COUNTRY

Project/Framework	Development Partners(s)	Sector Contribution
Harar Water Supply Project	AfDB	Provided safe water supply for more than 250,000 people in Harar and four neighboring towns and improved the livelihoods of women and the youth through, among others, increased employment opportunities due to the thriving of commercial enterprises such as hotels
Rural Water Supply and Sanitation Project (RWSSP)	AfDB	Contributed to increased access to water supply and sanitation services for rural populations, in about 125 woredas and supporting the establishment of a sustainable service provision framework across all levels
Promoting Basic Services (PBS) II and III	AfDB, WB, EU, DfID, Austria, Italy, Ireland Dev. Cooperation, Spain,	Contributing to poverty reduction and improving living standards by expanding access and enhancing the quality of the decentralized delivery of services in education, health, agriculture, water supply and sanitation; and rural roads while continuing to deepen local accountability and transparency in basic service delivery
Solar & Wind for Water	Africa Water Facility (AWF)	Piloting and promoting use of solar and wind energy for water pumping in rural areas and development. The project will result in an increased and sustained supply of water at lower financial, economic, environmental and social costs.
Ethiopia Water Supply and Sanitation Project	World Bank and DfID	Contributed to increased access to water supply and sanitation services for rural and urban populations, including creation of woreda water and sanitation programs (in 230 woredas) and establishment of water boards in 50 towns; including establishing of sector M&E framework
Ethiopia Water Supply, Sanitation and Hygiene Project	World Bank	Will increase access to improved water supply and sanitation services for residents in participating woredas/towns and communities in Ethiopia
Public Sector Capacity Building Program Support Project (PSCAP); I and II	EU, World Bank, DfID, Ireland Dev. Cooperation	Governance and Decentralized Service Delivery: development of human resources, working systems and effective organizational structures to improve the scale, efficiency and responsiveness of public service delivery at the federal, regional, and local level; empower citizens to participate more effectively in shaping their own development; and promote good governance and accountability
Drought Resilience and Sustainable Livelihoods Program for the Horn of Africa (HoA)	AfDB	Developing regional systems to alleviate the negative impacts of deteriorating environmental conditions in the HoA. Among the activities will be development of water storage and other related infrastructure; protection of water reservoirs and conservation of water catchment areas; development of market infrastructure and communication and information systems for selected pastoralist woredas.
UNICEF- Water, Environment and Sanitation	UNICEF	Supports humanitarian WASH, School WASH, WASH MIS, Education MIS, Health MIS, technical Assistance; WASH sector standards and manuals; CLTHS, water conservation and reuse; supports both rural and urban WASH interventions
Rural water supply, sanitation and hygiene programme in Benishangul Gumuz region	Finland	Institutionalizing community-based water planning, development, management and reinvestment using a Community Development Fund in Benishangul Gumuz Region; Finland also provides support to Civil Society
Multi-Annual Strategic Plans (MASP; 2012-15) of the Netherlands Embassy	Netherlands	Addresses water within the framework of water for food and water for health; mostly in collaboration with other partners like UNICEF, SNV, etc.
Project for rural water supply, sanitation & livelihood improvement through dissemination of rope pumps for drinking water	JICA	Providing technical support in the research and development, standardization and dissemination of rope pumps for drinking water - as a self-supply water lifting technology for rural households – in line with the Self-Supply Action Plan (SSAP). Also provides capacity building for the Ethiopian Water Technology Centre (EWTEC)
Support to water, energy and urban infrastructure	AFD	Upgrading of water supply in Addis Ababa Supporting increased access to water and sanitation in rural areas Sustainable management of water resources to support the Nile Basin Initiative

APPENDIX V – JUSTIFICATION FOR FINANCING MORE THAN 50% OF COST BY AfDB

1. Introduction: GOE made a request for this financing plan during appraisal of the program. This appendix provides the justification for waiver for the Bank financing more than 50% of the proposed operation financing as indicated in the financing plan depicted in the table below.

Source	Total Amount Million US\$	% Total Million US\$
ADB	76.11	66.8%
GoE	37.84	33.2%
Total	113.95	100%

2. Country Commitment to Overall Development: Ethiopia has been registering unprecedented level of economic growth for the past decade making the country one of the top performers in Africa. The outlook is positive for the next few years despite some risks inherent in the economy such as weak balance of payment, constraints for financing large scale infrastructure projects, uncertain external environment and weak private sector. The country has made significant headway in achieving most of the MDG targets owing to the Government's commitment to development. Poverty level declined from 45% in 1995/96 to 29% in 2010/11. Under five mortality dropped from 123 in 2005 to 88 in 2010. HIV/AIDs prevalence drop to 1.3% below the MDG target of 2.5%. Primary school net enrollment increased from 68% in 2005 to 95% in 2013. In 2013/14, access to potable water supply reached 76.7% nationally, disaggregated at 75.5% for rural and 84.5% for urban areas up from a national average of 51% in 2004/5.

3. Financing allocated by Sector Targeted by the Bank: Ethiopia has continuously allocated well above 70% of the country's budget for the past few years to pro-poor oriented sectors resulting in human development progress as indicated above. In 2013/4 financial year alone, Ethiopia allocated 84% of its budget for education, health, agriculture, water and sanitation, rural roads, and decentralization governance and of this the budget allocation for water supply and sanitation sector was 4.2% of the national budget. These sectors have been the priority sectors of the Bank and it has been supporting it through the Protection of Basic Services, Rural Water Supply and Sanitation, Primary Health Care, Education, Agriculture and Roads Projects. Ethiopia as part of its Growth and Transformation Plan (GTP) has been implementing the OOWNP since 2013/14 with an overall program budget of 2.4 billion of which 1.7 billion has been mobilised. The program is funded 60% by the Government with the balance from donors. It intends to achieve a universal coverage by the end of the GTP 2 period which is now at a drafting stage.

4. Budget and Debt Situation: Ethiopia's budget has been steadily growing and it has now proclaimed to reach US\$ 11 billion in 2015/16 financial year from US\$5 billion in 2005/6. In 2013/14, the fiscal deficit including grants was at 2.6% of the GDP. The tax-revenue-to-GDP ratio

improved to 12.7% in 2013/14 from 12.4% in the previous year, but this remains well below the sub-Saharan Africa average of about 20%. The growth in exports slowed down during the last 3 years, roving around US\$ 3.0 - 3.25 billion in the last three years, showing contraction as a percent of GDP, while import bill increased by about 20% in 2013/14. The trade balance is hence further deteriorated as a percentage of GDP and by nominal value. The external debt increased from USD 11.2 billion in 2011/12 to USD 16.9 billion by end of 2014. In 2014, Ethiopia accessed the EURBOND and borrowed USD 1 billion from the international financial market. Ethiopia's 2014/15 Federal budget law shows an allocation of *4.6% of the federal budget* to debt servicing. Ethiopia's debt is steadily growing, despite still remaining at low level in terms of debt stress.

5. Conclusion: The GoE has demonstrated commitment through its achievements and spending in critical sectors such as in water and sanitation. The 4TWSSIP program shall not be seen in isolation from the OWNPN for which Government's contribution is estimated at 60%. The financing under the program enhances the achievement of the sector goals and builds on the Bank's earlier contribution to the OWNPN. Furthermore, Ethiopia is still an ADF country only accessing the ADB window based on the new Credit Policy approved in 2014 (Diversifying the Bank's Products to Provide Eligible ADF-Only Countries Access to the ADB Sovereign Window). Requiring an ADF country to comply with counterpart financing level of ADB countries (refer 2.1.2, (ii) of the Policy on Expenditure Eligible For Bank Group Financing) more than 50% of program financing is a burden to the country.