

AFRICAN DEVELOPMENT FUND

PROJECT: Support to Higher Education Development **COUNTRY: Eritrea**

PROJECT APPRAISAL REPORT

Date: February 2010

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Currency Equivalents

As of December 2009

1 UA	=	ERN 24.4446
1 USD	=	ERN 15.00
1 UA	=	USD 1.61018

Fiscal Year

1st January – 31st December

Weights and Measures

1 metric tonne	=	2204 pounds (lbs)
1 kilogramme (kg)	=	2.200 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

ADF	=	African Development Fund
EIT	=	Eritrea Institute of Higher Education
ESDP	=	Education Sector Development Program
ESMP	=	Environmental and Social Management Plan
GoSE	=	Government of the State of Eritrea
HAC	=	Hamelmallo Agriculture College
HACOB	=	Halhale College of Business & Economics
HEIs	=	Higher Education Institutions
IPRSP	=	Interim Poverty Reduction Strategy Paper
ICSP	=	Interim Country Strategy Paper
MGDs	=	Millennium Development Goals
NBHE	=	National Board for Higher Education
NDP	=	National Development Plan
PCU	=	Project Coordinating Unit
PMU	=	Project Management Unit

Grant Information

Client's information

BORROWER:	Government of the State of Eritrea
EXECUTING AGENCY:	National Board for Higher Education

Financing plan

Source	Amount (UA)	Instrument
ADF	12.90	grant
Government	2.76	Counterpart Cont.
TOTAL COST	15.66	

ADB's key financing information

Grant currency	UA
Interest type	NA
Interest rate spread	NA
Commitment fee	NA
Other fees	NA

Timeframe - Main Milestones (expected)

Government Request for Bank Support	May, 2009
Identification Mission	July, 2009
Preparation Mission	September, 2009
Concept Note Approval	November, 2009
Appraisal Mission	December, 2009
Project approval	April, 2010
Effectiveness	May, 2010
Last Disbursement	December, 2014
Completion	June, 2015

Project Summary

Project Overview

1. The proposed Eritrea *Support to Higher Education Development Project* is designed within the context of the human resource development priorities of the country and in support of the development of higher level skills in the country. It will focus on the higher education sub-sector, with the aim of contributing to efforts to build the capacity of the country's higher education institutions for teaching, research and service. The project will cover the country's 7 higher education institutions, which enroll a total of 10,000 students. The expected outputs are: 260 junior faculty staff (graduate assistants) trained at the postgraduate level; expatriate staff (190 in year 1, 187 in year 2, and 20 in year 3) employed, providing about 4,760 man-months of service; and infrastructure of 2 higher education institutions expanded. The project will be implemented over a period of five years. It will be funded by an ADF grant of UA 12.90 million and government contribution of AU 2.76 million. The ADF grant will finance 82.3% of the total project cost and the government contribution will finance 17.7% of the cost of the project.

Needs Assessment

2. The proposed project is based on a request from the government of Eritrea for support in the area of human resource development, one of its key priority focus for growth and poverty reduction, and has benefited from the assessment by Bank identification, preparation and appraisal missions. The assessment clearly indicates that there is need for improving the capacity of the country's higher education institution to assist the country address the serious weaknesses in its human capital. The country's poverty reduction agenda puts emphasis on the development of human resources and the government's draft national development plan for 2010-2013 has human capital development as one of its priority areas for development. This is consistent with Bank's Medium Term Strategy 2008-2012 and the Eritrea Interim Country Strategy Paper for 2009-2011, which seeks to assist the country address human resource challenges. The project will support these goals through activities that will contribute to the country's efforts to build the optimal level of human capital stock required to achieve sustainable growth.

Bank's Added Value

3. The project will help fill a gap in the financing of the development of higher education which is not currently available from any other source. The Bank is currently one of the major development partners supporting the education sector and this is currently the only sector in which the Bank is cooperating with the government of Eritrea. The project will present a continuation of the Bank's support in the education sector and will also make the Bank the only major development partner supporting the higher education subsector and potentially the lead agency in the subsector.

Knowledge Management

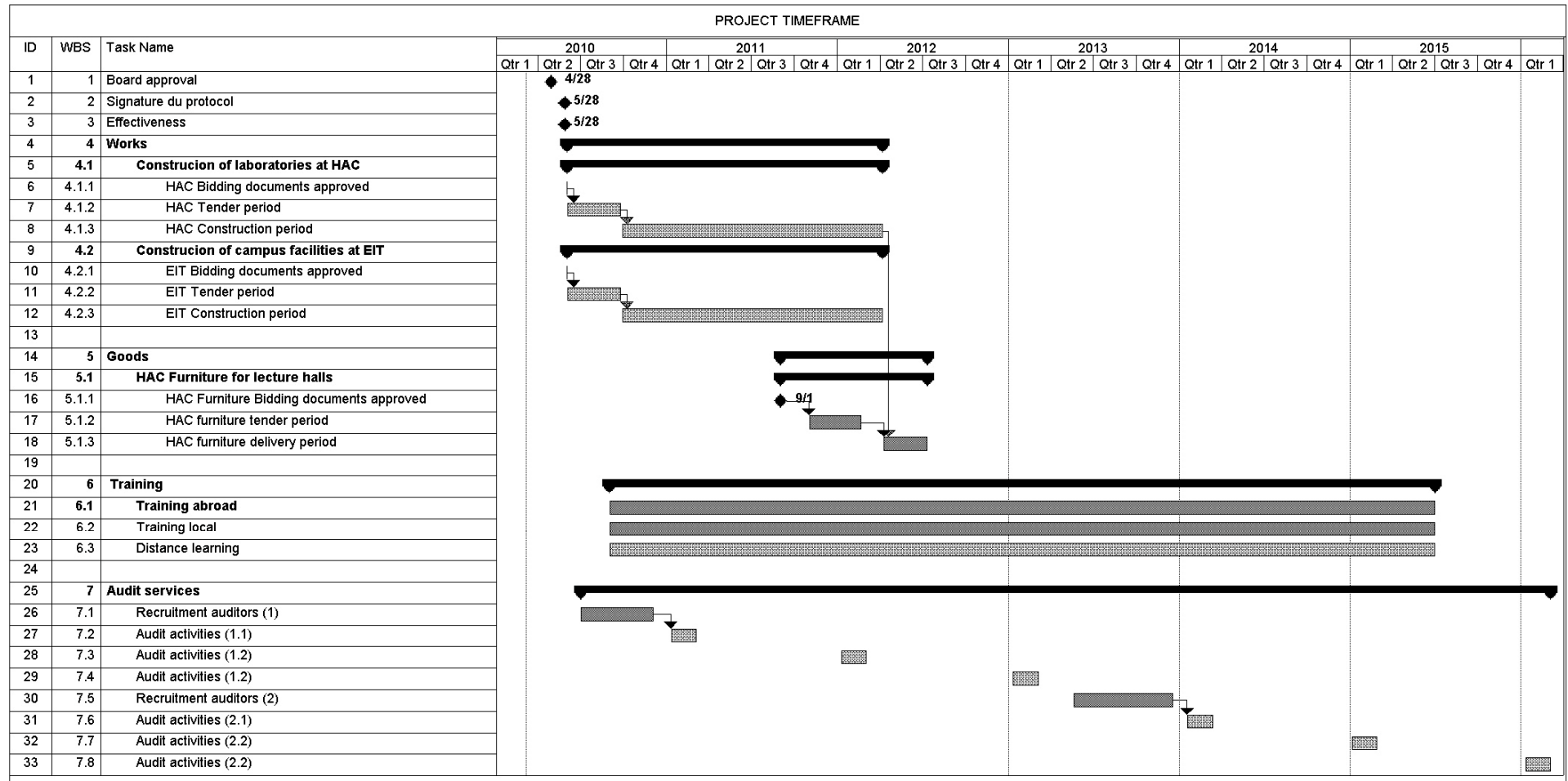
4. Through the building of capacity for teaching, research and service at higher education institutions, the project will facilitate the transfer, creation and dissemination of knowledge.

Result-based Logical Framework

HIERARCHY OF OBJECTIVES	EXPECTED RESULTS	REACH	PERFORMANCE INDICATORS	INDICATIVE TARGETS TIMEFRAME	ASSUMPTIONS / RISKS
<p><u>Goal:</u> Human resources development to further economic growth and reduce poverty</p>	<p><u>Impact:</u> Increased economic and social development in Eritrea</p>	<p><u>Beneficiaries:</u> Population</p>	<p><u>Impact Indicators:</u> Poverty incidence</p>	<p><u>Progress anticipated in the long term:</u> Contribute to reduction in poverty level from 53% in 2006 to 51% in 2014</p>	<p><u>Assumption statement:</u> Peace in the region</p> <p>Priority given by government to human resource development maintained</p>
<p><u>Project purpose:</u> To assist in the building of the capacity for teaching, research and service at higher education institutions</p>	<p><u>Outcomes:</u> Capacity of higher education institutions for teaching, research and service improved</p>	<p><u>Beneficiaries:</u> Students and staff of higher education institutions</p>	<p><u>Outcome indicators:</u> Number of higher education institutions with improved capacity for teaching, research and service</p> <p>% of qualified higher education staff that are nationals</p> <p>% qualified higher education national staff that are female</p>	<p><u>Progress anticipated in the medium term:</u> 7 higher education institutions adequately resourced between 2010 and 2014</p> <p>Increase % of qualified staff that are nationals from 37% in 2009 to over 90% by 2014</p> <p>Increase % of qualified higher education national staff that are female from 13% in 2009 to at least 25% by 2014</p>	<p><u>Risk:</u> Staff trained outside the country under the project failing to return to the country <u>Mitigation:</u> Government has a program for improving the working and living conditions for the staff of HEIs and is committed to further strengthening it; project will support in country training at locally established graduate training programs</p>

<u>Inputs and activities:</u>	<u>Outputs:</u>	<u>Beneficiaries:</u>	<u>Output indicator:</u>	<u>Progress anticipated in the short term:</u>	<u>Assumption statement:</u>
Training of staff of higher education institutions	Staff of higher education institutions trained	Staff of higher education institutions	Number of junior faculty staff upgraded	260 (75 out-of-country training; 85 local training; 100 distance learning) junior faculty staff trained by 2014	
			% of female junior faculty staff upgraded	100% of female junior faculty staff trained by 2014	
Provision of technical assistance for teaching and research	Higher education institutions adequately staffed	Students of high education institutions	Number of technical assistants provided	Technical assistants (190 in year 1; 187 in year 2; and 20 in year 3) provided between 2010 and 2014	
Provision/ upgrading of teaching and research facilities	Improved teaching and research environment	Students and staff of higher education institutions	Number of facilities established/Upgraded	3 engineering, 8 agriculture sciences and 2 computer labs, library and 2 lecture halls built and grounds improved by 2014	
Project Budget (UA mln)					
A. Goods	0.02				
B. Works	4.95				
C. Services	10.59				
D. Operating Costs	<u>0.10</u>				
Total	15.66				
Sources of Finance (UA mln):					
ADF Grant	12.90				
GoSE	<u>2.76</u>				
Total	15.66				

Project Timeframe



REPORT AND RECOMMENDATION OF THE MANAGEMENT OF THE ADB GROUP TO THE BOARD OF DIRECTORS ON A PROPOSED GRANT TO ERITREA FOR THE SUPPORT TO HIGHER EDUCATION DEVELOPMENT PROJECT

Management submits the following Report and Recommendation on a proposed grant for UA 12.90 million to finance the Support to Higher Education Development project in Eritrea

I – STRATEGIC THRUST & RATIONALE

1.1. Project linkages with country strategy and objectives

1.1.1 The proposed Eritrea *Support to Higher Education Development Project* is designed within the context of the human resource development priorities of the country and in support of the development of higher level skills in the country. It will focus on the higher education sub-sector, with the aim of contributing to efforts to build the capacity of the country's higher education institutions for teaching, research and service. The proposed project is aligned with the priorities of Eritrea's development agenda, which puts emphasis on the development of the country's human capital critical for growth and poverty reduction. It is consistent with the priority areas of the draft Government's National Development Plan (NDP) for 2010- 2013¹, which focuses on the three priority areas of (i) food security and development of cash crops, (ii) physical and social infrastructure and (iii) human capital development in the short to medium terms. Furthermore, the planned intervention is in line with the country's educational policy as articulated in Eritrea's 2003 National Education Policy, which in addition to the development of basic education, puts emphasis on the expansion of tertiary education and preparation of skilled work force as a critical part of the country's human resources development strategy.

1.1.2 The proposed project is also in line with the Bank's assistance strategy for Eritrea. Consistent with the draft NDP, the Bank Group's Interim Country Strategy Paper (ICSP) for 2009-2011 seeks to assist the country address human resource challenges through activities that will contribute to the country's efforts to build the optimal level of human capital stock required to achieve sustainable growth. The planned intervention for the development of the higher education sub-sector is therefore in support of the priorities of the draft NDP and the ICSP. It is also in line with Bank's own priorities as stated in its Medium-Term Strategy of 2008-2012, identifying higher education, technology and vocational training as one of its pillars. Furthermore, the intervention is consistent with the recommendations of the 2007 High Level Panel, which emphasized the need for the Bank to invest in vocational training, higher education and science and technology.

1.2. Rationale for Bank's involvement

1.2.1 The Bank is a major development partner in the education sector in Eritrea and this is currently the only sector which the Bank is partnering with the Government of the State of Eritrea (GoSE). The Bank has assisted in the development of the sector through the now completed Eritrea Emergency Reconstruction Program (ERP) and is currently supporting the Education Sector Development Program (ESDP) along with the International Development Association (IDA) of the World Bank and the European Union (EU). The on-going ADF project is being implemented satisfactorily and the GoSE is keen on continuing with its

¹ The National Development Plan (2010-2013) is still in draft form and is expected to be finalized shortly.

cooperation with the Bank in the education sector and the promotion of human resource development. The planned intervention is therefore a response to a specific request from the GoSE in May 2009 to the Bank for support in the area of higher education, which is also a priority area for the Bank.

1.2.2 The GoSE considers education as being central to its economic development and therefore places the sector high in its development agenda. The 2003 National Education Policy highlights the government's commitment to the development of the sector as well as the critical role education plays in developing the human capital that could contribute to the country's socio-economic development. Expansion of tertiary education and preparation of a skilled work force are some of the main features of the country's educational policy. The planned intervention in higher education will support the promotion of human resource development which is the only pillar in the 2009-2011 ICSP. It will also present a continuation of the Bank's support in the education sector, but this time at the tertiary level, thus aligning the project's aims with the objectives of the Bank's Higher Education Science Technology (HEST) strategy. In addition, it will reinforce the achievements of the on-going project by assisting in the production of teachers and school managers required for the secondary school system as well as the staff required for the planned expansion of community colleges aimed at providing access to tertiary education and middle level skills to the increasing number of secondary school graduates.

1.2.3 Furthermore, the increased access to primary and secondary education in recent years, while creating educational opportunities for many children, have also placed additional stress on a higher education system that was already weak in terms of human and financial resources. Net enrolment ratio for primary increased by one and half times and secondary enrolment doubled in the ten year period of 1997/8 to 2007/08. Also, the number of high school graduates taking the secondary school leaving examination increased by over two and half times from about 6,500 in 2005 to almost 17,000 in 2009. Enrolment in the higher education system has almost doubled in the past six years, increasing from about 5,000 students to 10,000, but there is a severe shortage of qualified national staff and physical facilities are very inadequate. To address these problems, the government has recruited foreign faculty to augment the staff of the tertiary institutions, instituted a staff training program aimed at producing qualified staff to gradually replace the expatriate staff and has made some investments in the development of the infrastructure. But these measures have not been sufficient to adequately address the capacity issues of higher education institutions (HEIs). They are also a major financial burden for the country (current government expenditure on expatriate staff alone is about USD 5.5 million annually). Bank support for building the capacity of the country's HEIs to assist in improving teaching and research in these institutions is therefore appropriate

1.3. Donors coordination

1.3.1 The Ministry of Education is responsible for the development of basic education (including vocational and technical education) as well as coordination of all activities related to the basic education sub-sector. The Ministry works closely with a donor technical committee that coordinates donor activities in the social sector. The Bank, the IDA and the EU are the major supporters of the basic education sub-sector through the on-going ESDP and the level of support from the three development partners is: an ADF loan/grant of UA 18.63 million; an IDA credit of SDR32.7 million; and an EU grant of EURO 53 million. UNICEF also provides some support to basic education.

1.3.2 In higher education, the responsibility for the development of the sub-sector lies with the National Board for Higher Education (NBHE). The NBHE is also responsible for the coordination of all activities related to the higher education sub-sector. But the NBHE is in its formative stages and as it becomes more established, its leadership in coordinating development activities in the higher education sub-sector is expected to improve. The only assistance that the sub-sector is receiving at present is USD 10 million from the government of China for the expansion of the College of Arts and Social Science and USD 10 million from the government of India for the provision of information communication technology (ICT) and science equipment for the HEIs while discussions are underway with JICA for future assistance to the HEIs. The activities to be supported by the Bank's proposed project will be closely coordinated with those provided by other development partners particularly with the project supported by the government of India.

II – PROJECT DESCRIPTION

2.1. Project components

2.1.1 The sector goal is human resources development in order to further economic growth and reduce poverty. The objective of the project is to contribute to building capacity for teaching, research and service at the country's higher education institutions. To achieve this objective, the project will have the following components:

Table 2.1: project components

nr.	Component name	Est. cost (UA Million)	Component description
1	Staff Development	3.95	<ul style="list-style-type: none"> ▪ This component aims to support the GoSE's efforts to build national capacity for teaching, research and service at the country's 7 HEIs*. This will be achieved through the upgrading of the qualifications of junior staff of HEIs at graduate education programs to be established at some of the HEIs; provision of fellowships for studies at institutions in other countries in fields where graduate programs are not available in the country; and through distance learning. ▪ A total of 260 graduate assistants from the 7 HEIs will receive postgraduate training at the masters degree level over a three year period: 75 Overseas Training; 85 Local Training; 100 Distance Learning.
2	Technical Assistance	6.12	<ul style="list-style-type: none"> ▪ This component will assist in efforts to improve the capacity of HEIs to provide quality higher education through increased and improved teaching, research and service. Given the shortage of qualified national staff, the component will assist in meeting the cost of providing technical assistance to augment the staffing of the HEIs in the areas where competencies are not currently available in the country. ▪ Expatriate staff (190 in year 1; 187 in year 2; and 20 in year 3) will be employed at the 7 HEIs of the country, providing about 4,760 man-months of service over the period of three years.

3	Infrastructure Development	5.45	<ul style="list-style-type: none"> ▪ The component will aim to support government attempts to improve the learning environment at the HEI's. Two HEIs - Eritrea Institute of Technology (EIT) and Hamelmalo Agriculture College (HAC) will have their infrastructure improved. Of the 7 HEIs, the infrastructure at these two institutions is the least adequate. ▪ At EIT three engineering (automotive, mechanical and industrial) laboratories, a library and toilet facilities will be established; electrical and sanitary works will also be undertaken. ▪ At HAC eight laboratories (animal science, agronomy, horticulture, plant protection, soil science, land use planning, food science and technology, and forestry and wildlife) for agriculture sciences, two computer laboratories, and two lecture halls will be established; ground will also be improved ▪ No equipment will be provided by the project as equipment will be transferred from the former laboratories of the University of Asmara (UoA)** and additional equipment will be provided under a project funded by the government of India.
4	Project Management	0.14	<ul style="list-style-type: none"> ▪ The component will provide the required resources for the annual auditing of the project and operating costs required for routine administration such as communications and local travel.

*The 7 HEIs are: Eritrea Institute of Technology (EIT) in Mai Nefhi; Hamelmalo Agriculture College (HAC) in Hamelmalo (Keren); College of Health Sciences (CHS) in Asmara; Orotta School of Medicine in Asmara; College of Marine Sciences and Technology (COMSAT) in Massawa; Halhale College of Business and Economics (HACOB) in Halhale; and College of Arts and Social Sciences (CASS) (currently in Mai Nefhi but planned to move to Adi Keih).

**Prior to relocation to their new premises, EIT and HAC had their laboratories at the UoA. The equipment from these laboratories is moved as new laboratories are established at the new locations.

2.2. Technical solution retained and other alternatives explored

2.2.1 Two alternatives were considered in the design of this project. The first alternative proposed by the government was to provide support for government request for assistance in meeting the cost of the expatriate staff working in higher education institutions. About 38.6% of the total faculty staff which is also 63% of staff qualified to teach at the HEI's are expatriate and the annual government expenditure on these expatriate staff is USD 5.5 million. This is a clear indication of government commitment to the development of higher education, but it is also a huge burden for the country. After consultations with the government, this alternative was rejected because it was not adequately addressing issues of sustainability with regard to building capacity for higher education.

2.2.2 The second alternative was to design a multi-component project which, while providing support in meeting the cost of expatriate staff through the provision of technical assistance, would also support a staff development program which would assist in building national capacity for teaching and research at the country's seven HEIs through the provision of a training program that will upgrade the qualifications of junior faculty staff (graduate assistants) currently not qualified to take full teaching duties. Such a project will also have a component that will address the inadequate physical infrastructure that is constraining the quality of the education provided at two of the HEI's. The two institutions are Eritrea Institute of Technology (EIT) and Hamelmalo Agricultural College (HAC). Of the seven HEIs, the

infrastructure at these two institutions is the least adequate. The EIT, which is the largest HEI in the country and housing the colleges of basic sciences, engineering and education, is operating from a campus where most buildings are prefabricated with no adequate engineering laboratories and science laboratories that need significant upgrading. The HAC is operating from an old agriculture technical school with very few facilities for the teaching of agricultural sciences.

2.2.3 The second alternative was selected because while it addresses the current problem of shortage of qualified national teaching staff by supporting the provision of technical assistance that will augment the staffing of the HEIs in the areas where competencies are not currently available, it will also assist in building the national capacity for teaching and research through staff and infrastructure development. The retained alternative will assist in moving the proportion of qualified staff who are nationals from current 37% to over 90% at the end of the project. At present of the 391 qualified staff, 145 (37%) are nationals and 246 (63%) are expatriate. And of the total 638 HEI staff, 392 (61.4%) are nationals and 246 (38.6%) are expatriate, while of 392 nationals, 145 (37%) are qualified staff and 247 (63%) are junior faculty staff whose qualifications need to be upgraded.

Table 2.2: project alternatives considered and reasons for rejection

Alternative name	Brief description	Reasons for rejection
Sector Support Budget	Resources provided to the government as a budget support but ear marked for the development of higher education. The principal activities supported by the project are in the services category. Over 73% of the ADF portion of the project will fund training and technical assistance.	<ul style="list-style-type: none"> ▪ Conditions for budget support are not fully in place at present. ▪ The country does not have a sector development program which includes higher education development ▪ Does not adequately address issues of sustainability with regard to building capacity for higher education.

2.3. Project type

2.3.1 The project is a stand alone investment project which will assist in the development of the country's higher education subsector. The government has developed a comprehensive education sector development program, which is supported by three development partners including the Bank. But the program is confined to the development of basic education and does not cover higher education¹. There is also no separate subsector program for higher education and the Bank will be the first major development partner to support the higher education subsector. Given these conditions, a project mode of support was considered to be the most appropriate mechanism to channel the assistance to the sub-sector.

2.4. Project cost and financing arrangements

2.4.1. The total project cost is estimated at UA 15.66 million. These cost estimates are based on December 2009 prices. For the purpose of costing, all items have been priced in United States Dollars and converted into UA at the exchange rate applicable for the month of December 2009.

¹ When the ESDP was developed in 2004, it did not cover tertiary education, but it was envisaged tertiary education would be included at a later stage. This did not happen as the responsibility for the development of tertiary education was moved from the MoE to a new body, the NBHE

2.4.2 Price escalation has been calculated based on 2.5% annual price increase for foreign currency and 3.5% for local currency throughout the five-year implementation period.

2.4.3 The ADF instrument is a grant.

2.4.4 The project will be financed jointly by the ADF at UA 12.90 million (82.3%) and the Government at UA 2.76 million (17.7%) as shown in Table 2.4. The ADF contribution will cover 100% of the foreign exchange costs and 29.8% of local costs. The Government will finance 70.2% of the local costs. The Fund will contribute to financing the cost of works, goods, services and training costs. For the List of Goods and Services see Annex C2.

Table 2.3: Project cost estimates by component [amounts in million USD and UA]

Components	in USD million				% Foreign	in UA million			
	Foreign Currency Cost	Local Currency Cost	TOTAL Costs			Foreign Currency Cost	Local Currency Cost	TOTAL Costs	% Foreign
1 Staff development	4.51	1.52	6.03	74.9%	2.80	0.94	3.74	74.9%	
2 Technical Assistance	8.37	0.99	9.36	89.4%	5.20	0.62	5.81	89.4%	
3 Infrastructure Development	4.64	2.93	7.57	61.3%	2.88	1.82	4.70	61.3%	
4 Project Management	0.00	0.20	0.20	0.0%	0.00	0.12	0.12	0.0%	
Total Base Cost	17.51	5.63	23.15	75.7%	10.88	3.50	14.37	75.7%	
Physical Contingency	0.46	0.27	0.73	63.5%	0.29	0.17	0.45	63.5%	
Price Contingency	0.91	0.42	1.34	68.4%	0.57	0.26	0.83	68.4%	
Total Project Cost	18.89	6.32	25.21	74.9%	11.73	3.93	15.66	74.9%	

Note: Exchange rates are provided in the introduction of this report (page (i))

Table 2.4: Sources of financing [amounts in million UA]

Sources of Financing	in UA million			% Total
	Foreign Currency Cost	Local Currency Cost	TOTAL Costs	
ADF GRANT	11.73	1.17	12.89	82.3%
GOSE	0.00	2.76	2.76	17.7%
Total Project Cost	11.73	3.93	15.66	100.0%

Table 2.5: Project cost by category of expenditure [amounts in million USD and UA]

Categories of Expenditure	in USD million				% Foreign	in UA million			
	Foreign Currency Cost	Local Currency Cost	TOTAL Costs			Foreign Currency Cost	Local Currency Cost	TOTAL Costs	% Foreign
A. Goods	0.00	0.03	0.03	0.0%	0.00	0.02	0.02	0.0%	
B. Works	4.64	2.21	6.85	67.7%	2.88	1.37	4.25	67.7%	
C. Services	12.88	3.24	16.12	79.9%	8.00	2.01	10.01	79.9%	
D. Operating cost	0.00	0.15	0.15	0.0%	0.00	0.09	0.09	0.0%	
Total Base Cost	17.51	5.63	23.15	75.7%	10.88	3.50	14.37	75.7%	
Physical Contingency	0.46	0.27	0.73	63.5%	0.29	0.17	0.45	63.5%	
Price Contingency	0.91	0.42	1.34	68.4%	0.57	0.26	0.83	68.4%	
Total Project Cost	18.89	6.32	25.21	74.9%	11.73	3.93	15.66	74.9%	

Table 2.6: Expenditure schedule by component [amounts in million UA]

Components	Year 1	Year 2	Year 3	Year 4	Year 5	Total	% Total
1 Staff development	0.875	1.538	1.538	0.000	0.000	3.95	25%
2 Technical Assistance	2.933	2.880	0.308	0.000	0.000	6.12	39%
3 Infrastructure Development	1.357	2.171	1.378	0.543	0.000	5.45	35%
4 Project Management	0.034	0.034	0.034	0.034	0.000	0.14	1%
Total Project Cost	5.20	6.62	3.26	0.58	0.00	15.66	100%

Table 2.7: Expenditure schedule by source and category of expenditure [amounts in million UA]

Categories of Expenditure	ADF GRANT			GOSE	TOTAL Costs	% Foreign
	Foreign Currency Cost	Local Currency Cost	Total Cost	Local Currency Cost		
A. Goods	0.00	0.02	0.02	0.00	0.02	0.0%
B. Works	3.34	0.00	3.34	1.61	4.95	67.4%
C. Services	8.40	1.04	9.44	1.14	10.58	79.4%
D. Operating cost	0.00	0.10	0.10	0.00	0.10	0.0%
Total Project Cost	11.74	1.17	12.90	2.75	15.66	75.0%

2.5. Project's target area and population

2.5.1 The project will cover all of the 7 higher education institutions of the country, which are situated at various regions of the country. Initially the principal beneficiaries of the project are the students in higher education institutions currently numbering 10,000. But future students will also benefit from the strengthened capacity of the HEI's. They will benefit from the improved conditions of learning following the improved staffing of the institutions and the upgrading of some of teaching facilities resulting from the project. Other beneficiaries of the project will include the 260 junior faculty staff who will receive training to upgrade their qualifications. Institutions, such as schools and health clinics, organizations, agencies such as government ministries, and enterprises, both public and private, at which the graduates will be serving, will also be major beneficiaries. Furthermore, farmers, fishing communities and adults in continuing business education programs are other special groups of beneficiaries. More farmers can benefit from the strengthened capacity of the Agriculture College, located in the country's farming region, in farming extension services. Similarly, fishing communities will benefit from the strengthened capacity of the College of Marine Sciences and Technology, located in the coastal region, in fishing extension services. The improved capacity of the College of Business and Economics will also provide more adults opportunities to attend the college's continuing business education programs, which are in high demand especially in urban areas.

2.6. Participatory process for project identification, design and implementation

2.6.1 The project has been developed through an extensive participation of key stakeholders whose involvement will continue during implementation. The project team consulted widely during the identification, preparation and appraisal missions. Views of representatives of the Ministry of Finance, the National Board for Higher Education, the Office of the President, Ministry of Education, Ministry of Labor and Welfare, and external financing agents were sought. There was a wide support for the project at all levels. All seven HEI's that the project

will support have been visited and extensive discussion carried out with the management of the institutions and their staff. Presentations on the development plans of each institution was made to the project team and data obtained incorporated in the design of the project. The project team worked with a national project team representing the HEIs and the NBHE to fully develop the project. This participatory approach will be maintained during project implementation. The HEIs will be represented in the project steering committee. The project management team will also receive technical support from the beneficiary higher education institutions in the preparation of work programs, selection of candidates for training and monitoring the implementation of construction activities.

2.7. Bank Group experience, lessons reflected in project design

2.7.1 The project benefited from lessons learned from the implementation of the Bank's ongoing education project, which is being implemented satisfactorily, as well as the experiences gained from interventions funded by other development partners. These lessons include: (i) full involvement of executing agency in the design of the project and implementation of project activities is critical to ensuring realization of project results; (ii) close coordination and harmonization of activities with other development partners enhances efficiency of utilization of resources; (iii) existence of stable and effective project management team is crucial to successful project implementation; (iv) monitoring and evaluation are critical to managing risks and enhancing achievement of results; and (v) extensive supervision of the project activities by the Bank is crucial to successful project implementation.

2.7.2 These lessons have been taken into account in the development of the project by: (i) collaborating with a national project team from the NBHE and HEI's in developing the project; (ii) harmonization of project activities with those of a project funded by the government of India; (iii) assigning major procurement activities to the staff of the on-going education project who have attained extensive knowledge of the Bank's procurement procedures; (iv) using the expertise of the HEIs in augmenting the capacity of the executing agency for monitoring and evaluation; and (v) planning for supervision of the project by the Bank at least twice a year to provide adequate implementation support to the project management. Experience from interventions in higher education by other development partners also demonstrate that supporting staff development, provision of equipment and technical assistance and rehabilitation of facilities improve the quality of higher education provided. This project will support provision of training for staff, technical assistance and expansion of facilities, areas found to be instrumental in laying strong foundations for a higher education system that is at its early stage of development like that of Eritrea.

2.8. Key performance indicators

2.8.1 The key performance indicators for monitoring progress in achieving the project objectives are described in the project logical framework. These include output indicators such as the number of junior faculty staff upgraded, number of technical assistants provided and number of facilities established; and outcome indicators such as the number of higher education institutions with improved capacity for teaching and research and the percentage of qualified higher education staff that are nationals.

III – PROJECT FEASIBILITY

3.1. Economic and financial performance

3.1.1 In recent years higher education has become a focus of increasing policy debate and analysis in African countries. The reason for this lies predominantly in the view that there is now sufficient evidence that higher education and research contribute to progress towards reaching the internationally agreed development goals of Education for All (EFA) and the Millennium Development Goals (MDG) and to economic and social development.

3.1.2 The increased importance of knowledge as a driving force in economic development and the consequent skill-biased nature of technological changes in the workplace are putting additional pressure on national governments to revamp their higher education systems in order to produce graduates who are well prepared for work. Economies increasingly need a more sophisticated labor force equipped with competencies, knowledge, and workplace skills that cannot be developed only in primary school or in secondary school programs. There is now considerable evidence-based literature that a large pool of workers with tertiary education is a prerequisite for attracting foreign investment and technologically-based industry that can transform the economic structure of a low-income economy. The project will therefore support the building of the capacity of the country's seven higher education institutions to produce the required skilled workforce. Furthermore, with this kind of support certain key sectors, such as agriculture and mining, will be rejuvenated to contribute to accelerated economic growth and reduction of poverty.

3.1.3 Shortage of appropriate human capital hinders Eritrea's development efforts. The country is facing serious shortages of skilled workforce, especially teachers for upper-schools and higher education institutions, and is currently relying on foreign teachers to fill the gaps. About 60% of the qualified staff of institutions of higher education and 30% of the qualified secondary school teachers (mostly science and mathematics teachers) are expatriate staff. Similarly there are acute shortages of qualified health workers. There is only one doctor and six nurses per 10,000 population. Preliminary results of a recent survey indicate serious shortages of higher level skills in various professions such as engineering, education, health, and administration. The rationale for the proposed interventions in higher education is therefore the need to assist the country improve the quality of its human capital critical for growth and poverty reduction. In fact, a ready market for nurses and teachers and other professional already exists in Eritrea.

3.2. Environmental and Social impacts

Environment

3.2.1 The activities to be implemented under the project include new construction at two existing higher education institutions. The project is therefore classified as category II according to the Bank's environmental guidelines. The project will have minimal negative impact on the environment. The only construction under the project are three engineering laboratories, a library and toilet facilities at Eritrea Institute of Technology and one block of laboratories for teaching agriculture sciences and two lecture halls at Hamelmalo Agriculture College. In the execution of civil works, the basic principles of environmental protection will be observed. This would include putting in place measures to reduce: risk of soil disturbance, de-vegetation and erosion during construction; degradation of land as result of harvesting of construction materials such as sand and stones; dust and noise from construction activities; occupational hazards to construction workers; and risks of pollution and accidents from

laboratory wastes. Positive impacts of the project on the environment include, improved sanitation facilities through the provision of toilets and increased capacity for the teaching of and research in environmental sciences and natural resources management.

3.2.2 The project team visited the two institutions at which the construction activities will take place and thoroughly reviewed with the institutions the designs of the buildings and provided advice as appropriate on environmental issues. The two institutions also submitted information on the likely environmental impacts of the works and the mitigation measures that will be put in place. The information provided includes mechanisms for identifying adverse environmental and social impacts associated with the implementation of activities supported by the project. It also contains measures that need to be taken to mitigate the adverse impacts and actions that can assist in improving the physical and social environment of the colleges. Further refinements of the information provided will include outlining the responsibilities of various actors such as the managers of the institutions, faculty and students in addressing environmental and social concerns. Annex B8 gives the Environmental and Social Management Plan (ESMP) summary, which outlines the project environmental issues and mitigation measures that will be put in place during project implementation.

Climate Change

3.2.3 Eritrea is among the most vulnerable countries to the adverse effects of climate change, mainly because of its least adaptive capacities and geographical location in the arid and semi-arid region of the Sahalian Africa. Government climate change projections indicate that temperatures could increase by more than 4 degrees Celsius by 2050, reducing the quantity of available water. The national program which deals with the effects of climate change also identified that the livestock production system and related livelihood opportunities for pastoralists as being most vulnerable to climate change. Droughts are expected to become longer and more intense and is already forcing pastoralist to move more often in search of pasture, disrupting traditional seasonal migration patterns and related social and economic impacts. To address these diverse climate change related issues there is a need to build Eritrea's capacity to mainstream and integrate the cross cutting climate change issues into its national developmental goals and the MDGs. The project will provide support in terms of staff training and teaching and research facilitates for Hamelmalo College of Agriculture where training in environmental sciences and natural resources management are provided.

Gender

3.2.4 Enrolment at all levels of education has increased in Eritrea in the last decade, but there is disparity in enrolments, which increases with the level of education, between female and male students. Girls are particularly under-represented at the secondary and tertiary education levels. Currently, about 41% of the secondary school population are girls and women constitute less than 30% of tertiary education enrolment. The low level of participation of females in the tertiary level is a consequence of the low enrolment at the middle and secondary levels, which is primarily a result of inadequate number of schools in rural areas, with the attendant problem of long distances to schools, parental reluctance to send girls to school in some regions, shortage of female teachers especially at the middle and secondary levels to act as role models for girls and early marriages.

3.2.5 Attempts being made to increase the participation of girls at the lower levels of education should also assist in increasing the proportion of girls at the tertiary level. With support from development partners under the ongoing ESDP, efforts are being made to

increase the number of schools, especially in rural areas. This will have the effect of bringing schools to under-served communities, reducing walking distances to schools and giving more girls the opportunity to attend school. Other measures taken to improve access of girls to education include the provision of boarding facilities for girls at schools, especially middle schools, in regions where the participation of girls in education is particularly low. The Bank's on-going education project contributes to the provision of these boarding facilities. In technical and vocational education, a quota of 30% female enrolment was introduced in 2001, when female representation was only 12% of total enrolment. This ratio was reached in 2005/06. These efforts coupled with Eritrea's policy of free public education at all levels should reduce barriers to access to public education and should ultimately increase the number girls transiting to tertiary education.

3.2.6 At the tertiary level, a major policy instrument employed by the government to increase the enrolment of girls in higher education institutions is the lowering of the bar for admission to HEIs for girls. This policy of preferential access to higher education institutions in favor of female high school graduates should facilitate more female students taking advantage of the expected improved quality of higher education resulting from the support provided by the project. However, for this policy to have a significant impact, the HEIs will need to provide additional support services, such as special tutoring session, for female students. And at the secondary level, vigorous effort would need to be made to improve the performance of girls.

3.2.7 Under the project, preference will also be given to female junior faculty members in the selection of candidates for training supported by the project to upgrade the qualifications of junior staff. This should assist in increasing the number of female teachers at the tertiary level, which will act as an incentive for female learners to aspire to higher levels of learning. At present only 13% of the faculty qualified to teach at the HEIs are females.

Social

3.2.8 Poverty and education are highly correlated, with poverty being both the cause and effect of low levels of education. Poverty is widespread in Eritrea with some 53%¹ of the population living below the poverty line. Achieving the MDGs of universal primary education and gender parity in secondary education are also major challenges. Despite significant increases in enrolment rates, in 2007/08 school year, gross enrolment in primary was only 67% and the gender parity index for secondary was 0.7. The government believes that these problems can be addressed in the context of a broad policy framework, which includes investments in human resources through education and training. By contributing to the government efforts to develop the country's human resource base, the project, through its support for improvements in the capacity of higher education institutions for teaching and research and especially in engineering and agriculture, basic and health sciences, and teacher education will assist in the building of middle and higher level skills in the country, which are needed for promoting sustained economic growth and social development. At the household level, the increased individual productivity, resulting from the improved quality of education, can lead to increased earnings and improved quality of life.

¹2009 UN Human Development Report

Involuntary resettlement

3.2.9 There will be no people who will be displaced by the project. The activities supported by the project will be taking place in existing institutions.

IV – IMPLEMENTATION

4.1. Implementation arrangements

Institutional

4.1.1 The National Board for Higher Education will be the Executing Agency of the project. Policy and operational oversight will be provided by a Project Steering Committee (PSC). The PSC of five members, comprising a senior official appointed by the Executive Director of the NBHE and who will serve as the chairperson of the PSC, a representative of the NBHE, two representatives of the HEIs and the project coordinator, will oversee the implementation of the project.

4.1.2 The NBHE will be responsible for project execution through its Project Coordination Unit (PCU), headed by a project coordinator, who will be the liaison officer between the NBHE and the Bank. The project coordinator will be heading resource personnel responsible for procurement, financial management, contract management, training, monitoring and evaluation (M&E) of all project activities (detail are in Annex B3). The NBHE has sufficient capacity in all fields except procurement and M&E. Therefore NBHE will be supported by the Project Management Unit of the Education Sector Development Program (PMU-ESDP), currently implementing the Bank's ESDP support project, which will be fully responsible to provide all procurement services. For M&E services support will be provided by staff from Halhale College of Business & Economics (HACOBEB). Both the PMU of the ESDP and the HACOBEB have the capacity and resources to provide the respective services. Regarding financial management, the NBHE has a qualified financial management specialist and two qualified accountants. Under the supervision of the financial management specialist, one of the accountants will be responsible for managing the project accounts. The NBHE will also be filling the position of internal auditor.

Procurement

4.1.3 All procurement of goods, works and services financed by the Bank will be in accordance with the Bank's Rules and Procedures for Procurement of Goods and Works or, as appropriate, Rules and Procedures for the Use of Consultants, using the relevant Bank Standard Bidding Documents, with the exception of the remuneration of the expatriate faculty, which will be in accordance with government procedures. The NBHE will be responsible for the procurement of goods, works, service contracts, consulting services and training, assisted by the PMU of the ESDP. The resources, capacity, expertise and experience of the PMU-ESDP are described in Annex B3.

4.1.4 The procurement arrangements for the project are summarized in the following table:

Project Categories		UA '000,000				
		ICB	Other	Short listing	Non-Bank funded	Total
1	Civil works					
1.1	HAC Hamelmalo	2.32 (1.57)				2.32 (1.57)
1.2	EIT	2.63 (1.77)				2.63 (1.77)
2	Goods					
2.1	HAC Furniture for lecture halls		0.02 (0.02)			0.02 (0.02)
3	Services contracts					
3.1	Expatriate faculty salaries		6.12 (5.46)			6.12 (5.46)
4	Consulting services					
4.1	Construction design & supervision				0.48 (0.00)	0.48 (0.00)
4.2	External audit services			0.03 (0.03)		0.03 (0.03)
5	Training					
5.1	Training abroad		2.45 (2.45)			2.45 (2.45)
5.2	Training local		0.85 (0.85)			0.85 (0.85)
5.3	Distance learning		0.66 (0.66)			0.66 (0.66)
6	Miscellaneous					
6.1	Travel and out of pocket expenses		0.10 (0.10)			0.10 (0.10)
	Total Cost	4.95 (3.34)	10.20 (9.53)	0.03 (0.03)	0.48 (0.00)	15.66 (12.90)

ICB - International Competitive Bidding
Amounts () are financed by the ADF Loan

Disbursement

4.1.5 The ADF will use two disbursement methods: i) special account method, and ii) direct payment method in line with the Disbursement Rules and Procedures. The Special Account method (SA) shall be used for payments of goods, services and operating costs category. The Direct Payment method shall be used for payments under the works category.

4.1.6 The foreign currency account shall be opened with a commercial bank acceptable to the Fund into which the ADF resources shall be disbursed to finance foreign eligible expenditures. Likewise, a local currency account shall be opened for which proceeds from the foreign currency account shall be deposited to finance local eligible expenditures of goods, services and operating costs. A separate local currency account shall be opened for the allocation of the counterpart funds for the project. The establishment of the three bank accounts shall be a condition precedent to first disbursement.

4.1.7 An initial deposit for an amount corresponding to six months of activities as justified by a work program approved by the Bank will be made in the SA. Subsequent replenishments of the SA will be subject to the NBHE having provided sufficient justifications for the use of at least 50% of the previous deposit and upon production of agreed work program for the following six months in line with the Bank's disbursement rules and procedures. To ensure adherence to agreed financial regulations, the special accounts will be monitored by the ADF financial supervision and AUDIT missions.

Financial Reporting and Auditing

4.1.8 An assessment of the financial management system of the executing agency that is the NBHE has been carried and the assessment indicates that the financial management systems, budgetary system and financial reporting system are adequate and acceptable to the Bank. The NBHE has a well documented accounting policies and procedures as well as charts of

accounts which are very detailed and acceptable to the Bank. The financial systems are automated and annual financial statements are regularly prepared. However, in order to strengthen the implementation of these policies and procedures, the NBHE should ensure that audited financial statements and reports are up to date; and that the position of the internal audit is filled. Also to further strengthen the financial management of the project accounts, the financial management staff of the NBHE, currently made up of financial management specialist and two accountants, will be provided with training in the Bank's disbursement procedures.

4.1.9 The NBHE prepares annual financial statements and reports regularly and the current chart of accounts is capable of recording the financial transactions of the project and producing required regular reports. However, in order to ensure efficient monitoring of the Project's expenditure, the NBHE will maintain separate project accounts which should correspond to the project budget. Detailed accounts concerning expenditure by the Bank and the Government should facilitate the identification of expenditure by project component, category of expenditure and source of finance. The accounts should clearly document disbursed amounts from the Bank and GoSE. The accounts and ledgers should be kept separately from any other project the NBHE would implement. External auditors will audit the project accounts annually and at the end of the project. An Audit Report will be presented annually to the Bank, within six (6) months following the end of each financial year. The statutory reporting requirements is that NBHE should submit monthly, semi-annually and annual audit to the Ministry of Finance and it is expected that the Bank will receive interim financial and audited financial statements regularly

4.2. Monitoring

4.2.1 The NBHE, with technical support from HACOBE, will be responsible for monitoring and evaluation of project activities. The NBHE will submit to ADF Quarterly Project Progress Reports (QPPR) in accordance with the established format covering all aspects of the project, within 30 days following the end of each quarter. The QPPR will cover progress measured against indicators in the project logframe. The project management will also prepare and submit a project completion report in accordance with the format recommended by ADF. Additional reports and clarifications will be submitted to the Fund as required.

4.2.2 To assess progress and provide implementation support, the Bank will conduct two supervision missions per year. A mid-term review will also be conducted after two years to evaluate progress. ADF will be responsible for undertaking the review in collaboration with the NBHE and HEIs. A participatory approach will be encouraged in the review process. In the event of the need for modification of the project after the mid-term review, submissions will be made to ADF for consideration.

4.3. Governance

4.3.1 The Bank's experience in implementing projects in Eritrea has shown that the governance practices and control systems in place are satisfactory. In each of the projects financed, the procurement and the financial procedures required by the Bank as well as the management of the contracts have been observed by the project management units. The audit and supervision reports of the on-going education project have not reported any irregularities. In this project the Bank's supervision and audit system will be proactive throughout the implementation period and will provide the desired guidance on improvements in internal

control systems. The executing agency will also have an internal auditor to provide sound advice on financial management.

4.4. Sustainability

4.4.1 The sustainability of project outcomes is primarily contingent on the level of ownership by the country. The proposed project was requested by the GoSE and will support clearly identified national priority. The government of Eritrea considers education as being central to its economic development and therefore places the sector high in its development agenda. Actions taken by the government in recent years to improve the provision of higher education include the decentralization of the higher education system through the establishment of new institutions at various regions of the country; expansion of existing facilities; provision of distance learning to those who cannot access regular programs; and promotion of gender equity in the provision of tertiary education.

4.4.2 However, the shortage of qualified national staff is a major problem, adversely affecting the quantity and quality of teaching and research. To address this particular problem, the government has recruited foreign teachers to augment the staff of the tertiary institutions. But the cost of engagement of the expatriate staff is enormous. Currently government expenditure on expatriate staff is about USD 5.5 million annually. This is a huge burden for the country, but a clear indication of government commitment to the development of higher education.

4.4.3 To reduce the dependence on expatriate staff and improve the sustainability of the higher education sub-sector, the GoSE developed a multi-pronged strategy which includes upgrading of the qualifications of junior staff through the provision of fellowships outside the country; the starting of graduate programs in the country to expand the number of junior staff that can be upgraded; the deployment of qualified government employees working in other government agencies and ministries as part time teaching staff; and the expansion of the use distance learning in delivering graduate education. The project will support the implementation of these activities, thus helping accelerate the phasing out of the deployment of expatriate staff at higher education institution. It is envisaged that by the end of the project, the proportion of qualified staff that are nationals will increase from the current level of about 37% to 90%.

4.4.4 The replacement of expatriate staff with qualified national staff by upgrading the qualifications of junior faculty staff through the provision of training will result in the gradual reduction of the recurrent cost of staffing the HEIs. This is because the salary of a qualified national staff is less than one-quarter of that of an expatriate staff. The project will support the engagement of expatriate staff while at the same time reducing the dependence on them by increasing the number of the qualified national staff through staff development program. In years 1, 2 and 3 the project will support respectively the cost of 190, 187 and 20 expatriate staff. At the same time by end of years 2, 3 and 4, the project would have supported respectively the training of 60, 100 and 100 junior faculty staff. But given that the number of students attending the HEIs will continue to increase, the process of staff development will continue beyond the project period and the government is committed to providing the required resources. At present there are 65 junior faculty staff that are studying in 7 foreign countries and another 20 will shortly go for out of country training.

4.4.5 Recurrent costs related to the maintenance of facilities constructed under the project are estimated at 2% of the capital investment and will amount to about UA 90,000 per year.

There are no accurate data available for recurrent expenditure for higher education, but the addition to the recurrent expenditure arising from the construction activities is unlikely to increase the recurrent expenditure of higher education by more than 0.1%. Modest increases in recurrent expenditure for the sub sector should offset this small increase in the recurrent expenditure resulting from the project construction activities.

4.5. Risk management

4.5.1 One risk associated with the project is that some of the staff on fellowships under the staff development program planned to be supported by the project may fail to return to the country or to their institutions after completing their training at institutions outside the country. To mitigate this risk, the GoSE has a program for improving the working and living conditions for the staff HEIs and is committed to further strengthening it. These measures include promotion following training and provision of housing and ICT facilities such as computers and access to internet. Also the project will support in-country training at locally established graduate training programs and the provision of training through distance learning where suitable.

4.6. Knowledge building

4.6.1 The project will assist knowledge building in the country. The focus of the project is the improvement of the capacity of the country's HEI's for teaching, research and service. The project will thus assist in increasing the amount and quality of human capital available for the transfer, creation and making better use of knowledge. The improved capacity at HEI's for teaching will facilitate increased transfer of knowledge, while the enhanced capacity for research should result in the creation of more knowledge to be disseminated through improved capacity for service. An area where knowledge creation and dissemination is particularly expected to increase is in agriculture sciences. Through the establishment of agriculture science laboratories and support for staff development, research in major agriculture areas such as research in crop varieties should improve and contribute to the expansion of the existing stock of knowledge.

4.6.2 In addition, as this is the first major externally funded project managed by the NBHE, the project will provide the NBHE the opportunity to gain experience in the management of donor supported projects. Similarly, as the development of higher education is becoming a major priority for the Bank, knowledge gained from the project will be valuable for the design and implementation of future Bank higher education projects and programs. The experiences gained will be recorded in the executing agency's reports and the Bank's supervision, mid-term and project completion reports. Additionally, resources will be mobilized to undertake analytical work to assist the Government in the development of a comprehensive program for the higher education sub-sector as well as a labor market analysis to identify skills gaps needed to drive forward the growth agenda.

V – LEGAL INSTRUMENTS AND AUTHORITY

5.1. Legal instrument

An ADF grant will be used to finance the project.

5.2. Conditions associated with Bank's intervention

A. Conditions Precedent to Entry into Force of the Protocol of Agreement

5.2.1 The Protocol of Agreement of the grant shall enter into force upon signature of the Recipient and the Fund.

B. Conditions Precedent to First Disbursement

5.2.2 The obligation of the Fund to make the first disbursement of the grant to the Recipient shall be conditional upon the entry into force of the Protocol of Agreement and the fulfillment by the Recipient of the following condition:

- The Recipient shall have provided evidence in form and substance satisfactory to the Fund of the opening of a foreign currency and local currency account (the “Special Accounts”) at a bank acceptable to the Fund for the deposit of proceeds of the grant.
- The Recipient shall have provided evidence in form and substance of opening of a separate local currency account to receive the counterpart contribution to be provided by the Recipient.

5.3. Compliance with Bank Policies

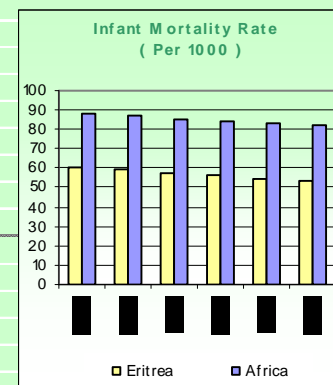
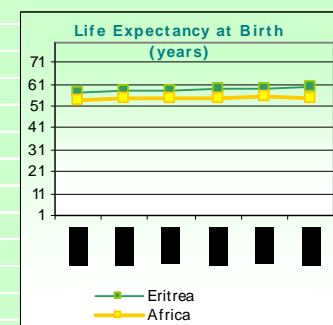
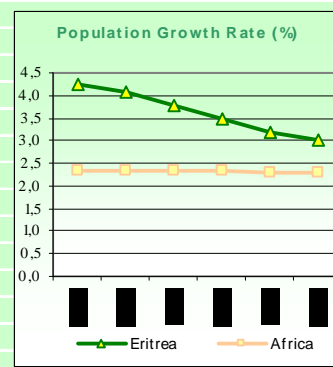
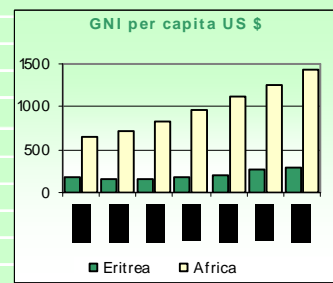
5.3.1 This project complies with all applicable Bank policies. The proposed project is consistent with the Bank’s education sector policy and its Higher Education and Science Technology Strategy. It is also in line with the Bank Group’s 2009-2011 Interim Country Strategy Paper for Eritrea.

VI – RECOMMENDATION

Management recommends that the Board of Directors approve the proposed grant of UA 12.90 million to the Government of the State of Eritrea for the purposes and subject to the conditions stipulated in this report.

Appendix I. Eritrea Country's comparative socio-economic indicators

	Year	Eritrea	Africa	Developing Countries	Developed Countries
Basic Indicators					
Area ('000 Km ²)		118	30 323	80 976	54 658
Total Population (millions)	2008	4,9	986	5.523	1.229
Urban Population (% of Total)	2008	21,0	39,1	44,2	74,6
Population Density (per Km ²)	2008	42,6	32,6	66,6	23,1
GNI per Capita (US \$)	2008	300	1 428	2 405	38 579
Labor Force Participation - Total (%)	2008	39,9	42,3	45,6	54,6
Labor Force Participation - Female (%)	2008	41,0	41,1	39,7	44,9
Gender -Related Development Index Value	2005	0,469	0,482	0,694	0,911
Human Develop. Index (Rank among 182 countries)	2007	165	n.a.	n.a.	n.a.
Popul. Living Below \$ 1 a Day (% of Population) ▼	2005	...	34,3	25,0	...
Demographic Indicators					
Population Growth Rate - Total (%)	2008	3,0	2,3	1,4	0,3
Population Growth Rate - Urban (%)	2008	5,1	3,3	2,5	0,6
Population < 15 years (%)	2008	41,5	56,0	40,0	16,6
Population >= 65 years (%)	2008	2,4	4,5	3,3	15,6
Dependency Ratio (%)	2008	83,3	78,0	52,8	49,0
Sex Ratio (per 100 female)	2008	96,6	100,7	96,7	106,0
Female Population 15-49 years (% of total population)	2008	25,3	48,5	53,3	47,2
Life Expectancy at Birth - Total (years)	2008	59,6	54,5	65,7	77,1
Life Expectancy at Birth - Female (years)	2008	61,8	55,5	67,6	80,6
Crude Birth Rate (per 1,000)	2008	37,0	35,8	22,2	11,2
Crude Death Rate (per 1,000)	2008	8,5	12,4	8,1	10,1
Infant Mortality Rate (per 1,000)	2008	53,5	83,9	51,4	6,3
Child Mortality Rate (per 1,000)	2008	73,6	134,5	77,4	7,9
Total Fertility Rate (per woman)	2008	4,6	4,6	2,7	1,6
Maternal Mortality Rate (per 100,000)	2005	450,0	683,0	450,0	9,0
Women Using Contraception (%)	2002	8,0	29,7	61,0	75,0
Health & Nutrition Indicators					
Physicians (per 100,000 people)	2004	4,9	39,6	78,0	287,0
Nurses (per 100,000 people)*	2004	57,5	120,4	98,0	782,0
Births attended by Trained Health Personnel (%)	2002	28,3	51,2	59,0	99,0
Access to Safe Water (% of Population)	2006	60,0	68,0	62,0	100,0
Access to Health Services (% of Population) ▼	2005	...	61,7	80,0	100,0
Access to Sanitation (% of Population)	2006	5,0	37,6	53,0	100,0
Percent. of Adults (aged 15-49) Living with HIV/AIDS	2005	2,4	4,5	1,3	0,3
Incidence of Tuberculosis (per 100,000)	2005	2,4	315,8	275,0	19,0
Child Immunization Against Tuberculosis (%)	2007	90,0	83,0	89,0	99,0
Child Immunization Against Measles (%)	2007	80,0	83,1	81,0	93,0
Underweight Children (% of children under 5 years)	2003	73,0	25,2	27,0	0,1
Daily Calorie Supply per Capita	2004	1 465	2 436	2 675	3 285
Public Expenditure on Health (as % of GDP)	2005	1,7	2,4	1,8	6,3
Education Indicators					
Gross Enrolment Ratio (%)					
Primary School - Total	2007	54,9	99,6	106,0	101,0
Primary School - Female	2007	49,9	92,1	103,0	101,0
Secondary School - Total	2007	29,2	43,5	60,0	101,5
Secondary School - Female	2007	24,2	40,8	58,0	101,0
Primary School Female Teaching Staff (% of Total)	2007	47,9	47,5	51,0	82,0
Adult Illiteracy Rate - Total (%) ▼	2005	...	38,0	21,0	1,0
Adult Illiteracy Rate - Male (%) ▼	2005	...	29,0	15,0	1,0
Adult Illiteracy Rate - Female (%) ▼	2005	...	47,0	27,0	1,0
Percentage of GDP Spent on Education	2006	2,4	4,5	3,9	5,9
Environmental Indicators					
Land Use (Arable Land as % of Total Land Area)	2007	6,3	6,0	9,9	11,6
Annual Rate of Deforestation (%) ▼	2005	...	0,7	0,4	-0,2
Annual Rate of Reforestation (%) ▼	2005	...	10,9
Per Capita CO2 Emissions (metric tons)	2007	0,2	1,0	1,9	12,3



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

last update :

octobre 2009

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

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

Appendix II. Table of ADB's On-going Portfolio in the Eritrea

Sector: Social

Project	Type	Rating	Amount UA Mil	Date approved	Disburse Deadline	% Disbursed
Support to Education Sector Development Program	Loan	2.0	13.6	Nov 04	Dec 11	37.8
Support to Education Sector Development Program	Grant	2.0	5.03	Nov 04	Dec 09	100
TOTAL APPROVALS			18.63			54.6%

Appendix III. Key related projects financed by the Bank and other development partners in the country

Agency	Project	Period	Amount (million)
Basic Education			
ADF	Education Sector Development Program	2004-2011	UA 18.63
IDA	Education Sector Development Program	2003-2011	SDR 32.70
EU	Education Sector Development Program	2005-2010	EUR 53.00
UNICEF	Education Sector Development Program	2007-2009	USD 07.70
Higher Education			
China	Expansion of College of Arts & Social Sciences	2008-2011	USD 10.00
India	Provision of ICT & Science Equipment to Higher Education Institutions	2009-2012	USD 10.00

Appendix IV. Map of the Project Area



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

Language: English
Original: English

PROJECT: Support to Higher Education Development
COUNTRY: Eritrea

**TECHNICAL ANNEXES TO THE PROJECT APPRAISAL
REPORT**

Date: February 2010

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Currency Equivalents

As of December 2009

1 UA	=	ERN 24.4446
1 USD	=	ERN 15.00
1 UA	=	USD 1.61018

Acronyms and Abbreviations

ADF	=	African Development Fund
EIT	=	Eritrea Institute of Higher Education
ESDP	=	Education Sector Development Program
ESMP	=	Environmental and Social Management Plan
GoSE	=	Government of the State of Eritrea
HAC	=	Hamelmallo Agriculture College
HACOBEE	=	Halhale College of Business & Economics
HEIs	=	Higher Education Institutions
IPRSP	=	Interim Poverty Reduction Strategy Paper
ICSP	=	Interim Country Strategy Paper
MGDs	=	Millennium Development Goals
MoE	=	Ministry of Education
NBHE	=	National Board for Higher Education
NDP	=	National Development Plan
NER	=	Net Enrolment Ratio
PCU	=	Project Coordinating Unit
PMU	=	Project Management Unit

Technical Annexes

A Eritrea's Development Agenda, Sector Brief and Donor's Support

A1 Eritrea's Development Agenda (Policy Context)

A1.1 Eritrea is one of the poorest countries in Africa. Its per capita GDP is US\$ 284 and it is estimated that about 53% of the population live below the poverty line. Poverty is also more prevalent in rural areas where 70 % of the population lives. The UNDP's 2009 Human Development Report ranks Eritrea 165 out of 182 countries.

A1.2 The government's overall objective is the reduction of poverty. The draft National Development Plan (NDP) for 2010- 2013¹, is the current framework for economic and social development in Eritrea. The plan is committed to the Millennium Development Goals (MDGs) and seeks to reduce poverty by focusing on the following three priority areas: (i) food security and development of cash crops, (ii) physical and social infrastructure and (iii) human capital development.

A1.3 The proposed project is aligned with the priorities of the draft NDP, which put emphasis on the development of the country's human capital critical for growth and poverty reduction. It is also consistent with the country's educational policy as articulated in Eritrea's 2003 National Education Policy, which in addition to the development of basic education, puts emphasis on the expansion of tertiary education and preparation of skilled work force as a critical part of the country's human resources development strategy.

A1.4 The project is also in line with the Bank's assistance strategy for Eritrea, which is to assist the country in its efforts to alleviate poverty through promotion of human resource development as outlined in the results-based 2009-2011 Interim Country Strategy Paper (ICSP). The project will support the only pillar of the ICSP, namely human capital development. In addition, the project is consistent with the Bank's education sector policy and its Higher Education and Science Technology (HEST) Strategy, and will further the achievement of the objectives of the on-going ADF education project.

A2 The Education Sector

Structure and Status of the Education System

A2.1 Eritrea's education system has improved markedly since independence 19 years ago. Formal education is structured into a system of 2 years of pre-primary, 5 years of primary, 3 years of middle, 4 years of secondary and 1 year or more of post-secondary education.

A2.2 Pre-primary education is intended for children aged 5-6 and coverage has steadily increased with slight decline in 2007 and 2008. In 1999/2000, the Net Enrolment Ratio (NER) for the 5-6 age group was 4.9%, but in 2007/08, this ratio reached 14.6%, with an equal number of boys and girls participating in pre-primary education.

¹ The draft NDP is in its final stages of being finalized

A2.3 Primary education is for children between ages 7-11 and in 2007/8 comprised enrolments of 314,034 at 783 schools. In 2007/8 the NER was 50%, a substantial improvement over the 1991/92 NER of 25%, but lower than the NER of 52.6% of 2005/06. There is no clear explanation for this decline in the NER for the last two years. The Ministry of Education is planning to investigate the reasons for the decline. The enrolment of boys is higher than that of girls with girls' making about 46% of the net enrolment at this level.

A2.4 Middle schools enroll children between the ages of 12-14. In 2007/2008, there were 144,031 children enrolled at 245 schools and the NER was only 25%. NER for girls at this level is lower than that for boys, standing at 23% compared to 27% for boys. The Gross Enrolment Ratio (GER) of 44.7%, which is almost twice the NER, indicates a substantial overage enrolment at this middle level.

A2.5 Secondary education also experienced substantial changes in the past decade. Enrolments doubled in the ten year period from 1997/98 to 2007/08 and the number of schools has significantly increased. But the level of participation is still low as reflect by the NER of 15%. Gender disparity is also still an issue at the secondary level as girls make only 41% of the secondary population.

A2.6 Post-secondary education and training takes place mainly in the country's seven higher education institutions (HEIs)² and two other post-secondary institutions³. Enrolment at the HEIs doubled in the past six years increasing from 5,000 students to 10,000. But females make only about 30% of the tertiary education enrolment. The low level of participation of females in the tertiary level is a consequence of the low enrolment at the secondary level. To increase the number of girls in tertiary education, the grade that girls have to attain in the Eritrea Secondary Education Certificate Examination (ESECE), which is the measure used for selecting students to HEIs, is lower than that required of boys. This lowering of the bar for admission for girls has improved the participation of girls in tertiary education in recent years.

Institutional Framework of the Sector

A2.7 Educational services in Eritrea are mainly the responsibility of two government agencies, namely; the Ministry of Education (MoE) which is responsible for primary, secondary and technical and vocational education and the National Board for Higher Education (NBHE), which is in charge of tertiary education. Prior to the establishment of the NBHE the MoE was responsible for all levels of education. The seven colleges, which constitute the national higher education system, are autonomous agencies with government support.

A2.8 The NBHE is mandated with the overall development and coordination of the country's tertiary education system. It takes the lead in the assessment of needs, formulation of policies and guidelines, establishment of institutions and programs; allocation of resources; evaluation

² The 7 HEIs are: Eritrea Institute of Technology (EIT) in Mai Nefhi; Hamelmalo Agriculture College (HAC) in Hamelmalo (Keren); College of Health Sciences (CHS) in Asmara; Orotta School of Medicine in Asmara; College of Marine Sciences and Technology (COMSAT) in Massawa; Halhale College of Business and Economics (HACOB) in Halhale; and College of Arts and Social Sciences (CASS) (currently in Mai Nefhi but planned to move to Adi Keih).

³ The National Center for Vocational Training the Teacher Training Institute

and quality assurance of the system. In addition the NBHE handles the promotion of research and dissemination of results. Annex C1 gives the organizational structure of the NBHE.

Education Policy Framework

A2.9 The development of education in Eritrea is guided by the National Education Policy of 2003. The policy highlights the government's commitment to the development of the sector as well as the critical role education could play in developing the human capital that could contribute to the country's socio-economic development. Provision of quality basic education; promotion of continuing education; preparation of skilled work force; achievement of gender parity in the provision of education; expansion of technical and vocational education and training; and expansion of tertiary education are the main features of the country's educational policy.

A2.10 At the basic education level, the Education Sector Development Program (ESDP) has been developed in 2004 to translate the objectives of the education policy into a comprehensive action plan that guides the allocation of resources and the overall development of basic education. The ESDP is a rolling five year development programs to be updated annually, with the objective of increasing access to quality equitable primary and secondary education; development of vocational, technical and technological skills; and strengthening of institutional capacity to deliver better quality education services.

A2.11 At the tertiary level, there is no sub-sector development program. When the ESDP was developed in 2004, it did not cover tertiary education, but it was envisaged tertiary education would be included at a later stage. This did not happen as the responsibility for the development of tertiary education was moved from the MoE to a new body, the NBHE. The NBHE is in its formative years, but as it build capacity for planning and coordination of tertiary education activities, it has also initiated some actions that are expected to lead to development of a comprehensive costed sub-sector development program with achievable objectives. In collaboration with other national stakeholders, a road map for the different levels of education in Eritrea and a proposal for the establishment of junior colleges were drafted at the end of 2008.

Education Financing

A2.12 In Eritrea education is primarily financed by government and public education is offered free at all levels. However, data on national budget and public expenditure on education is very limited. It is estimated that as percent of GDP total spending on education increased from 2.7% in 2000 to 5.4% in 2005. It is also reported that government recurrent expenditure on education in 2009 was about 12% of public recurrent expenditure. But public recurrent expenditure on education may be higher than this estimate given that public education was expanding in recent years and is provided by the government at no charge. Also, although education is primarily financed by the government, non-governmental organizations contribute to the provision of education as well. In 2007/2008, non-governmental entities owned 11% (83 of the 783) of primary schools; 12% (30 of the 245) of middle schools; and 14% (10 of the 73) of secondary schools.

Donor Support in the Education Sector

A2.13 Several development partners are involved in supporting the education sector. The African Development Fund, the World Bank, the European Union and UNICEF are supporting the on-going Education Sector Development Program (ESDP). The higher education sub-sector is not included in the areas supported by the ESDP, but it receives some support from two bilateral partners, China and India. The following table summarizes the size of support by each agency and the area of support.

Agency	Project	Period	Amount (million)
<i>Basic Education</i>			
ADF	Education Sector Development Program	2004-2011	UA 18.63
IDA	Education Sector Development Program	2003-2011	SDR 32.70
EU	Education Sector Development Program	2005-2010	EUR 53.00
UNICEF	Education Sector Development Program	2007-2009	USD 07.70
<i>Higher Education</i>			
China	Expansion of College of Arts & Social Sciences	2008-2011	USD 10.00
India	Provision of ICT & Science Equipment to Higher Education Institutions	2009-2012	USD 10.00

A2.14 Donor support for the ESDP is focused on improving access and equity, quality and relevance and the planning and management capacity for basic education. In the area of access and equity, the emphasis has been on the construction and rehabilitation of primary and secondary schools. In the area of quality and relevance, the focus has been on: teacher training including in-service teacher training; the construction and rehabilitation of Teacher Development Centers; curriculum review and development; provision of text books; enhancement of school health and sanitation; provision of safe drinking water; awareness creation related to HIV/AIDS and the introduction and popularization of the life skills' curriculum; and on the improvement of school assessment systems. With respect to management and planning, donor resources have been directed toward: the development of national and district education strategies; the development of an education management information systems; training of educational managers, teachers and other educational stakeholder groups.

Challenges and Constraints in the Education Sector

A2.15 The challenges facing the Eritrea education sector are many. Chief among them is the need to improve the quality of primary education, increase access and improve the quality and equity of secondary and tertiary education, and improve the relevance of the education provided. Inadequate provision of access-increasing and quality-improving inputs, such as classrooms, qualified teachers, and instructional materials, brought about by resource constraints, is a major impediment to overcoming these challenges. Weaknesses in planning and institutional arrangements are also constraints to the efficient allocation and use of available resources. In addition, the widespread poverty in the country is an immense constraint to the provision of quality education.

A2.16 The higher education system in Eritrea has experienced major changes in recent years. But the increased access to primary and secondary education in the last decade (net enrolment ratio for primary increased by one and half times and secondary enrolment doubled in the ten year period of 1997/8 to 2007/08), while creating educational opportunities for many children, have also placed additional stress on a higher education system that was already

weak in terms of human and financial resources. Enrolment in the higher education system has almost doubled in the past six years, increasing from about 5,000 students to 10,000, but there is a severe shortage of qualified national staff and physical facilities are very inadequate. To address these problems, the government has recruited foreign faculty to augment the staff of the tertiary institutions, instituted a staff training program aimed at producing qualified staff to gradually replace the expatriate staff and has made some investments in the development of the infrastructure. But the cost of engagement of the expatriate staff is enormous. Currently government expenditure on expatriate staff is about USD 5.5 million annually. This is a huge burden for the country, but a clear indication of government commitment to the development of higher education.

B. Backup of the Key Arguments of the Report

B1. Lessons Learned

B1.1 To date the Bank has financed one education project (Support to Education Sector Development Program - ESDP) in Eritrea. The project, supported by an ADF loan of UA 13.6 million and an ADF grant of UA 5.03 million, is under implementation and is parallel financed with the International Development Association (IDA) of the World Bank and the European Union (EU). The objective of the project is to contribute to increased access to quality education at the basic and secondary levels. After some delay, due to the suspension of construction activities between 2006 and 2008, the implementation of the project activities are now on track, following the relaxing of restrictions over the construction industry and increased community-based construction activities. The Bank also contributed to the establishment of educational facilities (6 junior secondary schools and a teacher training college) under the completed Eritrea Emergency Reconstruction Program (ERP). The measures that assisted in improving the implementation of the on-going project and which can be applied to the implementation of the new project as well as the experiences gained from interventions funded by other development partners are summarized in the following table:

	Lesson	Application in Project Design
1	Full involvement of executing agency in the design of the project and implementation of project activities	Project was designed in collaboration with a national project team from the NBHE and HEI's
2	Close coordination and harmonization of activities with other development partners	Project activities has been designed to ensure harmonization with those of a project funded by the government of India
3	Existence of stable and effective project management team	Major procurement activities have been assigned to the staff of the on-going education project who have attained extensive knowledge of the Bank's procurement procedures
4	Monitoring and evaluation of risks and results	The expertise of the HEIs will be used in augmenting the capacity of the executing agency for monitoring and evaluation
5	Extensive supervision of the project activities by the Bank	Supervision of the project by the Bank are planned to be undertaken at least twice a year to provide adequate implementation support to the project management.
6	Staff development, provision of equipment and technical assistance and rehabilitation of facilities improve the quality of higher education	The project is designed to support provision of training for staff, technical assistance and expansion of facilities, which areas found to be instrumental in laying strong foundations for a higher education system in its early stage of development

B2. Project Components and Costs

Project Components

B2.1 The project will have four components namely (i) staff development for teaching and research, (ii) technical assistance for teaching and research, (iii) infrastructure development for teaching and research, and (iv) project management. The project will be implemented over a period of five years with the following outputs:

- A total of 260 graduate assistants from the 7 HEIs will receive postgraduate training at the masters degree level: 75 Out-of-Country Training; 85 Local Training; 100 Distance Learning.
- Expatriate staff (190 in year 1, 187 in year 2, and 20 in year 3) will be employed at the 7 HEIs of the country, providing about 4,760 man-months of service.
- At EIT 3 engineering laboratories, a library and toilet facilities will be established; electrical and sanitary works will also be undertake.
- At HAC 8 laboratories for agriculture sciences, 2 computer laboratories, and 2 lecture halls will be established; ground will also be improved
- Technical support for project management provided.

B2.2 Component I – Staff development for teaching and research - In view of the shortage of qualified national staff at the country's HEIs, this component aims to support the GoSE's efforts to build national capacity for teaching and research at the country's seven HEIs, thereby reducing the dependence on expatriates for the staffing of the HEIs. This will be achieved through the upgrading of the qualifications of junior staff of HEIs at graduate education programs to be established at some of the HEIs and through the provision of fellowships for studies at institutions in other countries in fields where graduate programs are not available in the country. To assist in improving the level of skills in the country, support for training through distance learning will also be provided. A total of about 260 graduate assistants from the 7 HEIs are expected to receive postgraduate training at the masters degree level over a three year period. It is expected by end of years 2, 3 and 4, the project would have supported respectively the training of 60, 100 and 100 junior faculty staff. The training will be provided as follows: 75 out-of-country training; 85 local training; 100 distance learning. The rationale for the three pronged approach is based on an assessment of the areas where graduate training could not be provided in the country in the coming five years, where training is feasible locally and where there is clearly defined programs that be proved through distance education..

B2.3 Component II – Technical assistance for teaching and research – The component will assist in efforts to improve the capacity of HEIs to provide quality higher education through increased and improved teaching and research. Given the shortage of qualified national staff, the project will assist in meeting the cost of providing technical assistance to augment the staffing of the HEIs in the areas where competencies are not currently available in the country. Although more acute in the sciences and engineering areas, at present there is a shortage of qualified national staff in most subjects taught at the HEIs. Expatriate staff number of 190 in year 1; 187 in year 2; and 20 in year 3 will be employed at the 7 HEIs of the country, providing about 4,760 man-months of technical assistance over the period of three years.

B2.4 Component III – Infrastructure development for teaching and research – The physical infrastructure of the HEIs is very inadequate, thus constraining the quality of the education provided at the HEIs. The component will aim to support government attempts to improve

the learning environment at two of the country's HEIs. The two institutions are Eritrea Institute of Technology (EIT) and Hamelmalo Agricultural College (HAC). Of the seven HEIs, the infrastructure at these two institutions is the least adequate. The EIT, which is the largest HEI in the country and housing the colleges of basic sciences, engineering and education, is operating from a campus where most buildings are prefabricated, with no adequate engineering laboratories and science laboratories that need significant upgrading. The HAC is operating from an old agriculture technical school with very few facilities for the teaching of agricultural sciences.

- At the EIT, the project will provide resources for the establishment of three engineering (automotive, mechanical and industrial) laboratories, a library and toilet facilities, and electrical and sanitary works. The upgrading of basic sciences facilities through the modification of laboratories and the provision of furniture is already underway at government cost.
- At HAC, support will be provided for the establishment of eight laboratories for agriculture sciences (animal science, agronomy, horticulture, plant protection, soil science, land use planning, food science and technology, and forestry and wildlife), two computer laboratories, two lecture halls and the improvement of the grounds.
- No equipment will be provided by the project as equipment will be transferred from the former laboratories of the University of Asmara (UoA) and additional science and ICT equipment will be provided under a project funded by the government of India. But to ensure that the facilities provided by the project are effectively utilized, the implementation of project activities will be closely coordinated with the project funded by the government of India.

B2.5 Component IV – Project management – The project will provide the required resources for the annual auditing of the project and operating costs required for routine administration such as communications and local travel.

Project Costs

B2.6 The total project cost is estimated at UA 15.66 million. These cost estimates are based on December 2009 prices. For the purpose of costing, all items have been priced in United States Dollars and converted into UA at the exchange rate applicable for the month of December 2009.

B2.7 Price escalation has been calculated based on 2.5% annual price increase for foreign currency and 3.5% for local currency throughout the five-year implementation period.

B2.8 The ADF instrument is a grant.

B2.9 The project will be financed jointly by the ADF at UA 12.95 million (82.3%) and the Government at UA 2.76 million (17.7%) as shown in Table 2.4. The ADF contribution will cover 100% of the foreign exchange costs and 29.8% of local costs. The Government will finance 70.2% of the local costs. The Fund will contribute to financing the cost of works, goods, services and training costs. For the List of Goods and Services see Annex C2.

Table B2.1: Project cost estimates by component [amounts in million USD and UA]

Components	in USD million			% Foreign	in UA million			% Foreign
	Foreign Currency Cost	Local Currency Cost	TOTAL Costs		Foreign Currency Cost	Local Currency Cost	TOTAL Costs	
1 Staff development	4.51	1.52	6.03	74.9%	2.80	0.94	3.74	74.9%
2 Technical Assistance	8.37	0.99	9.36	89.4%	5.20	0.62	5.81	89.4%
3 Infrastructure Development	4.64	2.93	7.57	61.3%	2.88	1.82	4.70	61.3%
4 Project Management	0.00	0.20	0.20	0.0%	0.00	0.12	0.12	0.0%
Total Base Cost	17.51	5.63	23.15	75.7%	10.88	3.50	14.37	75.7%
Physical Contingency	0.46	0.27	0.73	63.5%	0.29	0.17	0.45	63.5%
Price Contingency	0.91	0.42	1.34	68.4%	0.57	0.26	0.83	68.4%
Total Project Cost	18.89	6.32	25.21	74.9%	11.73	3.93	15.66	74.9%

Note: Exchange rates are provided in page (ii)

Table B2.2: Sources of financing [amounts in million UA]

Sources of Financing	in UA million			% Total
	Foreign Currency Cost	Local Currency Cost	TOTAL Costs	
ADF GRANT	11.73	1.17	12.89	82.3%
GOSE	0.00	2.76	2.76	17.7%
Total Project Cost	11.73	3.93	15.66	100.0%

Table B2.3: Project cost by category of expenditure [amounts in million USD and UA]

Categories of Expenditure	in USD million			% Foreign	in UA million			% Foreign
	Foreign Currency Cost	Local Currency Cost	TOTAL Costs		Foreign Currency Cost	Local Currency Cost	TOTAL Costs	
A. Goods	0.00	0.03	0.03	0.0%	0.00	0.02	0.02	0.0%
B. Works	4.64	2.21	6.85	67.7%	2.88	1.37	4.25	67.7%
C. Services	12.88	3.24	16.12	79.9%	8.00	2.01	10.01	79.9%
D. Operating cost	0.00	0.15	0.15	0.0%	0.00	0.09	0.09	0.0%
Total Base Cost	17.51	5.63	23.15	75.7%	10.88	3.50	14.37	75.7%
Physical Contingency	0.46	0.27	0.73	63.5%	0.29	0.17	0.45	63.5%
Price Contingency	0.91	0.42	1.34	68.4%	0.57	0.26	0.83	68.4%
Total Project Cost	18.89	6.32	25.21	74.9%	11.73	3.93	15.66	74.9%

Table B2.4: Expenditure schedule by component [amounts in million UA]

Components	Year 1	Year 2	Year 3	Year 4	Year 5	Total	% Total
1 Staff development	0.875	1.538	1.538	0.000	0.000	3.95	25%
2 Technical Assistance	2.933	2.880	0.308	0.000	0.000	6.12	39%
3 Infrastructure Development	1.357	2.171	1.378	0.543	0.000	5.45	35%
4 Project Management	0.034	0.034	0.034	0.034	0.000	0.14	1%
Total Project Cost	5.20	6.62	3.26	0.58	0.00	15.66	100%

Table 2.7: Expenditure schedule by source and category of expenditure [amounts in million UA]

Categories of Expenditure	ADF GRANT			GOSE	TOTAL Costs	% Foreign
	Foreign Currency Cost	Local Currency Cost	Total Cost	Local Currency Cost		
A. Goods	0.00	0.02	0.02	0.00	0.02	0.0%
B. Works	3.34	0.00	3.34	1.61	4.95	67.4%
C. Services	8.40	1.04	9.44	1.14	10.58	79.4%
D. Operating cost	0.00	0.10	0.10	0.00	0.10	0.0%
Total Project Cost	11.74	1.17	12.90	2.75	15.66	75.0%

B2.10 Annex C2 gives the list of goods and services

B2.11 Annex C3 gives the detailed project cost.

B3. Implementation Arrangements

Executing Agency

B3.1 The National Board for Higher Education will be the executing agency and will steer the project to ensure that it is efficiently managed. Policy and operational oversight will be provided by a Project Steering Committee (PSC). The PSC of five members, comprising a senior official appointed by the Executive Director of the NBHE and who will serve as the chairperson of the PSC, a representative of the NBHE, two representatives of the HEIs and the project coordinator, will oversee the implementation of the project. The NBHE has a Project Coordination Unit (PCU) for the management of the project. The technical staff of the PCU comprise of a project manager, who reports to the Director of NBHE, an accountant and an engineer. These three staff are government civil servants and they are already in place. The Project Management Unit (PMU) of the on-going Education Sector Development Program (ESDP), the HEIs and the Ministry Public Works (MoPW) will also be involved in the implementation of some of the project activities as part of their regular duties with no remunerations from the project.

Institutional Arrangements

B3.2 The Director of NBHE will oversee the execution of the project, approving work plans and reviewing progress, as well as ensuring that the PCU and HEI's responsible for the implementation of the project carry out their duties. The project coordinator, under the direction of the director of the NBHE, will be responsible for the implementation of the operational activities related to the project, including preparation of work plans and progress reports and supervision of the project staff.

B3.3 The staff development and technical assistance components of the project will be implemented in close collaboration with the HEIs. The HEIs will fully participate in the planning and implementation of the training activities for graduate assistants and in the placement and supervision of technical assistants. The engineer of the PCU will be responsible for the coordination of the implementation of the infrastructure component. But since the PCU does not have the capacity for the procurement of the construction works, the procurement staff of the PMU of the on-going ESDP project will provide the required support in the preparation of tender documents, evaluation of bids and award of contracts, while the

staff of the MoPW will be responsible for the supervision of the works. Both the PMU of the ESDP and the MoPW have the capacity and resources to provide the respective services.

B3.4 Regarding financial management, the NBHE has a qualified financial management specialist and two qualified accountants. Under the supervision of the financial management specialist, one of the accountants will be responsible for managing the project accounts. The NBHE will also be filling the position of internal auditor. For monitoring and evaluation (M&E) services, support will be provided by staff from Halhale College of Business & Economics (HACOBÉ).

Supervision and Implementation Schedules

B3.5 The project will be implemented during a period of 5 years (60 months) from effectiveness of the grant, assumed to be in the second quarter of 2010. The implementation schedule is presented in Annex B3.1 and administration activities are summarized as follows:

<u>ACTIVITY</u>	<u>RESPONSIBLE AGENCY</u>	<u>TARGET DATE</u>
<u>Administration:</u>		
Appraisal Mission	ADF/GoSE	Dec 2009
Grant Negotiations	ADF/GoSE	April 2010
Board Approval	ADF	April 2010
General Procurement Notice	ADF/GoSE	May 2010
Grant Signature	GoSE/ADF	May 2010
Grant Effectiveness	GoSE/ADF	May 2010
Project Launching	ADF/GoSE	June 2010
Quarterly Progress Reports	GoSE	2010-2015
Mid-Term Review	ADF/GoSE	June 2012
PCR	ADF	2015

B4. Financial Management and Disbursement Arrangements

Financial Management

B4.1 An assessment of the financial management system of the executing agency that is the NBHE has been carried and the assessment indicates that the financial management systems, budgetary system and financial reporting system are adequate and acceptable to the Bank. The NBHE has a well documented accounting policies and procedures as well as charts of accounts which are very detailed and acceptable to the Bank. The financial systems are automated and annual financial statements are regularly prepared. However, in order to strengthen the implementation of these policies and procedures, the NBHE should ensure that audited financial statements and reports are up to date; and that the position of the internal audit is filled. Also to further strengthen the financial management of the project accounts, the financial management staff of the NBHE, currently made up of financial management specialist and two accountants, will be provided with training in the Bank's disbursement procedures.

B4.2 The NBHE prepares annual financial statements and reports regularly and the current chart of accounts is capable of recording the financial transactions of the project and

producing required regular reports. In order to ensure efficient monitoring of the project expenditure, the NBHE will maintain separate project accounts which should correspond to the project budget. Detailed accounts concerning expenditure by the Bank and the Government should facilitate the identification of expenditure by project component, category of expenditure and source of finance. The accounts should clearly document disbursed amounts from the Bank and GoSE. The accounts and ledgers should be kept separately from any other project the NBHE would implement. Audit arrangements are discussed in section B6.

Disbursement Arrangements

B4.3 The ADF will use two disbursement methods: i) special account method, and ii) direct payment method in line with the Disbursement Rules and Procedures. The Special Account method (SA) shall be used for payments of goods, services and operating costs category. The Direct Payment method shall be used for payments under the works category.

B4.4 The foreign currency account shall be opened with a commercial bank acceptable to the Fund into which the ADF resources shall be disbursed to finance foreign eligible expenditures. Likewise, a local currency account shall be opened for which proceeds from the foreign currency account shall be deposited to finance local eligible expenditures of goods, services and operating costs. A separate local currency account shall be opened for the allocation of the counterpart funds for the project. The establishment of the three bank accounts shall be a condition precedent to first disbursement.

B4.5 An initial deposit for an amount corresponding to six months of activities as justified by a work program approved by the Bank will be made in the SA. Subsequent replenishments of the SA will be subject to the NBHE having provided sufficient justifications for the use of at least 50% of the previous deposit and upon production of agreed work program for the following six months in line with the Bank's disbursement rules and procedures. To ensure adherence to agreed financial regulations, the special accounts will be monitored by the ADF financial supervision and AUDIT missions.

B5. Procurement Arrangements

B5.1 The procurement arrangements for the project are summarized in the following table:

Project Categories		UA '000,000				Total
		ICB	Other	Short listing	Non-Bank funded	
1	Civil works					
1.1	HAC Hamelmalo	2.32 (1.57)				2.32 (1.57)
1.2	EIT	2.63 (1.77)				2.63 (1.77)
2	Goods					
2.1	HAC Furniture for lecture halls		0.02 (0.02)			0.02 (0.02)
3	Services contracts					
3.1	Expatriate faculty salaries		6.12 (5.46)			6.12 (5.46)
4	Consulting services					
4.1	Construction design & supervision				0.48 (0.00)	0.48 (0.00)
4.2	External audit services			0.03 (0.03)		0.03 (0.03)
5	Training					
5.1	Training abroad		2.45 (2.45)			2.45 (2.45)
5.2	Training local		0.85 (0.85)			0.85 (0.85)
5.3	Distance learning		0.66 (0.66)			0.66 (0.66)
6	Miscellaneous					
6.1	Travel and out of pocket expenses		0.10 (0.10)			0.10 (0.10)
	Total Cost	4.95 (3.34)	10.20 (9.53)	0.03 (0.03)	0.48 (0.00)	15.66 (12.90)

ICB - International Competitive Bidding
Amounts () are financed by the ADF Loan

Civil Works

B5.2 Procurement of civil works of new campus buildings at HAC and EIT totaling UA 4.95 million and valued at more than UA 2.32 million per contract will be carried out under International Competitive Bidding (ICB) procedures.

Goods

B5.3 A contract for HAC furniture for the lecture halls totaling UA 0.02 million will be awarded under shopping because the furniture is off-the-shelf available and of small value.

Service Contracts

B5.4 Payment of salaries of already recruited expatriate faculty staff totaling UA 6.12 million but numbering not more than 200 faculty staff during any given academic year will be carried out under government procedures. Global Placement, the staff recruitment agency that assisted in the selection of the expatriate staff, was recruited using GoSE procedures in 2005 and has been employed without interruption to date to recruit higher and secondary education expatriate staff. The faculty is recruited through a competitive selection procedure under GoSE supervision. This procedure has been used on the ongoing ADF funded education project (Support to Education Sector Development Program – ESDP) for a total amount of UA 4.5 million and it has proved successful.

Consulting Services

B5.5 Audit services will be carried out by consulting firms through contracts valued at UA 0.03 million in total, and two consecutive contracts will be awarded. The process for selecting

firms shall be through Short List and the method for evaluation is Least Cost Selection (LCS). In view of the small contract value, the Borrower may limit advertisement of the procurement to national or regional newspapers. However, any eligible consultant, regional or not, who wishes to provide the requested services, may express his desire to be short-listed.

Training

B5.6 The project will formulate an annual training plan and budget which will be submitted to the Bank for prior review and approval. The annual training will include: (i) the proposed training; (ii) the justification for the training and how it will lead to effective project performance and outcomes; (iii) the personnel to be trained; (iv) the selection method of individuals or institutions conducting such training; (v) the institution that will conduct training, if already selected (vi) the estimated cost of training. Upon completion of training the trainees will be required to prepare a report on the training received. The selection of candidates for training shall be done through Government procedures and these procedures shall ensure equal opportunity to all eligible participants. This covers training abroad for contracts valued at UA 2.45 million in total, distance education for contracts valued at UA 0.66 million and training at local level for contracts valued at UA 0.85 million.

Miscellaneous

B5.7 Procurement of travel and out of pocket expenses will be carried out through shopping.

B5.8 All other procurement methods are summarized as follows

Procedure	UA		
	Goods	Maximum per contract	Maximum in aggregate
National shopping	HAC Furniture for lecture halls	20,898	20,898
Government procedures	Training abroad	50,000	2,447,332
	Training local	15,000	848,570
	Distance learning	10,000	655,723
Government procedures	Expatriate faculty salaries	15,000	6,120,535

General Procurement Notice

B5.9 The text of a General Procurement Notice (GPN) has been agreed with GoSE and it will be issued for publication in UN Development Business Journal, upon approval by the Board of Directors of the Grant Proposal.

Review Procedures

B5.10 The following documents are subject to review and approval by the Bank before promulgation: Specific Procurement Notices; Tender Documents or Requests for Proposals from Consultants; Tender Evaluation Reports or Reports on Evaluation of Consultants' Proposals, including recommendations for Contract Award, Draft contracts, if these have been amended from the drafts included in the tender invitation documents; and Training programs abroad, local and distance learning.

National Law and Regulations

B5.11 Eritrea's national procurement laws and regulations have been reviewed and determined to be acceptable.

Executing Agency

B5.12 The NBHE will be responsible for the procurement of goods, works, service contracts, consulting services and training as detailed above, assisted by the Project Management Unit of the Education Sector Development Program (PMU-ESDP). The PMU-ESDP has a 5-year experience in all aspects of procurement with a satisfactory procurement performance. They have the resources, capacity, expertise and experience required for this assignment. The PMU has 7 professional staff in its Procurement Section, while the total professional staff of the PMU is 25. In 2009, the total procurement carried out by the section was USD 28.5 million and of this total USD 12.3 million was for the on-going ADF project.

Procurement Plan

B5.13 The Bank shall review the procurement arrangements proposed by the Borrower in the Procurement Plan for its conformity with the Grant Agreement and its Rules. The Procurement Plan shall cover an initial period of at least 18 months. The Borrower shall update the Procurement Plan on an annual basis or as needed always covering the next 18 months period of project implementation. Any revisions proposed to the Procurement Plan shall be furnished to the Bank for its prior approval.

B6. Audit Arrangements

B6.1 External auditors will audit the project accounts annually and at the end of the project. An Audit Report will be presented annually to the Bank, within six (6) months following the end of each financial year. Paragraph B.5.5 details the procurement process for the selection of audit firms. The internal audit of NBHE will play an important role in keeping project management informed about the required financial management procedures and rules.

B7. Economic and Financial Analysis

B7.1 In recent years higher education has become a focus of increasing policy debate and analysis in African countries. The reason for this lies predominantly in the view that there is now sufficient evidence that higher education and research contribute to progress towards reaching the internationally agreed development goals of Education for All (EFA) and the Millennium Development Goals (MDG) and to economic and social development.

B7.2 The increased importance of knowledge as a driving force in economic development and the consequent skill-biased nature of technological changes in the workplace are putting additional pressure on national governments to revamp their higher education systems in order to produce graduates who are well prepared for work. Economies increasingly need a more sophisticated labor force equipped with competencies, knowledge, and workplace skills that cannot be developed only in primary school or in secondary school programs. Eritrea is at an early stage of economic development, but there is now considerable evidence-based literature that a large pool of workers with tertiary education is a prerequisite for attracting foreign investment and technologically-based industry that can transform the economic

structure of a low-income economy. The project will support the building of the capacity of the country's seven higher education institutions to produce the required skilled workforce. Furthermore, with this kind of support certain key sectors, such as agriculture and mining, will be rejuvenated to contribute to accelerated economic growth and reduction of poverty.

B7.3 Shortage of appropriate human capital hinders Eritrea's development efforts. The country is facing serious shortages of skilled workforce, especially teachers for upper-schools and higher education institutions, and is currently relying on foreign teachers to fill the gaps. About 60% of the qualified staff of institutions of higher education and 30% of the qualified secondary school teachers (mostly science and mathematics teachers) are expatriate staff. Similarly there are acute shortages of qualified health workers. There is only one doctor and six nurses per 10,000 population. The results of a survey carried out by the Ministry of Trade Industry on manufacturing enterprises reveal that the shortage of skilled work force is one of the bottle necks to high production capacity utilization and the lack of adequate training institutions in the country was a major factor contributing to the inadequate supply of skilled workforce. Preliminary results of recent survey of 63 public and parastatal organizations also indicate serious shortages of higher level skills in various professions such as engineering, education, health, and administration. The rationale for the proposed interventions in higher education is therefore the need to assist the country improve the quality of its human capital critical for growth and poverty reduction. In fact, a ready market for nurses and teachers and other professional already exists in Eritrea.

B8. Environmental and Social Analysis

B8.1 The project is classified as Category II because there are no major environmental effects that will be caused by the expansion of two higher education institutions. The two institutions will have their learning environment improved through the provision of laboratories, lecture halls, a library and sanitation facilities. The project environmental issues and management/ mitigation measures are provided in the Environmental and Social Management Plan (ESMP) summary below.

B8.2 Brief description of the project and key environmental and social components:

- Training for the junior faculty staff of higher education institutions
- Technical assistance for teaching and research
- New construction at two higher education institutions

B8.3 Major environmental and social impacts

The main environmental and social impacts anticipated include the following:

Positive Impacts:

- Increased capacity for the teaching of and research in environmental sciences and natural resources management;
- Improved sanitation facilities through the provision of toilets at two higher education institutions;
- Better opportunity for female junior faculty to upgrade their qualifications;
- Increased opportunity for female high school graduates to attend higher education institutions.

Potential Negative Impacts

- Risk of soil disturbance, de-vegetation and erosion during construction;
- Degradation of land as result of harvesting of construction materials such as sand and stones;
- Dust and noise from construction activities;
- Occupational hazards to construction workers;
- Risks of pollution and accidents from laboratory wastes.

B8.4 Enhancement and mitigation program

The enhancement and mitigation program to address environmental issues is summarized as follows:

The project team visited the two institutions at which the construction activities will take place and thoroughly reviewed with the institutions the designs of the buildings and provided advice as appropriate on environmental issues. The two institutions also submitted information on the likely environmental impacts of the works and the mitigation measures that will be put in place. The following mitigation measures represent the main outlines of the EMSP and will form an integral part of the project:

- Impact from construction activities is limited since the scope of construction is limited to 6 buildings within existing college premises. However, during construction, land cut and filled is to be reduced to minimum; steep slopes to be grassed or lined; top soil to be preserved and affected areas re-vegetated; movement of construction trucks and equipment to be limited; use of sand and crushed stones to be regulated; and construction site to be boarded;
- To prevent any hazard from laboratory waste, incinerators and septic tanks shall be built for the disposal of laboratory waste; safety rules will also be enforced to minimize safety risks and pollution from laboratory;
- Sanitization facilities will be provided at the two colleges which will receive additional facilities to ensure an acceptable level of cleanliness and hygiene for students and staff;
- Efforts will be made to train and sensitize staff, college managers and students on environmental health hazards associated with infected water and poor drainage;
- Existing trees on both institutions will be preserved and students will be sensitized on the importance of tree planting and protection.

B8.5 Monitoring program and complementary initiatives

- During the construction period, monthly site meetings will be held. These meetings will monitor the implementation of the environmental mitigation plans.
- The management of the institutions will lead the environmental monitoring activities and will provide regular reporting to project management and the NBHE; and
- Bank supervision missions will follow up on the implementation of the ESMP.

B8.6 Institutional arrangements and capacity building requirements

- As the executing agency, the overall responsibility for the implementation of the project ESMP will rest with the NBHE. In addition, environmental education is provided by the institutions as part of the regular curriculum.
- The Project Coordinating Unit (PCU) will supervise the implementation of the ESMP;

B8.7 Public consultations and disclosure requirements

- The project is designed to operate in a participatory manner where all activities will be implemented in close collaboration with the beneficiary institution to increase their sense of ownership of the improved facilities to be introduced under the project.

B8.8 Estimated costs: Project environmental components

- The main environmental improvement falls under the civil works for construction of facilities with a budget of UA 4.95 million.
- Notably, waste management will be improved through the provision of toilets and septic tanks as part of the provision of the facilities.

B8.9 Implementation schedule and reporting

- The environmental management and monitoring will be implemented following the same project schedule as all activities were mainstreamed in the project design. Achievements and problems will be reported in the project quarterly progress reports and should be timely addressed by the project management and the Bank.

Stakeholders

B8.10 The project was developed in consultation with a various stakeholders. These included the Ministry of Finance, the National Board for Higher Education, the Office of the President, Ministry of Education, Ministry of Labor and Welfare, the seven institutions of higher education that the project aims to support and external financing agents. The consultation process that lead to the development of the project started with a request from the Government of the State of Eritrea (GoSE) submitted to the Bank seeking the Bank's support for the development of higher education in the country. In response to the GoSE's request, the Bank fielded an identification mission to discuss with the stakeholders the priority areas for support in the education sector under a second ADF education project. The identification mission, combined with Bank's mission to develop an Interim Country Strategy Paper (ICSP), met with the stakeholders, including government officials and representatives of development partners active in the education sector, and agreed that future ADF support will be within the context of the human resource development priorities of the country and in support of the development of higher level skills. It was also agreed that future ADF support to the sector should focus on the higher education sub-sector, with the aim of contributing to efforts to build the capacity of country's higher education institutions for teaching and research.

B8.11 The identification mission was followed by preparation and appraisal missions. The missions carried out further consultations with the stakeholders and re-examined with them the priority areas for support proposed during the identification mission. It was agreed once

again that the focus of the project should remain on the higher education sub-sector. Areas of in the higher education sub-sector that future ADF resources will assist were also more clearly defined and agreement on the project's components was also reached.

B8.12 During the missions all seven HEI's that the project will support were visited and extensive discussion carried out with the management of the institutions and their staff. Presentations on the development plans of each institution was made to the project team and data obtained incorporated in the design of the project. The project team worked with a national project team representing the HEIs and the NBHE to fully develop the project. This participatory approach will be maintained during project implementation. The HEIs and other government agencies will be represented in the project steering committee. The project management team will also receive technical support from the beneficiary higher education institutions in the preparation of work programs, selection of candidates for training and monitoring the implementation of construction activities.

Gender analysis

B.813 The Eritrean government is firmly committed to gender equality, a legacy of the strong participation of women in the struggle for independence. The constitution enshrines gender equality and an ambitious legal reform process has been supported by the government, having lead to gender sensitive land legislation and the prohibition of female genital mutilation. Enforcement remains a challenge and the National Union of Eritrean women (NUEW) mandated to act as national women's machinery is lacking focal points in ministries to enforce systematic gender mainstreaming. The Ministry of Education has managed to mainstream gender equality more effectively.

B8.14 Except at the pre-primary level, enrolment of girls is lower than that of boys at all levels of the formal education system in Eritrea. At the primary, middle and secondary levels, girls make 46%, 45% and 41% of the net enrolments respectively. At the tertiary level, females make only about 30% of the enrolment. But in adult education women constitute about 90% of the learners. Reasons given for the lower level of participation of females in the formal education system compared to males include: inadequate number of schools in rural areas, with the attendant problem of long distances to schools, parental reluctance to send girls to school in some regions, shortage of female teachers especially at the middle and secondary levels to act as role models for girls and early marriages.

B8.15 The government is committed to increasing the level of participation of girls at all levels of education. With assistance from development partners such as the Bank, attempts are being made under on-going Education Sector Development Program to increase the number of schools, especially in rural areas. This will have the effect of brining schools to under-served communities as well as reducing walking distances to schools, giving more girls the opportunity to attend school. This is because parents are more likely to allow girls to attend school when the distance to travel is relatively short. Other measures taken to improve access of girls to education include the provision of boarding facilities for girls at schools, especially middle schools, in regions where the participation of girls in education is particularly low. The Bank's on-going education project contributes to the provision of these boarding facilities. In technical and vocational education, a quota of 30% female enrolment was introduced in 2001, when female representation was only 12% of total enrolment. This ratio was reached in 2005/06. It should also be pointed out that in Eritrea public education at

all levels is offered free of charge, and thus family income is not a major barrier to access to public education.

B8.16 At the tertiary level a major policy instrument employed by the government to increase the number of females enrolled in higher education institution is the lowering of the bar for admission to higher education institutions for girls. The grade that girls have to attain in the Eritrea Secondary Education Certificate Examination (ESECE), which is the measure used for selecting students to higher education institutions, is lower than that required of boys. This policy of preferential access to higher education institutions in favor of female high school graduates should facilitate more female students taking advantage of the expected improved quality of higher education resulting from the support provided by the project. Also, preference will be given to female junior faculty members in the selection of candidates for training supported by the project to upgrade the qualifications of junior staff. This will ultimately help increase the number of female teachers at the tertiary level, which will act as an incentive for female learners to aspire to higher levels of learning. At present only 13% of the faculty qualified to teach at the HEIs are females

Social analysis

B8.17 Higher education can contribute to social transformation and development. Higher education has long been acknowledged as essential for both personal success and economic growth, and studies confirm that higher education can produce significant asocial benefits. It can bring better job opportunities, higher earnings, and even improved health. It promotes democracy and sustainable growth and the potential for social participation by students is substantial. Institutions of higher education play a major role in knowledge transfer, creation and application and thus can contribute to the intellectual, social, cultural and economic development of societies and communities.

B8.18 In Eritrea education is a major national priority for development and there is a strong government commitment to increase access and improve the quality of higher education. Public education at all levels is offered free of charge and family economic condition is not a major barrier to access in public higher education. However, the extent to which the potential of higher education to impact on the society can be realized will depend on the level of resources, human and material, that can be mobilized for improving access and quality of higher education. The project will contribute to the provision of some of the resources that will assist the country's HEIs better serve the society, through the preparation of graduates who will teach at the schools, staff health clinics, run government ministries and agencies, provide extension serves to communities and manage private sector activities; as well as the creation and timely application of new knowledge.

B9. Project Preparation and Supervision

B9.1 The preparation of the project was undertaken by an education specialist and a procurement specialist who is also an architect. Contributions were also received from consultant architect, consultant financial management specialist and gender specialist. In response to a government request for an education project to assist in the development of higher education in the country, the Bank fielded an identification mission to consult with the government on areas in the education sector which the future education project will support. The identification mission was followed by preparation and appraisal missions which further

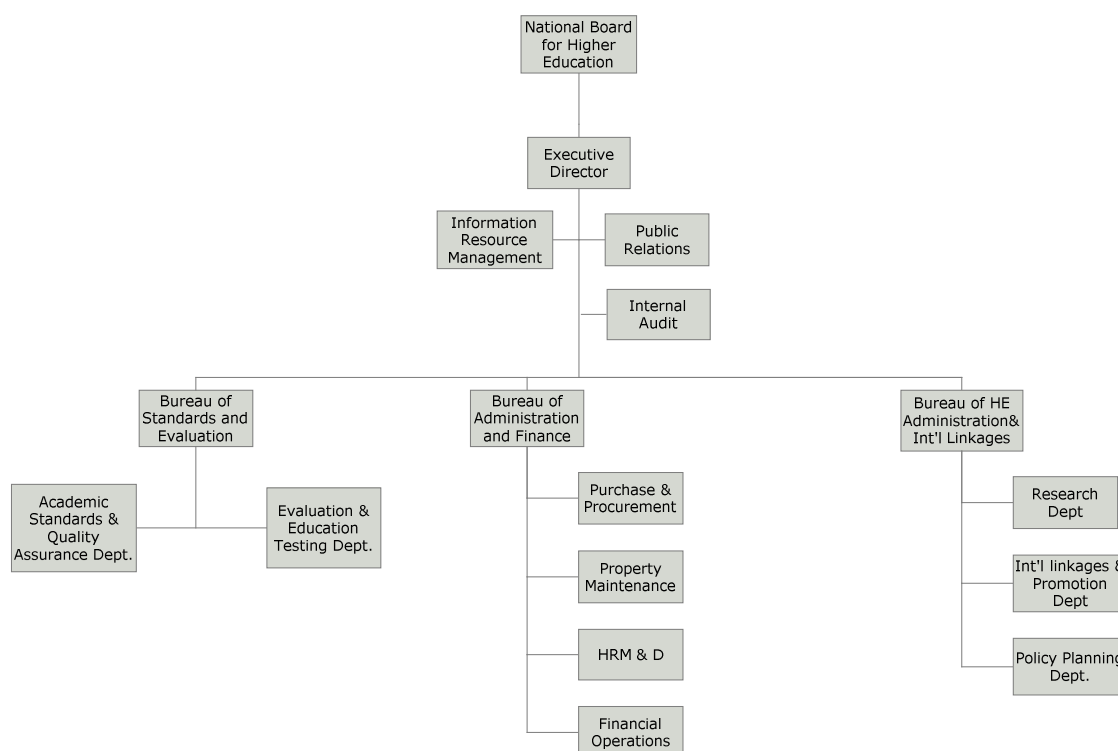
developed with the stakeholders the project concept and activities to be supported by the project.

B9.2 The project formulation process and the milestones for major administrative and supervision activities are summarized in the table below:

	ACTIVITY	DATE
1	Government submitted a request for Bank support for new ADF education project	May 2009
2	Project Identification Mission	6 -19 July 2009
3	Project Preparation Mission	2-23 September 2009
4	Country Team Meeting on PCN	11 November 2009
5	Clearance of PCN by OpsCom	25 November 2009
6	Appraisal Mission	29 November – 19 December 2009
7	Country Team Meeting	10 March 2010
8	Clearance of Appraisal Report by OpsCom	17 March 2010
9	Submission for Translation	17 March 2010
10	Grant Negotiations	1 April 2010
11	Board Presentation	28 April 2010
12	Grant Signature	May 2010
13	Grant Effectiveness	May 2010
14.	Project Launching	June 2010
15	Supervisions	2010 - 2015
16	Mid-Term Review	2012
17	PCR	2015

C. Additional Technical Annexes

Annex C1 Organizational Structure of the National Board for Higher Education



Annex C2 List of Goods and Services

ANNEX C2: SUMMARIZED LIST OF GOODS & SERVICES											
(UA millions)											
Source of Funds	ADF GRANT			GOSE		Total				%	%
Category of Expenditure	FE	LC	Total	LC	Total	FE	LC	Total	%	GRANT	GOSE
A GOODS											
HAC Furniture for lecture halls	0.000	0.021	0.021	0.000	0.000	0.000	0.021	0.021	100.0%	100.0%	0.0%
TOTAL GOODS	0.000	0.021	0.021	0.000	0.000	0.000	0.021	0.021	100.0%	100.0%	0.0%
B WORKS											
HAC Hamelmalo	1.565	0.000	1.565	0.758	0.758	1.565	0.758	2.323	46.9%	67.4%	32.6%
EIT	1.770	0.000	1.770	0.857	0.857	1.770	0.857	2.627	53.1%	67.4%	32.6%
TOTAL WORKS	3.335	0.000	3.335	1.614	1.614	3.335	1.614	4.949	100.0%	67.4%	32.6%
C SERVICES											
Expatriate faculty salaries	5.459	0.000	5.459	0.661	0.661	5.459	0.661	6.121	57.8%	89.2%	10.8%
Construction design & supervision	0.000	0.000	0.000	0.479	0.479	0.000	0.479	0.479	4.5%	0.0%	100.0%
External audit services	0.000	0.030	0.030	0.000	0.000	0.000	0.030	0.030	0.3%	100.0%	0.0%
Training abroad	2.447	0.000	2.447	0.000	0.000	2.447	0.000	2.447	23.1%		
Training local	0.000	0.849	0.849	0.000	0.000	0.000	0.849	0.849	8.0%		
Distance learning	0.496	0.160	0.656	0.000	0.000	0.496	0.160	0.656	6.2%	100.0%	0.0%
TOTAL SERVICES	8.403	1.038	9.441	1.140	1.140	8.403	2.178	10.581	100.0%	89.2%	10.8%
D OPERATING COST											
Travel and out of pocket expenses	0.000	0.103	0.103	0.000	0.000	0.000	0.103	0.103	100.0%	100.0%	0.0%
TOTAL OPERATING COST	0.000	0.103	0.103	0.000	0.000	0.000	0.103	0.103	100.0%	100.0%	0.0%
TOTAL COST	11.738	1.166	12.903	2.754	2.754	11.738	3.920	15.657	100.0%	82.4%	17.6%

Annex C3

DETAILED COST ESTIMATES

Category and Detail	Base Cost	Total Base Cost	F.E. Base	L.C. Base	F.E. Cont.	L.C. Cont.	F.E. Escal.	L.C. Escal.	TOTALS L.C.	F.E. AfDB	L.C. AfDB	L.C. GOV
COMPONENT 1 :												
1 Staff development												
1.C/SERVICES												
MA & MSc TRAINING PROGRAMMES												
a) Training abroad procurement - Direct negotiation			100.00%	0.00%	0.00%	0.00%	5.08%	0.00%		100.00%	0.00%	0.00%
Number of trainees												
Tuition fees	1,875,000		1,875,000	0	0	0	95,322	0	1,970,322	1,970,322	0	0
Air travel	75,000		75,000	0	0	0	3,813	0	78,813	78,813	0	0
Subsistence	1,800,000		1,800,000	0	0	0	91,509	0	1,891,509	1,891,509	0	0
s/t		3,750,000	3,750,000	0	0	0	190,645	0	3,940,645	3,940,645	0	0
b) Training local procurement - Direct negotiation			0.00%	100.00%	0.00%	0.00%	0.00%	7.16%		0.00%	100.00%	
Number of trainees												
Tuition fees	1,071,000		0	1,071,000	0	0	0	76,735	1,147,735	0	1,147,735	0
Subsistence	204,000		0	204,000	0	0	0	14,616	218,616	0	218,616	0
s/t		1,275,000	0	1,275,000	0	0	0	91,351	1,366,351	0	1,366,351	0
c) Distance learning procurement - Direct negotiation												
Number of trainees												
Tuition fees	760,000		760,000	0	0	0	38,637	0	798,637	798,637	0	0
Subsistence	240,000		0	240,000	0	0	0	17,195	257,195	0	257,195	0
s/t		1,000,000	760,000	240,000	0	0	38,637	17,195	1,055,833	798,637	257,195	0
TOTAL COST 1.C/SERVICES		6,025,000	4,510,000	1,515,000	0	0	229,282	108,546	6,362,828	4,739,282	1,623,546	0
TOTAL COST COMPONENT 2		6,025,000	4,510,000	1,515,000	0	0	229,282	108,546	6,362,828	4,739,282	1,623,546	0

Category and Detail	Base Cost	Total Base Cost	F.E. Base	L.C. Base	F.E. Cont.	L.C. Cont.	F.E. Escal.	L.C. Escal.	TOTALS L.C.	F.E. AfDB	L.C. AfDB	L.C. GOV
COMPONENT 2 :												
2 Technical Assistance											15153094	
2.C/SERVICES												
Expatriate faculty salaries procurement - GOSE procedures												
Number of faculty												
Academic year 1												
Academic year 2												
Academic year 3										100.00%	0.00%	100.00%
a) Salary	8,108,592		8,108,592	0	0	0	412,229	0	8,520,821	8,520,821	0	0
b) Ticket	256,410		256,410	0	0	0	13,036	0	269,446	269,446	0	0
c) Medical expenses	198,740		0	198,740	0	0	0	14,239	212,979	0	0	212,979
d) Housing allowance	794,960		0	794,960	0	0	0	56,957	851,917	0	0	851,917
s/t		9,358,702	8,365,002	993,700	0	0	425,265	71,196	9,855,163	8,790,267	0	1,064,896
SUB TOTAL SALARIES		9,358,702	8,365,002	993,700	0	0	425,265	71,196	9,855,163	8,790,267	0	1,064,896
TOTAL COST 2.C/SERVICES		9,358,702	8,365,002	993,700	0	0	425,265	71,196	9,855,163	8,790,267	0	1,064,896
TOTAL COST COMPONENT 2		9,358,702	8,365,002	993,700	0	0	425,265	71,196	9,855,163	8,790,267	0	1,064,896
COMPONENT 3 :												
3 Infrastructure Development												
Category and Detail	Base Cost	Total Base Cost	F.E. Base	L.C. Base	F.E. Cont.	L.C. Cont.	F.E. Escal.	L.C. Escal.		F.E. AfDB	L.C. AfDB	L.C. GOV
3.A/GOODS			0.00%	100.00%	0.00%	5.00%	0.00%	7.16%				
a) Furniture procurement - Shoppnig HAC										0.00%	100.00%	0.00%
HAC Furniture for lecture halls	30,000		0	30,000	0	1,500	0	2,149	33,649	0	33,649	0
s/t Furniture		30,000	0	30,000	0	1,500	0	2,149	33,649	0	33,649	0
TOTAL COST 3.A/GOODS		30,000	0	30,000	0	1,500	0	2,149	33,649	0	33,649	0

Category and Detail		Base Cost	Total Base Cost	F.E. Base	L.C. Base	F.E. Cont.	L.C. Cont.	F.E. Escal.	L.C. Escal.	TOTALS L.C.	F.E. AfDB	L.C. AfDB	L.C. GOV
a)	HAC Hamelmalo procurement - NCB			67.81%	32.19%								
				80.25%	19.75%	10.00%	10.00%	5.08%	7.16%				
	Laboratories	2,835,000		1,922,520	912,480	192,252	91,248	107,512	71,915	3,297,927	2,222,284	0	1,075,642
	Computer laboratories	105,000		71,204	33,796	7,120	3,380	3,982	2,664	122,145	82,307	0	39,839
	Lecture halls	200,000		135,628	64,372	13,563	6,437	7,585	5,073	232,658	156,775	0	75,883
	Covererd walkways	25,000		16,953	8,047	1,695	805	948	634	29,082	19,597	0	9,485
	Electrification	50,000		33,907	16,093	3,391	1,609	1,896	1,268	58,164	39,194	0	18,971
	s/t		3,215,000	2,180,213	1,034,787	218,021	103,479	121,923	81,554	3,739,977	2,520,157	0	1,219,820
			3,215,385										
b)	EIT procurement - NCB			67.81%	32.19%								
				80.25%	19.75%	10.00%	10.00%	5.08%	7.16%				
	Modification work	90,000		61,032	28,968	6,103	2,897	3,413	2,283	104,696	70,549	0	34,147
	Automotive laboratory	680,800		461,676	219,124	46,168	21,912	25,818	17,270	791,968	533,662	0	258,306
	Mechanical engineering laboratory	680,800		461,676	219,124	46,168	21,912	25,818	17,270	791,968	533,662	0	258,306
	Manufacturing engineering laboratory	680,800		461,676	219,124	46,168	21,912	25,818	17,270	791,968	533,662	0	258,306
	Library	840,000		569,636	270,364	56,964	27,036	31,855	21,308	977,163	658,455	0	318,709
	Toilets	175,000		118,674	56,326	11,867	5,633	6,637	4,439	203,576	137,178	0	66,398
	Window burglar bars	39,525		26,803	12,722	2,680	1,272	1,499	1,003	45,979	30,983	0	14,996
	General Site works					0	0	0	0				
	Pavement to Offices	45,000		30,516	14,484	3,052	1,448	1,707	1,142	52,348	35,274	0	17,074
	Site Electrical Works*	88,258		59,851	28,407	5,985	2,841	3,347	2,239	102,670	69,183	0	33,486
	Site Sanitary Works*	315,402		213,886	101,516	21,389	10,152	11,961	8,001	366,904	247,236	0	119,668
	s/t		3,635,585	2,465,427	1,170,158	246,543	117,016	137,873	92,223	4,229,239	2,849,842	0	1,379,397
	TOTAL COST 3.B/WORKS		6,850,585	4,645,640	2,204,945	464,564	220,495	259,795	173,777	7,969,216	5,369,999	0	2,599,217
			6,430,769										
	3.C/SERVICES			0.00%	100.00%	0.00%	5.00%	0.00%	7.16%	0.00%	0.00%	0.00%	100.00%
	Construction design & supervision												
	Design	411,035		0	411,035	0	20,552	0	30,922	462,509	0	0	462,509
	Supervision	274,023		0	274,023	0	13,701	0	20,615	308,339	0	0	308,339
	s/t		685,059	0	685,059	0	34,253	0	51,537	770,848	0	0	770,848

Category and Detail	Base Cost	Total Base Cost	F.E. Base	L.C. Base	F.E. Cont.	L.C. Cont.	F.E. Escal.	L.C. Escal.	TOTALS L.C.	F.E. AfDB	L.C. AfDB	L.C. GOV
									8773714			
COMPONENT 4 :												
4 Project Management												
4.C/SERVICES			0.00%	100.00%	0.00%	5.00%	0.00%	7.16%	0.00%	0.00%	100.00%	0.00%
External audit services procurement - Shortlisting												
Auditor's fees	48,000		0	48,000	0	2,400	0	3,439	53,839	0	53,839	0
s/t		48,000	0	48,000	0	2,400	0	3,439	53,839	0	53,839	0
SUB TOTAL AUDIT		48,000	0	48,000	0	2,400	0	3,439	53,839	0	53,839	0
TOTAL COST 4.C/SERVICES		48,000	0	48,000	0	2,400	0	3,439	53,839	0	53,839	0
4.D/ OPERATING COST			0.00%	100.00%	0.00%	5.00%	0.00%	7.16%	0.00%	0.00%	100.00%	0.00%
Travel and out of pocket expenses procurement - Shopping												
Budget	147,860		0	147,860	0	7,393	0	10,594	165,847	0	165,847	0
s/t		147,860	0	147,860	0	7,393	0	10,594	165,847	0	165,847	0
SUB TOTAL AUDIT		147,860	0	147,860	0	7,393	0	10,594	165,847	0	165,847	0
TOTAL COST 4.C/ OPERATING COST		147,860	0	147,860	0	7,393	0	10,594	165,847	0	165,847	0
TOTAL COST COMPONENT 4		195,860	0	195,860	0	9,793	0	14,033	219,686	0	219,686	0
TOTAL PROJECT COST	USD	23,145,206	17,520,642	5,624,564	464,564	266,040	914,342	421,239	25,211,390	18,899,547	1,876,881	4,434,962
	UA	14,374,297	10,881,170	3,493,127	288,517	165,224	567,851	261,610	15,657,498	11,737,537	1,165,635	2,754,327