



**AFRICAN DEVELOPMENT FUND**

**PROJECT: Support to Technical Vocational Education and Training Project (STVET)**

**COUNTRY: Eritrea**

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**PROJECT APPRAISAL REPORT**

*Date: September 2011*

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## TABLE OF CONTENTS

### CURRENCY EQUIVALENTS, WEIGHTS AND MEASURES, ACRONYMS AND ABBREVIATIONS, GRANT INFORMATION, PROJECT SUMMARY, RESULT-BASED LOGICAL FRAMEWORK, PROJECT TIMEFRAME..... i-vii

I – STRATEGIC THRUST & RATIONALE.....	1
1.1. Project linkages with country strategy and objectives.....	1
1.2. Rationale for Bank’s involvement.....	1
1.3. Donors coordination.....	2
II – PROJECT DESCRIPTION.....	3
2.1. Project components.....	3
2.2. Technical solution retained and other alternatives explored.....	4
2.3. Project type.....	4
2.4. Project cost and financing arrangements.....	4
2.5. Project’s target area and population.....	6
2.6. Participatory process for project identification, design and implementation.....	6
2.7. Bank Group experience, lessons reflected in project design.....	7
2.8. Key performance indicators.....	7
III – PROJECT FEASIBILITY.....	8
3.1. Economic and financial performance.....	8
3.2. Environmental and Social impacts.....	8
IV – IMPLEMENTATION.....	11
4.1. Implementation arrangements.....	11
4.2. Monitoring.....	14
4.3. Governance.....	14
4.4. Sustainability.....	14
4.5. Risk management.....	15
4.6. Knowledge building.....	16
V – LEGAL INSTRUMENTS AND AUTHORITY.....	16
5.1. Legal instrument.....	16
5.2. Conditions associated with Bank’s intervention.....	16
5.3. Compliance with Bank Policies.....	17
VI – RECOMMENDATION.....	17
Appendix I. Country’s comparative socio-economic indicators.....	
Appendix II. Table of ADB’s portfolio in the country.....	
Appendix III. Related projects financed by the Bank and other development partners in the country.....	
Appendix IV. Map of the Project Area.....	
Appendix V. ESMP Summary.....	

### **LIST of Tables**

<i>Result-based Logical Framework.....</i>	<i>iv</i>
<i>Project Timeframe.....</i>	<i>vii</i>
<i>Table 2.1: Project Components.....</i>	<i>3</i>
<i>Table 2.2: Project alternatives considered and reasons for rejection.....</i>	<i>4</i>
<i>Table 2.3 Project cost estimates by component [amounts in million USD and UA].....</i>	<i>5</i>
<i>Table 2.4: Sources of financing [amounts in million UA].....</i>	<i>5</i>
<i>Table 2.5: Project cost by category of expenditure [amounts in million USD and UA].....</i>	<i>5</i>
<i>Table 2.6: Expenditure schedule by component [amounts in million UA].....</i>	<i>6</i>
<i>Table 2.7: Expenditure schedule by source and category of expenditure [amounts in million UA].....</i>	<i>6</i>
<i>Table 4.1: Procurement Arrangements.....</i>	<i>12</i>
<i>Table 4.5 Risk and Mitigation Measures.....</i>	<i>15</i>

## Currency Equivalentents

*As of August 2011*

1 UA	=	ERN 24.6118
1 USD	=	ERN 15.37
1 UA	=	USD 1.60045

## Fiscal Year

1<sup>st</sup> January – 31<sup>st</sup> 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
ATS	=	Asmara Technical school
BPPR	=	Bi-annual Project Progress Report
DP's	=	Development Partners
ENPV	=	Economic Net Present Value
ESDP	=	Education Sector Development Program
ESMP	=	Environmental and Social Management Plan
EU	=	European Union
GoSE	=	Government of the State of Eritrea
GDP	=	Gross Domestic Project
HEI's	=	Higher Education Institutions
HEST	=	Higher Education Science and Technology
ICT	=	Information and Communication Technology
IDA	=	International Development Association
IPRSP	=	Interim Poverty Reduction Strategy Paper
ICSP	=	Interim Country Strategy Paper
MDGs	=	Millennium Development Goals
MHTS	=	Mai- Habar Technical school
MoE	=	Ministry of Education
MTS	=	Medium Term Strategy
NDP	=	National Development Plan
PSC	=	Project Steering Committee
PMU	=	Project Management Unit
TVET	=	Technical Vocational Education and Training
WTS	=	Winna Technical School

## Grant Information

### Client's information

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<b>RECIPIENT:</b>	State of Eritrea
<b>EXECUTING AGENCY:</b>	<b>Ministry of Education</b>

### Financing plan

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Source	Amount (UA)	Instrument
ADF	12.02	Grant
Government	1.33	Counterpart Cont.
<b>TOTAL COST</b>	<b>13.35</b>	

### ADF's key financing information

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

### Timeframe - Main Milestones (expected)

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Government Request for Bank Support	December, 2010
Identification Mission	March, 2011
Preparation Mission	May, 2011
Concept Note Approval	July, 2011
Appraisal Mission	August, 2011
Project approval	November, 2011
Effectiveness	December, 2012
Completion	December, 2016
Last Disbursement	June, 2017

## Project Summary

1. **Project Overview: The proposed *Support to Technical Vocational and Education Training Project (STVET)* is designed to support the Government of the State of Eritrea (GoSE)'s commitment to improve equitable access, quality and relevance of Technical Vocational Education and Training (TVET) in the country.** The outcome of the project is to increase the supply of high quality middle level technicians needed by the Eritrean economy. The key outputs of the project are to increase the number of graduates from existing TVET institutions from 750 in 2011 to 1300 in 2014; mainstream entrepreneurship training in TVET institutions and finally, institutionalize tracer studies to be undertaken by the Directorate of TVET, which will help measure the external efficiency of training systems. The project will be implemented over a five year period and funded by an ADF grant of UA 12.02 million, with a Government contribution of UA 1.33 million. The project is making use of the "small allocation rule" allowing countries with an indicative 3-year PBA allocation, which is less than UA 20 million to access the entire allocation at any time during the cycle.
2. **Needs Assessment: Eritrea suffers from a shortage of intermediate technical and vocational skills.** Enrolment in formal TVET is only 3.14 % of post primary enrolment and the existing TVET institutions are not well equipped to fully embrace the competence based mode of TVET delivery. The annual output of about 750 graduates per annum at intermediate and advanced levels falls short of projected current demand of about 1,000 graduates per annum in the manufacturing sector let alone requirements in other sectors. Hence, there is an urgent need to improve the capacity of the country's TVET institutions to assist the country address weaknesses in skills development. The project is based on a request from the GoSE which seeks to enable TVET graduates to be more employable so as to contribute to growth and poverty reduction.
3. **Bank's Added Value: The project complements and sustains the achievements of investment made by the Government; other Development Partners (DPs) and the Bank in basic education by providing more opportunities for transition to post primary education.** The Bank has an excellent track record in the design and implementation of education interventions in Eritrea. The Bank's and other DP's interventions have had a positive effect with regard to increasing access and completion rates at both the primary and secondary level. Consequently at the post primary level, the system cannot absorb about 70% of student who complete grade 8 and hence reducing the effectiveness and sustainability of investments at lower levels of education. The intervention will provide about 750 places for grade 8 and 12 graduates. Additionally, the EU has provided support for the development of competency-based curriculum (CBT) and the adoption of occupational standards. But the TVET institutions do not have learning conditions commensurate with the CBT mode of delivery. The project will support improvement of teaching and learning conditions thus enhancing the effectiveness and sustainability of investments made in curriculum development.
4. **Knowledge Management: The project will contribute to improving the body of knowledge in the area of skills development for the Government and the Bank.** The aim of the project is to nurture the acquisition, development and application of high quality technical know-how of TVET graduates in a manner that is consistent with established training goals and national values as a basis for economic growth. For empirical and evidence-based information on the same, analytical work will be undertaken in the area of external efficiency of TVET and labor market analysis to generate knowledge to assist the Government in the development of a comprehensive program for the TVET sub-sector as well as to identify skills gaps needed to drive forward the growth agenda.

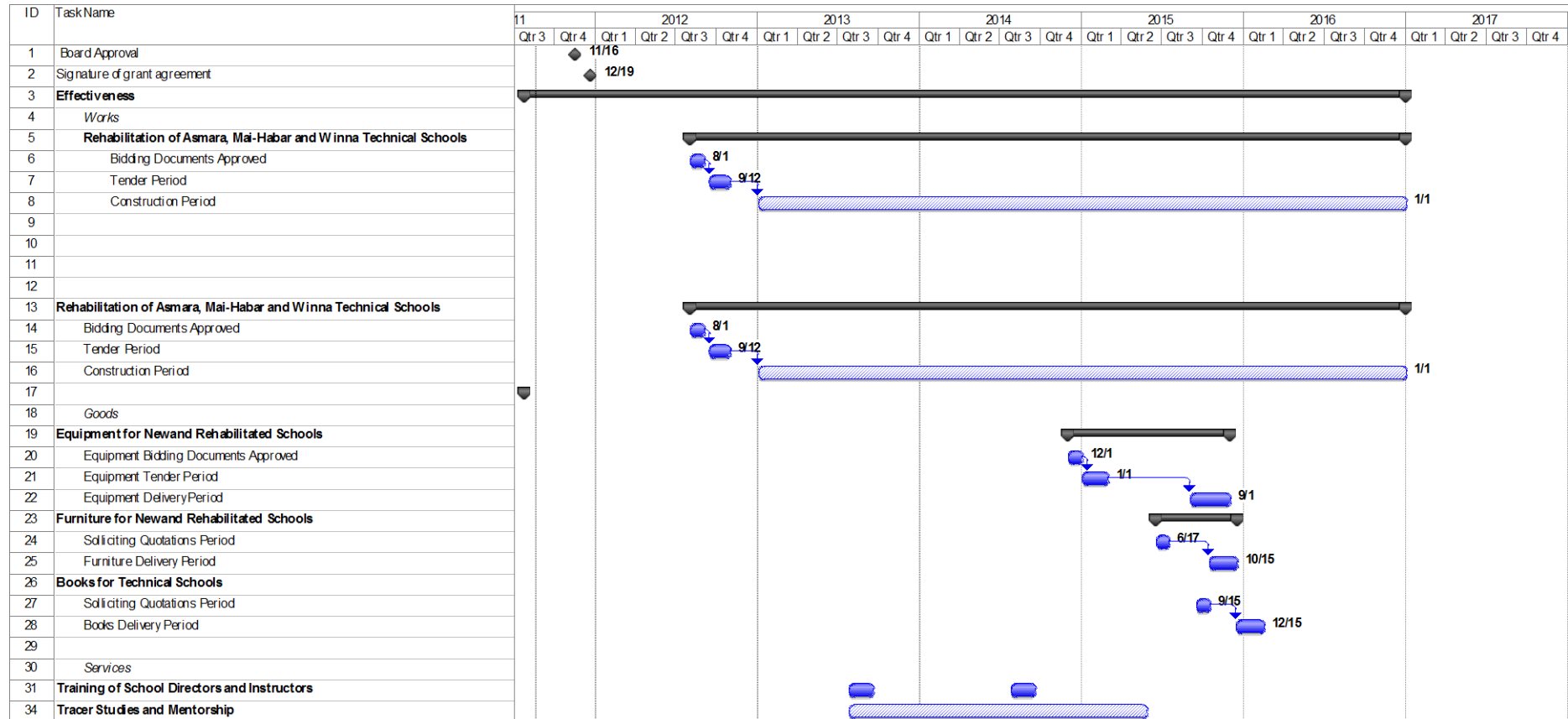
## Result-based Logical Framework

Country and Project Name: Eritrea – Support to Technical and Vocational Education and Training (STVET) Project						
Purpose of the project: To support the development of high quality middle level technical and vocational skills needed in the Eritrean economy.						
RESULTS CHAIN		PERFORMANCE INDICATORS			Means of Verification	RISKS / MITIGATION MEASURES
		Indicator (including CSI)	Baseline (2010)	Target (2016)		
IMPACT	Availability of high quality intermediate technical labour for industry	% of student graduating from TVET institutions with requisite skills	70% ( of which 40% are female)	90% (of which 45% are female)	National statistics , Tracer studies , TVET reports	
		% of graduates employed within six months of graduation	80 %	90%		
		Enrolment in TVET institutions as % of total enrolment at all levels of education.	0.3%	0.6%		
OUTCOMES	<b>Outcome 1.</b> Public TVET institutions at the intermediate level strengthened in terms of physical facilities, relevant equipment and skilled staff.	% of qualified instructors in the technical schools.	60% male & 20% are female	70% male & 30 % are female	TVET EMIS, Reports from institutions, Project monitoring reports and project completion report	<u>Risks:</u> Lack of resources to meet recurrent costs (equipment, maintenance and instructors etc) <u>Mitigation:</u> integrated financing provisions for skills development under the MoE budget
		Student text book ratios in beneficiary schools	1: 10	1:1		
		Number of institutions upgraded and equipped	None	3 institutions		
		Number of TVET graduates	750 graduates (of which 40% are female)	1300 graduates (of which 45% are female)		
	<b>Outcome 2.</b> Increase in number of students enrolling and graduating from TVET institutions by gender and increase in the number of female students in non traditional courses	% of students completing Grade 8 and 12 enrolling for TVET programmes	4.7% (of which 40% are female)	6% (of which 45% are female)	TVET EMIS, Reports from institutions	<u>Risk :</u> unstable inflow of students ( female and male) with the required grades  <u>Mitigation :</u> Institutionalization of career guidance and role model programs at JHS and SHS level and implementation of the teacher improvement intervention at the same level
		% of students completing TVET courses disaggregated by gender	80% (of which 40 % are female )	90% (of which 45% are female)		
		% of female students in technical schools	40%	45%		

OUTPUTS	<b>Outcome 3.</b> The Directorate of TVET and institutions strengthened to perform coordinating and policy making role within the skills and training sector	Number of tracer studies and competency tests conducted  Number of instructors trained  Number of managers trained	None  47 (of which 10% are female)  None	2 studies  180 (of which 30% are female)  20 (of which 10% are female)	Exit interviews and surveys, quarterly progress reports, annual performance reports, staff surveys and appraisal reports		
	<b><u>Component 1: Expanding Equitable Access and Quality of TVET</u></b> - upgrade 3 existing technical schools ( <i>rehabilitation of infrastructure and equipment; procurement of equipment</i> )	- Number of existing schools rehabilitated and equipped	3 existing government and 3 private Technical Schools		Annual MOE progress report and project quarterly progress report	<b>Risk:</b> The cost overrun during implementation that can arise from the significant number of physical inputs being provided. <b>Mitigation.</b> A thorough costing exercise at appraisal and the inclusion of contingencies; implementation of the construction and upgrading activities in phased clusters for assessing cost containment options.	
	<b><u>Component 2: Building Human and Institutional Capacity for TVET</u></b> - Upgrading Pedagogy skills of instructors in entrepreneurship  -Training of Managers of TVET institutions and policy makers.	Number of entrepreneurship tutors trained  Number of managers and staff of TVET Directorate trained	180 entrepreneurship instructors (of which 30% female)  20 managers, 4 TVET directorate staff and 4 PMU staff		Annual MOE progress report and project quarterly progress report		
	<b><u>Component 3: Project management</u></b> - Establishment of the PMU - Coordination and delivery of TVET programmes -	Functional project management framework for coordination fully	PMU operational at the beginning of the project to execute infrastructure development and completion of buildings and their equipping		Annual MOE progress report and project quarterly progress report		

<b>KEY ACTIVITIES</b>	<p><u>Component I: Expanding Equitable Access to TVET</u></p> <ul style="list-style-type: none"> <li>Rehabilitation of existing facilities and equipping of work shops</li> </ul>	<p><b>Inputs:</b></p> <p><b>Project cost by category of expenditure</b></p> <table> <tr> <td><b>Category</b></td> <td></td> </tr> <tr> <td>Goods</td> <td>9.13</td> </tr> <tr> <td>Works</td> <td>3.31</td> </tr> <tr> <td>Services</td> <td>0.32</td> </tr> <tr> <td>Operating costs</td> <td>0.59</td> </tr> <tr> <td><b>Total Project Cost</b></td> <td><b>13.35</b></td> </tr> </table>	<b>Category</b>		Goods	9.13	Works	3.31	Services	0.32	Operating costs	0.59	<b>Total Project Cost</b>	<b>13.35</b>
	<b>Category</b>													
	Goods		9.13											
	Works		3.31											
Services	0.32													
Operating costs	0.59													
<b>Total Project Cost</b>	<b>13.35</b>													
<p><u>Component II: Building Institutional and Human Capacity for TVET</u></p> <ul style="list-style-type: none"> <li>Upgrading and training of tutors</li> <li>Training of school managers and policy makers</li> <li>Support to EMIS (tracer studies)</li> </ul>														
<p><u>Component III: Project Management</u></p> <ul style="list-style-type: none"> <li>Payment of M&amp;E cost, Audit and operational cost expenses and salaries for PMU staff.</li> </ul>														

## 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 TECHNICAL VOCATIONAL EDUCATION AND TRAINING PROJECT**

Management submits the following Report and Recommendation on a proposed grant for UA 12.02 million to finance the Support to Technical Vocational Education and Training project in Eritrea.

### **I – STRATEGIC THRUST & RATIONALE**

#### ***1.1 Project linkages with country strategy and objectives***

**1.1.1 The proposed project is anchored within Eritrea’s development strategies and objectives.** The proposed support to Technical Vocational Education and Training project is aligned with the priorities of Eritrea’s development objectives, which focus on building optimal levels of human capital stock required to achieve sustainable growth and poverty reduction. The project also seeks to address the needs of the economy whose structure is changing in favour of industry and service sectors. In this context, the improvement in the supply and quality of intermediate technicians is key in assisting the country to achieve higher worker productivity, improve efficiency and flexibility of the labour market and increase business and technological innovation through improving the capacity of technicians to apply and adapt existing as well new knowledge and processes.

**1.1.2 The project conforms to the priorities of the Government and those of the Bank.** The proposed project conforms to key policy and strategic documents of Government and the Bank and addresses a key development issue, that of increasing the stock of human capital. First, the proposed project is aligned with the Bank Group’s Interim Country Strategy Paper (ICSP) 2009-2011 for Eritrea which seeks to assist the country’s efforts to build optimal level of human capital stock required to achieve sustainable growth. Second, the project is aligned with the Education Sector Development Plan and the Road Map for Development of Different Levels of Education in Eritrea (2008). Third, the project is aligned with the priorities of the Interim Poverty Reduction Strategy Paper (IPRSP) of 2004-2006, which also puts emphasis on the development of the country’s human capital. Fourth, the project objectives take into account the recommendations of the 2007 High Level Panel, Medium-Term Strategy (MTS) 2008-2012 and the Higher Education Science and Technology Strategy (HEST) which emphasized the need for the Bank to invest in science, technology and innovation through vocational education and training and higher education.

#### ***1.2 Rationale for Bank’s involvement***

**1.2.1 Shortage of appropriate human capital hinders Eritrea's efforts to reduce poverty, transform society, and create a modern, vibrant and competitive economy.** The country is facing shortages of intermediate level workforce, especially technicians. The main problem of the education system is that it directs students toward the academic stream. Consequently, enrolment at TVET is only 3.14% of the enrolment in post-secondary institutions. As part of the efforts to increase TVET access, EU is financing a mentorship program which targets students between grades 8-12 to reduce the stigma attached to TVET training and encourage students to enrol in TVET instead of the academic streams. In addition,

TVET training in Eritrea is free and the employment rate for TVET graduates is good. Yet, Government plans to increase the enrolment of TVET to 15% by 2015 are constrained by the fact that the system is unable to absorb up to 70% of the students who pass examinations at grade 10 and 12 which is projected to increase from 14000 in 2011 to 28800 in 2015.

**1.2.2 The project will assist the country to improve its human capital critical for sustaining growth and poverty reduction agenda.** Investing in TVET in Eritrea is timely because of three key reasons. First of all, high economic growth rate averaging about 17% is projected for Eritrea in the medium term on account of the lucrative gold mining. Secondly, the structure of the economy is changing in favour of industry and services. Thirdly, there are a number of manufacturing sectors that are in demand of intermediate skills. These include food, beverages, bottling, tobacco, textiles, leather and leather products, paper, printing, publishing, chemicals, pottery, bricks, ceramics, cement, metal manufacturing products, automotive products, and furniture. Consequently, the project will support training in relevant trades such as welding and metal fabrication, woodwork, electricity and electronics, refrigeration, plumbing, building construction, auto electricity and auto mechanics. All these trades are in high demand for manufacturing sector and the gold industry in particular. In sum, to sustain growth in the medium and long run will require increasing the quantum and quality of skills to match the demands of the economy.

**1.2.3 The Bank is a major development partner in the education sector in Eritrea and the education sector is the only one that the Bank is currently funding.** The Bank's interventions in Eritrea have become all the more important with the closure of the World Bank operations in August 2011 and the completion of the EU work programme for education. It is also pertinent to recall that when Government requested for assistance under ADF 11, the two areas of higher education and TVET were included. However, due to the limited amount of the allocation, only the higher education project was funded with the understanding that the TVET operation will be designed and supported as soon as resources are available. Through financing this intervention the Bank is complementing previous investments in the education sector and also responding to a specific request from the GoSE to the Bank for support.

**1.2.4 Government needs support to alleviate serious financial constraints in the TVET sub-sector.** Funding for the TVET interventions contained in the Education Sector Development Plan and the road map for development of different levels of education has not been following and as such, critical aspects of the reform relating to access have not been implemented. Bank's support is thus needed to provide Government with resources to implement critical aspects of the TVET reform.

### **1.3 Donor coordination**

**1.3.1 The donor coordination mechanism in the country is sufficient to support dialogue and successful implementation of a TVET operation.** The Ministry of Education is responsible for coordinating all assistance to education in the country. And there is a donor technical committee that coordinates donor activities in the social sector. In addition to the Bank, the World Bank (WB) and EU are the major supporters of the education sector. They have both supported the ESDP, with an IDA credit of USD 45 million and an EU grant of Euro 53 million. The Government of China has also assisted with the expansion of the College of Arts and Social Science while the Government of India is providing support for the provision of information communication technology (ICT) and science equipment for the higher education institutions (HEI's). With regard to TVET, available EU financing has

concentrated on software interventions in the ESDP which include, development of the competency based curriculum and occupational standards, teacher training, procurement of textbooks and teaching materials. Due to financial constraints, reforms targeting increasing access to intermediate skills through expansion, rehabilitation and equipping of existing technical schools have not been funded by GoSE. To this end, the project strategically complements current efforts from GoSE and other development partners in education and training. The project investments will build on the efforts of other partners such as the World Bank, EU and Government which are targeting improving education to all Eritreans.

## II – PROJECT DESCRIPTION

### 2.1 Project components

**2.1.1 The development objective of the project is to support the production of quality intermediate level technical and vocational training skills needed to further economic growth and reduce poverty.**

**2.1.2 The specific objectives of the project are:** (1) Expanding equitable access to TVET, (2) Improving relevance, and quality of TVET, and (3) Improving management at the coordination and school levels. To achieve these objectives, the project will have three components.

Table 2.1: Project Components

nr.	Component name	Est. cost (UA Million)	Component description
1	<b><u>Expanding Equitable Access and quality of TVET</u></b>  Infrastructure Development  Equipment	3.31  9.18	<ul style="list-style-type: none"> <li>▪ The component supports increased access to Technical, Vocational Education and Training (TVET) at the intermediate level. It will help improve the learning environment in 3 existing Government technical schools (ATS, WTS, MHTS) and equip 3 existing private technical schools. Expansion of facilities in the schools will include the construction and expansion of workshops, sanitary facilities and external works including access roads, drains, and walkways.</li> <li>▪ Modern equipment for all the trades will be supplied to existing Government and private technical schools to improve the quality of teaching and learning.</li> </ul>
2	<b><u>Building Human and Institutional Capacity for TVET</u></b>	0.25	<ul style="list-style-type: none"> <li>▪ This component will assist in efforts to improve the quality of teaching and learning in the project schools by training and upgrading 180 instructors in relevant trades. To enhance school management, 20 school Directors will also be trained. The project will support the Ministry of Health with an HIV school programme implementation. The component will also support analytical studies i.e. labour market and tracer studies.</li> </ul>
3	<b><u>Project Management</u></b>	0.60	<ul style="list-style-type: none"> <li>▪ The component will provide the required resources for the annual auditing of the project and operating costs required for administration and technical supervision of the STVET. This will include communications and monitoring of project activities.</li> </ul>

## 2.2 *Technical solution retained and other alternatives explored*

2.2.1 **In the design of the project, two technical solutions were considered. The retained technical solution addresses the key issues of access, equity, relevance of TVET delivery.** The retained technical solution will help extend, rehabilitate and equip three existing government technical schools and equip three additional private technical schools supported by the Government. Under this alternative, the issues of access, relevance and equity are given adequate attention. Both the Bank and GoSE determined that this solution is aligned with Government's policy framework on TVET which aims to sustain and safeguard the gains made in TVET since independence.

2.2.2 **A second technical solution that was explored but rejected involved the construction and equipping of three new government owned technical schools and rehabilitate and equipping of three existing government owned technical institutions.** This alternative had drawbacks. These include the fact that it is selective in approach and ignored the quality challenges being faced by the private training institutions that enroll about 50% of the TVET graduates and for which Government already pays part of the recurrent cost. Moreover, the alternative does not adequately address the issues of sustainability with regard to maintaining and safeguarding the nation's gains in the TVET sector since independence in 1991. In view of these challenges, the alternative was rejected.

Table 2.2: Project alternative considered and reasons for rejection

Alternative name	Brief description	Reasons for rejection
Selective expansion of TVET	The option involved the construction and equipping of 3 new government owned technical schools and rehabilitation and equipping of three existing government owned technical institutions and ignores the private providers who produce 50% of TVET graduates in the country.	<ul style="list-style-type: none"> <li>▪ The alternative did not embrace government's need to sustain the gains in TVET delivery since independence</li> </ul>

## 2.3 *Project type*

**The operation is an investment project.** It will assist in financing the implementation of selected elements of agreed reforms to increase access and quality of TVET delivery in Eritrea.

## 2.4 *Project cost and financing arrangements*

2.4.1 **The total project cost is estimated at UA 13.35 million.** And will be financed jointly by an ADF grant of 12.02 million (90.0%) and the Government's contribution of UA 1.33 million (10%). The ADF funding will cover 100% of the foreign exchange costs and 63.0% of local costs. The Government will finance 37.0% of the local costs. The Fund will contribute to financing the cost of works, goods, services and training costs. The GoSE will cover ancillary costs including taxes and duties, training cost, salaries of the PMU staff, and additional salaries for new staff for the new institutions constructed under this project. For the List of Goods and Services see Annex C2.

2.4.2 **These cost estimates are based on August 2011 prices and an escalation factor has been inbuilt to reduce the impact of price increments on planned outputs.** 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 July 2011. 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. The estimated project costs and proposed sources of finance are summarized below in tables 2.3 through 2.7.

Table 2.3: 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. Expanding Equitable Access to TVET	14.24	3.45	17.69	80.5%	8.90	2.16	11.06	80.5%
2. Building Human and Institutional Capacity	0.00	0.36	0.36	0.0%	0.00	0.22	0.22	0.0%
3. Project Management	0.00	0.85	0.85	0.0%	0.00	0.53	0.53	0.0%
<b>Total Base Cost</b>	<b>14.24</b>	<b>4.66</b>	<b>18.90</b>	<b>75.4%</b>	<b>8.90</b>	<b>2.91</b>	<b>11.81</b>	<b>75.4%</b>
Physical Contingency	0.71	0.23	0.95	75.4%	0.45	0.15	0.59	75.4%
Price Contingency	1.14	0.37	1.51	75.4%	0.71	0.23	0.95	75.4%
<b>Total Project Cost</b>	<b>16.10</b>	<b>5.26</b>	<b>21.36</b>	<b>75.4%</b>	<b>10.06</b>	<b>3.29</b>	<b>13.35</b>	<b>75.4%</b>

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 Costs	Local Currency Costs	TOTAL Costs	
ADF Grant	10.06	1.96	12.02	90.0%
GoSE	0.00	1.33	1.33	10.0%
<b>Total Project Cost</b>	<b>10.06</b>	<b>3.29</b>	<b>13.35</b>	<b>100.0%</b>
Percentage	75.4%	24.6%	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
	Foreign Currency Cost	Local Currency Cost	TOTAL Costs		Foreign Currency Cost	Local Currency Cost	TOTAL Costs	
1. Goods	14.60	0.01	14.61	100.0%	9.12	0.01	9.13	100.0%
2. Works	1.50	3.80	5.29	28.3%	0.94	2.37	3.31	28.3%
3. Services	0.00	0.52	0.52	0.0%	0.00	0.32	0.32	0.0%
4. Operating Costs	0.00	0.94	0.94	0.0%	0.00	0.59	0.59	0.0%
<b>Total Project Cost</b>	<b>16.10</b>	<b>5.26</b>	<b>21.36</b>	<b>75.4%</b>	<b>10.06</b>	<b>3.29</b>	<b>13.35</b>	<b>75.4%</b>

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

Component	Year 1	Year 2	Year 3	Year 4	Year 5	Total	% Total
1. Expanding Equitable Access to TVET	2.649	5.410	2.924	1.037	0.475	12.494	93.6%
2. Building Human and Institutional Capacity	0.054	0.110	0.060	0.021	0.010	0.254	1.9%
3. Project Management	0.127	0.260	0.141	0.050	0.023	0.601	4.5%
<b>Total Project Cost</b>	<b>2.830</b>	<b>5.781</b>	<b>3.124</b>	<b>1.108</b>	<b>0.507</b>	<b>13.350</b>	<b>100.0%</b>

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 Costs	Local Currency Costs	Total Costs	Local Currency Costs		
A. Goods	9.12	0.01	9.13	0.00	9.13	100.0%
B. Works	0.94	1.69	2.63	0.68	3.31	28.3%
C. Services	0.00	0.26	0.26	0.06	0.32	0.0%
D. Operating Costs	0.00	0.00	0.00	0.59	0.59	0.0%
<b>Total Project Cost</b>	<b>10.06</b>	<b>1.96</b>	<b>12.02</b>	<b>1.33</b>	<b>13.35</b>	<b>75.4%</b>

## 2.5 Project's target area and population

**A broad scope of beneficiaries and area is targeted by the project.** The project will involve the extending, rehabilitation and equipping of three existing technical schools and equipping of three private technical schools. Initially, the principal beneficiaries of the project will be 10<sup>th</sup> grade students in the secondary schools all over the country who number about 50,000. Other beneficiaries of the project will include: (i) the 180 instructors selected from all technical institutions in the country to be trained; (ii) adults living near the technical institutions who may opt for training or retraining during the vacation in selected modules in various trades; (iii) local populations who choose to enroll in functional literacy programs related to activities or occupations of villages or communities within the catchment area of the technical schools; (iv) industry sector which will have a steady supply of 2400 high quality graduates per year; and (v) families whose life time earnings and quality of life will be impacted on positively by the students who complete TVET and get employed or become employers. Members of the local communities who will work on the construction sites will also earn an income to support their families.

## 2.6 Participatory process for project identification, design and implementation

**A participatory approach has been adopted during identification, preparation, appraisal and will continue throughout the implementation stage of the project.** 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 Department of TVET, Ministry of Education, Ministry of Labor and Welfare, the Association of Eritrean Women and other donors were sought. There was wide support for the project at all levels. The Ministry of Public Works will execute the designs for

the three existing technical schools; prepare cost estimates and bidding documents for the tendering process. This participatory approach will be maintained during project implementation. The Association of Eritrean Women, other donors, federation of employers and industry will provide advice and technical assistance to the project implementation team. The existing technical schools and stakeholders in TVET delivery will be represented in the Project Technical Committee (PTC). The project management team will also receive technical support from the beneficiary technical schools 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 design of the project incorporates lessons learnt from previous Bank and other Development Partners operations in the sector.** The project benefited from lessons learned from the implementation of the Bank's on-going education project supporting basic and secondary education, 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 the 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; for example curriculum development for TVET and the adoption of occupational standards for Eritrea is being financed by the EU (iii) existence of a 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 conceiving the project by:** (i) collaborating with the Project Management Unit for the ongoing ESDP in developing the project ; (ii) assisting the authorities of the existing technical schools to prepare their needs assessment for both physical expansion and replacement of obsolete machines; (iii) assigning major procurement activities to the procurement staff of the on-going education project who have attained considerable knowledge of the Bank's procurement procedures; (iv) using the expertise of the Department of TVET 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 project management. Experience from interventions in TVET by other development partners including the Bank in other countries also demonstrate that supporting instructor training, provision of equipment and technical assistance and rehabilitation of facilities improve the quality of TVET education provided.

## ***2.8 Key performance indicators***

**Achievement of the project development objective will be measured using the indicators presented in the project's Result-Based Logical Framework.** 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 students graduating from TVET institutions with the requisite skills, percentage of graduates employed within six months of graduation; and outcome indicators such as the number of TVET institutions with improved teaching and learning conditions and improved skills and competencies of TVET graduates.

## III – PROJECT FEASIBILITY

### *3.1 Economic and financial performance*

3.1.1 **The project has positive economic benefits.** Investment in TVET has positive Net Present Value (NPV). The NPV at a 10% discount rate is USD 4,798,341. The NPV was calculated using conservative assumptions with a view to testing the robustness and sustainability of the results of the financial simulation. The NPV value is small because education in public technical schools is free and hence the Government does not receive any revenue from school fees. Refer to section B.7 of the technical annexes for the underlying assumptions of the financial simulation model.

3.1.2 **Investment in TVET increases the stock of skilled manpower and its ability to adapt to new technologies and innovations.** The structure of the Eritrean economy is fast changing in favor of industry and thus needs a better prepared intermediate labor force equipped with competencies, knowledge, and workplace skills that cannot be developed in primary school or secondary school levels. At this stage of development, a large pool of workers with technical education is a prerequisite for attracting foreign investment and technologically-based industry that can further transform the economy and improve its competition based on the quality of its products. Beyond that, investment in technical and vocational education will enhance business and technological innovation by improving the capacity of technicians to apply and adapt existing as well as new knowledge and processes. The project will support the building of the capacity of the country's technical institutions to produce the required skilled workforce. Furthermore, with this kind of support, certain key sectors, such as agriculture and mining, will have better trained workers, which will contribute to economic growth and reduction of poverty.

3.1.3 **The project will contribute to easing the financing gap in the Education Sector Strategic plan and thus enhance the capacity of the country to attain its objective for improving the quality and access to technical and vocational education and training.** The demand for education at the basic level has crowded out financing to both the higher education and TVET levels to the extent that the access interventions in the Education Strategic Plan have not been funded. The project is thus timely with respect to the provision of the required funding for TVET.

### *3.2 Environmental and Social impacts*

3.2.1 **Environment: The project activities have very limited impact on the environment.** The project is classified as category II according to the Bank's environmental guidelines. The activities to be implemented under the project include new construction and rehabilitation at 3 existing sites with very little impact on the environment. 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 washrooms.

**3.2.2 Environmental and Social Management Plan (ESMP) summary outlining the project environmental issues and mitigation measures that will be put in place during project implementation was discussed and agreed with stakeholders.** The project design team visited three existing institutions at which the construction activities will take place and thoroughly reviewed with the institutions and Zoba leadership the options available and provided advice as appropriate on environmental issues. The 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; (1) mechanisms for identifying adverse environmental conditions; (2) social impacts associated with the implementation of activities supported by the project; and (3) 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 technical schools. Further refinements of the information provided will include outlining the responsibilities of various actors such as the directors of the schools 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.

**3.2.3 Climate Change: The project will have minimal impact on climate change.** 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 Sahel region in Africa. Government climate change projections indicate that temperatures could increase by more than 4 degrees Celsius by 2050, reducing the quantity of available water. To mitigate these diverse effects of the project activities on the climate, the facilities to be constructed by the project are designed to be low energy consumers in cooling and lighting. Cross ventilation and natural lighting are used in most spaces except where mechanical ventilation is necessary. The infrastructure also includes provisions for appropriate drainage in flood prone areas. In addition, landscaping, grass and trees planting will be required within the schools as a means of contributing to ground cover. Rainwater will be harvested and used for appropriate cleaning and gardening. Solar energy is being proposed as the energy source for heating of water and lighting for selected facilities. Beyond that, the revised curriculum for TVET has incorporated climate change aspects like energy conservation, the design of buildings that are energy efficient, use of building materials that has less impact on climate change, water conservation and renewable energy education for all TVET trades.

**3.2.4 Gender: 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 under-represented at the secondary and tertiary education levels. Currently, about 41% of the secondary school populations 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 additional 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 The project takes into account Government's gender policy which recognizes the fact that sustainable development cannot be realized without the full and equal participation of girls and children from poor households at all levels of education.** The main activities of the project in this regard include; i) raising gender awareness of the

communities by undertaking training and mobilization campaigns for the community; ii) reviewing curriculum and gender materials to make them more gender sensitive both in general and technical education; iii) increasing the number of female teachers in schools by ensuring that at least 30% trainee instructors are female and the continuation of the guidance and counseling programmes at grade 10 level. Other measures supported by the project to improve access of girls to education include the provision of boarding facilities for girls at technical schools in regions where the participation of girls in education is particularly low. The proposed project will contribute to the provision of these boarding facilities and also encourage foster-parenting in the communities where the schools are located to encourage parents resident in distant regions to release their daughters for vocational education. It is noted that the implementation, of the 30% female quota at TVET level introduced in 2001 coupled with Eritrea's policy of free public education at all levels have not increased the number of girls transiting to and completing technical education to the desired levels. In order to address this issue, the project will support government to design and pilot an innovative incentive scheme under the project that targets families who accept to release their girl children to attend TVET and guardians who accept to foster female students while attending TVET training. This scheme is intended to address the negative impact of the inherent/characteristic cultural negative attitude towards girl children attending TVET education away from home.

**3.2.6 Social: The project has high poverty reduction outcomes.** 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%<sup>1</sup> 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 technical education institutions for teaching and especially in trade related skills such as construction, mining and agriculture will facilitate the building of middle level skills in the country. These skills are needed for promoting sustained economic growth and social development. The project will specifically open up opportunities for the poorer sections of the Eritrean population by increasing the spaces available for transiting to TVET. As consequence, at the household level, the increased individual productivity, resulting from the improved quality of education, through regular training, night and make-up courses in the technical schools can lead to increased earnings and improved quality of life.

**3.2.7 Involuntary resettlement:** There will be no displacement of people by the project. The activities supported by the project will be taking place in existing institutions.

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<sup>1</sup>2009 UN Human Development Report

## IV – IMPLEMENTATION

### 4.1 *Implementation arrangements*

#### **Institutional Arrangements**

4.1.1 **The implementation arrangements for the project are mainstreamed and participatory.** The Executing Agency for the project will be the MoE acting through PMU, under overall supervision of the Director General Administration and Finance, MoE. All projects and interventions funded by the Education Funding Agencies members in support of the sector are coordinated through the PMU. MoE will be in charge of technical, policy and quality control oversight for project outputs. In order to enhance participation of stake holders engaged in TVET delivery, a Project Technical Committee (PTC) has been constituted by GoSE. The PTC will be chaired by the Director General TVET with members from the following stakeholders: a representative of each of the participating institutions; a representative of the Ministry of finance and Public Works, private sector and three (3) technical officers, one (1) from the Directorate of Administration and Finance and two (2) for the Directorate of TVET . The PTC will be required to meet on a quarterly basis.

4.1.2 **The designated implementing unit is fully integrated into the institutional and management structure of the MoE and has the capacity to provide the service.** The PMU is executing all donor funded project in the education sector including the ongoing Education Sector Development Program with a closing date of 31<sup>st</sup> December 2011 will be responsible for project execution. The PMU is currently staffed with a Project Manager, Engineering, Procurement, Accounts, Internal Auditor and Monitoring and Evaluation officers who have managed donor funded projects in the sector for several years and therefore have the capacity and resources to provide the required services. The performance of the PMU during execution of the ongoing projects has been rated as highly satisfactory. The PMU is supported by regional and district engineering staff to supervise construction activities of the project.

#### **Procurement Arrangements**

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.** The PMU will be responsible for the procurement of goods, works, and services. 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 table 4.1 :

Table 4.1: Procurement Arrangements

PROJECT CATEGORIES	UA '000 000						
	ICB		Other		Short listing		Total
<b>1. WORKS</b>							
<b>Civil Works (Existing Schools)</b>							
1.1 Asmara Technical School			1.13	[0.94]			1.13 [0.94]
1.2 Winna Technical School			1.13	[0.95]			1.13 [0.95]
1.3 Mai-Habar Technical School			1.05	[0.87]			1.05 [0.87]
<b>2. GOODS</b>							
2.1 Furniture for 3 existing tech. schools			0.21	[0.21]			0.21 [0.21]
2.2 Equipment for 3 existing tech. schools	8.44	[8.44]					8.44 [8.44]
2.3 Books for 3 existing tech. schools	0.32	[0.32]					0.32 [0.32]
2.4 Reference Materials for HIV counselling			0.01	[0.01]			0.01 [0.01]
2.5 Vehicles for 3 existing Technical Schools			0.16	[0.16]			0.16 [0.16]
<b>3. SERVICES</b>							
<b>Professional Services</b>							
3.1 Design of Technical Schools					0.06	[0.00]	0.06 [0.00]
<b>Training</b>							
3.2 Training of Tutors			0.13	[0.13]			0.13 [0.13]
3.3 Training of School Directors			0.01	[0.01]			0.01 [0.01]
<b>Technical Assistance</b>							
3.4 External Auditor for 5 years					0.01	[0.01]	0.01 [0.01]
3.5 Tracer Studies & Mentorship					0.02	[0.02]	0.02 [0.02]
3.6 Labour Market Studies					0.05	[0.05]	0.05 [0.05]
3.7 Equipment Specialist					0.02	[0.02]	0.02 [0.02]
3.8 Consultants for MTR and PCR					0.01	[0.01]	0.01 [0.01]
<b>4. OPERATING COSTS</b>							
4.1 Salaries			0.28	[0.00]			0.28 [0.00]
4.2 Consumables			0.12	[0.00]			0.12 [0.00]
4.3 Communication			0.04	[0.00]			0.04 [0.00]
4.4 Trips to Tunis (3 round trips)			0.02	[0.00]			0.02 [0.00]
4.5 Per diem for trips to Tunis (5 persons)			0.01	[0.00]			0.01 [0.00]
4.6 Internal travel for supervision (hiring etc)			0.12	[0.00]			0.12 [0.00]
4.7 Expenses for workshops (Component 2)			0.01	[0.00]			0.01 [0.00]
4.8 MoH Initiative for HIV capacity			0.01	[0.00]			0.01 [0.00]
<b>TOTAL COST</b>	<b>8.76</b>	<b>[8.60]</b>	<b>4.44</b>	<b>[3.28]</b>	<b>0.16</b>	<b>[0.11]</b>	<b>13.35 [12.02]</b>

[ ] Amounts financed by ADB 'Other' refers to NCB, Shopping, Direct Negotiation, Short listing, Operating Cost

### Disbursement Arrangements

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

**4.1.6 A foreign currency account shall be opened with a bank acceptable to the Fund into which the ADF resources shall be disbursed to finance foreign eligible expenditures.** A local currency account shall also 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 initially be deposited into the Special Account.** Subsequent replenishments of the Special Account will be subject to the PMU having provided sufficient justifications for the use of at least 50% of the previous deposit/advance, 100% of all older advances 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 Management (Including Auditing)**

**4.1.8 The FM risk of the project has been rated as moderate.** In line with the Paris Declaration and the Accra Agenda for Action, the project will use Eritrea's Financial Management systems in part. This is because the Bank has not as yet assessed the country's PFM system. A PMU was established and embedded within the Ministry of Education to implement projects including this one. The PMU has a qualified accountant assisted by three other competent staff. The PMU Accountant reports to the Project Coordinator who in turn reports to the Ministry's Director of Finance and Administration. A desk review updating the 2009 FM Assessment of the PMU was carried out. The PMU's financial management of the ongoing ESDP project has demonstrated that its financial, budgetary and financial reporting systems are adequate and acceptable to the Bank and also has well documented accounting procedures as well as software which are relevant and acceptable to the Bank. The financial systems are automated and annual financial statements are regularly prepared. The PMU and the Ministry have an Internal Audit Unit. The Internal Audit Unit will include the project in its annual work plans and will share the internal audit reports with the Bank. The FM risk of the project has been rated as moderate. (*See Technical Annex B4 for detail FM analysis*)

**4.1.9 In order to ensure efficient monitoring of the project's expenditure, the PMU will maintain separate project accounts which should correspond to the project budget.** Detailed and separate 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 PMU would implement. External auditors, approved by the Auditor General and acceptable to the Bank will audit the project accounts annually and at the end of the project using audit Terms of Reference to be agreed between the Government and the Bank. The audit report, complete with a Management Letter, will be presented annually to the Bank, within six (6) months following the end of Eritrea's fiscal year.

## 4.2 *Monitoring*

4.2.1 **M&E mechanisms in place are adequate to assure results.** The Monitoring and Evaluation officer of the PMU will be responsible for monitoring and evaluation of project activities. The PMU will submit to ADF, Biannual Project Progress Reports (BPPR) in accordance with the established format covering all aspects of the project, within 30 days following the end of the second and fourth quarter. The BPPR will cover progress measured against indicators in the project log frame and the ESMP. The Project Engineer supported by the Regional Engineers will be in charge of interpreting the elements in the ESMP, implementation of mitigation measures and preparation of ESMP progress reports. The project management and ADF will jointly 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 **Monitoring mechanism of Government will be complemented by Bank's supervision missions.** 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 PMU and the Directorate of TVET. A participatory approach will be encouraged in the review process. The ADF will consider any submissions for modifications to the project should the need arise after deliberations during the mid-term review.

## 4.3 *Governance*

**Governance practices and control systems in place in Eritrea are satisfactory.** Judging from the Bank's ongoing projects, it is clear that governance practices and control systems in place in Eritrea are satisfactory. In each of the projects financed, the Project Management Unit has observed procurement, as well as financial and contract management procedures required by the Bank. So far, the audit and supervision reports of the on-going education projects have not reported any irregularities. In this project, the Bank's supervision and audit procedures will be applied throughout the implementation period and will provide the desired guidance on improvements in internal control systems.

## 4.4 *Sustainability*

4.4.1 **The prospects of sustaining the project outcomes are high.** There are four reasons that support this point. **First, student flow to the institutions is guaranteed.** At present, 70% of students who complete grade 8 cannot be absorbed in post primary institutions. Technical education in Eritrea is free hence the financial constraints to accessing TVET are limited. In addition, there are mentorship programs at basic education level to encourage students to TVET and the demand for intermediate skills offered by the institutions to be constructed and rehabilitated is still very high.

4.4.2 **Second, the project contributes to aligning the graduates of TVET with the needs of industry.** As part of the reform, employers who are the end users of the graduates of the TVET system shall participate in the planning, curriculum development and management of the TVET. As a result, the knowledge imparted in the TVET system will be relevant to the needs of employers or industry in Eritrea. This approach fulfills the parameters of relevance of the training and improves the ability of skilled graduates graduating from TVET institutions to gain ready access to the job market hence sustaining GoSE's investment in TVET.

4.4.3 **Third, the project will support the mainstreaming of entrepreneurship training through increasing the stock of entrepreneurship instructors.** Investment in TVET can be further sustained if emphasis is placed on entrepreneurship as part of the training. The mainstreaming of **entrepreneurship** training will enable graduates from the TVET system to be employed but also be equipped to be self-employed after graduation. It will equip the students with skills to set up their own business ventures. Those graduates who succeed in doing so will employ local youth and also train them in the relevant trades. Even so, the future of TVET graduates with respect to absorption by the job market will depend on the growth of the economy and subsequent expansion of the industrial and manufacturing base of the country. At any rate, graduates with skills in entrepreneurship are better prepared to participate in the expansion of the industrial and manufacturing sector of Eritrea.

4.4.4 **Fourth, the financial impact of the project activities on the recurrent budget of the sector is minimal.** Costs related to the maintenance of facilities constructed under the project are estimated at 1.5% of the capital investment and will amount to about UA 40,000 per year. The recurrent expenditure arising from the construction activities is unlikely to increase the recurrent expenditure of technical and vocational education by 0.2%. Modest increases in recurrent expenditure for the sub sector should offset this small increase in the recurrent expenditure resulting from the project. Analysis of the growth of the recurrent budget in TVET institutions indicates that the growth has been on average 3% thus sustaining this growth in recurrent expenditure in the medium term will provide the needed finance to meet the recurrent cost due to the project .

## 4.5 Risk management

**Anticipated risks are minimal as the proposed project is a Government priority action under the ADF XII and consistent with the broader Government program under the ESDP.** Effective risk management will entail follow-up on appropriate mitigation measures identified at appraisal and incorporated in the project's design. The mitigation actions are presented in the respective technical annexes of this project. The table below summarizes the risks and related mitigation measures project.

Table 4.5 Risk and Mitigation Measures

<b>Risk</b>	<b>Rating</b>	<b>Mitigation measures</b>
Likelihood that the cost of meeting the staffing needs of the upgraded schools will increase faster than planned budget	<b>L</b>	The Medium Term Expenditure Frame work (MTEF) to capture the increased cost for instructors. Salary projections to be based on actual staff establishments plus a growth factor equal to the increase in the payroll.
Costs overrun during implementation that can arise from the significant number of physical inputs being provided.	<b>L</b>	This will be mitigated by doing a thorough costing exercise during appraisal, the inclusion of contingencies and strict adherence to implementation schedules.
Likelihood that the cost of maintaining equipment and new infrastructure will rise.	<b>M</b>	MoE Strategic Plan provides an integrated financial framework in which both the capital expenditure required for the program components and the associated recurrent cost implications are taken into account. By supporting the overall plan, the proposed ADB assistance will be implicitly working within that integrated financial framework.
Likelihood that supply and retention of female students and instructors to TVETschools and instructor training	<b>M</b>	In order to sustain the flow of students to the institutions, GoSE will support the institutionalization of career guidance and role model programs at the secondary level of education and the

Risk	Rating	Mitigation measures
colleges will be challenged by low numbers of female students coming through the lower level of the education system.		implementation of the teacher improvement interventions at the same level. Remedial courses will be encouraged within the TVET institutions to reduce the probability of dropping out of female students. In addition, sensitization campaigns will be used to mobilize more females to study TVET Trade.

#### 4.6 Knowledge building

4.6.1 **The project will assist knowledge building in the country.** The Bank’s intervention directed towards supporting governments’ efforts to increase the quality of intermediate skills will reduce the skills gap and improve the ability of the worker forces to adapt to new technologies. The provision modern equipment and training of teachers will raise the level of TVET to come to terms with the exigencies of the digital and computer age. The relevance of the curricula to industry and training with digital and automated equipment will transform the whole spectrum of TVET training and propel it into modernized world of industry.

4.6.2 **Similarly, as the development of TVET is becoming a major priority for the Bank, knowledge gained from the project will be valuable for the design and implementation of future Bank TVET projects and programs.** The project will support the undertaking of analytical work in the area of external efficiency of TVET and labour market studies to assist the Government in the development of a comprehensive program for the TVET sub-sector as well as a labor market analysis to identify skills gaps needed to drive forward the growth agenda and future investments in TVET.

## 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 for grant shall enter into force upon signature by the Recipient and the Fund.

#### B. **Conditions Precedent to First Disbursement of the Grant**

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 of opening of a separate local currency account to receive the Recipient's counterpart contribution. .
- The Recipient shall have provided evidence of approval of the Environment and Social Management Plan (ESMP) by the relevant authority.

### **C. Undertaking**

5.2.3 The Recipient hereby undertakes to implement the ESMP and to report on a quarterly basis, in a form acceptable to the Fund, on the status of said implementation.

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

**This project complies with all applicable Bank policies.** The proposed project is consistent with the Bank's Medium Term Strategy, the education sector policy and the HEST. It is also in line with the Bank Group's 2009-2011 Interim Country Strategy Paper for Eritrea.

## **VI – RECOMMENDATION**

**In light of the constraints faced by the Technical and Vocational Education and Training (TVET) sub-sector in Eritrea, the proposed project will help meet some of the challenges by contributing to increasing equitable access to TVET and improving its quality and relevance.** The proposed project offers a relevant and effective response to some of the constraints and challenges faced by the education and training system. Therefore, Management recommends that the Board of Directors approve the proposed grant of UA 12.02 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

Eritrea - Development Indicators				
Social Indicators	Eritrea		Africa	Developing countries
	1990	2010 *		
Area ( '000 Km²)	118		30,323	80,976
Total Population (millions)	3.2	5.2	1,031.5	5,658.7
Population growth (annual %)	1.4	2.9	2.3	1.3
Life expectancy at birth, total (years)	48.1	60.4	56.0	67.1
Mortality rate, infant (per 1,000 live births)	97.7	51.0	78.6	46.9
Physicians per 100,000 People	...	5.0	58.3	109.5
Births attended by skilled health staff (% of total)	...	...	50.2	64.1
Immunization, measles (% of children ages 12-23 months)	...	80.0	71.1	80.7
School enrollment, primary (% gross)	20.8	48.3	102.7	107.2
Ratio of girls to boys in primary education (%)	94.2	83.0	91.7	96.2
Literacy rate, adult total (% of people ages 15 and above)	...	65.3	64.8	80.3
Access to Safe Water (% of Population)	43.0	61.0	64.5	84.3
Access to Sanitation (% of Population)	3.0	14.0	41.0	53.6
Human Develop. (HDI) Rank (Over 169 Countries)	...	...	n.a	n.a
Human Poverty Index (% of Population)	...	33.7	...	...
Eritrea				
Economy	2000	2008	2009	2010
GNI per capita, Atlas method (current US\$)	170	270	278	...
GDP (current Million US\$)	706	1,380	1,857	2,117
GDP growth (annual %)	-3.6	-9.8	3.9	2.2
Per capita GDP growth (annual %)	-6.9	-12.4	0.9	-0.7
Gross Domestic Investment (% of GDP)	22.0	...	...	...
Inflation (annual %)	19.9	19.9	33.0	12.7
Budget surplus/deficit (% of GDP)	-39.6	-21.1	-14.7	-14.6
Trade, External Debt & Financial Flows	2000	2008	2009	2010
Export Growth, volume (%)	3.2	31.3	26.1	26.1
Import Growth, volume (%)	-27.8	-13.2	1.0	-0.1
Terms of Trade (% change from previous year)	0.5	-32.9	3.6	-14.8
Trade Balance ( mn US\$)	-292	-304	-319	-349
Trade balance (% of GDP)	-41.3	-22.0	-17.2	-16.5
Current Account ( mn US\$)	-4	-75	-94	-31
Current Account (% of GDP)	-0.6	-5.5	-5.1	-1.5
Debt Service (% of Exports)	9.3	45.0	35.9	34.1
External Debt (% of GDP)	46.6	61.9	48.2	43.5
Net Total Inflows ( mn US\$)	183.4	137.8	149.2	...
Net Total Official Development Assistance (mn US\$)	175.8	143.6	144.8	...
Foreign Direct Investment Inflows (mn US\$)	27.9	-0.2	0.0	...
External reserves (in month of imports)	0.6	1.3	...	...
Private Sector Development & Infrastructure	2000	2005	2009	2010
Time required to start a business (days)	...	76	84	84
Investor Protection Index (0-10)	...	4.7	4.7	4.7
Main Telephone Lines (per 1000 people)	8.4	8.4	8.2	8.2
Mobile Cellular Subscribers (per 1000 people)	...	9.0	22.0	22.0
Internet users (000)	1.4	17.9	40.6	40.6
Roads, paved (% of total roads)	21.8	...	...	...
Railways, goods transported (million ton-km)	...	...	...	...

Source: ADB Statistics Department, based on various national and international sources

## 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	13.60	Nov 04	Dec 11	37.8
Support to Education Sector Development Program	Grant	2.0	5.03	Nov 04	Dec 09	100
Higher Education Development Project	Grant	2.0	12.90	May 10	Dec 14	20
<b>TOTAL APPROVALS</b>			<b>31.53</b>			<b>40.4%</b>

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

Agency	Project	Period	Amount (million)
<b><i>Basic Education</i></b>			
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
<b><i>Higher Education</i></b>			
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
ADF	Higher Education Development Project	2010-2015	UA 12.90

## 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.

## Appendix V. ESMP

### **ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN SUMMARY**

**Project Title:** Support to Technical Vocational Education and Training Project

**Project Number:** P-ER-IAE-001

**Country:** ERITREA

**Department:** OSHD

**Division:** OSHD. 2

**a) Brief Description of the Project and Key environmental and social components**

- Rehabilitation of 3 existing technical schools

**b) Major environmental and social impacts**

*Positive Impacts*

- Improved safe drinking water in the new technical schools;
- Reduced incidence of water-borne diseases like cholera etc;
- Improved sanitation facilities through the provision of ventilated latrines;

*Potential Negative Impacts:*

- New construction and rehabilitation at the existing sites will lead to de-vegetation, soil erosion, dust emission and noise
- Slight risk of pollution of ground water and soil contamination

**Enhancement and mitigation program**

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The following mitigation measures represent the main outline of the ESMP and will form an integral part of the project:

- VIP latrines will be built in the schools to provide for proper disposal of solid waste;
- To avoid the contamination of water resources, the water points will be designed and constructed in such a way as to ensure proper drainage of waste water so as to prevent any possibility of water stagnation, which may pose the risk of groundwater contamination and development of breeding grounds for mosquitoes, flies and other insects.
- Existing trees on the school sites will be preserved to protect the soils, provide shade and serve as wind shields
- Grounds will be landscaped and storm water drains will be provided

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**c) Monitoring program and complementary initiatives**

- The school authorities and the relevant ministry will follow up on all the issues relating to protection of the environment in the both the new and existing technical schools;
- Bank supervision missions will follow up the implementation of the ESMP.

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**d) Institutional arrangements and capacity building requirements**

- The PMU, under the guidance of the Ministry of Education will direct all consultants to adhere to guidelines designed to safeguard and improve on the physical environment.

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**e) Public consultations and disclosure requirements**

- The PMU guided by the Ministry of Education and the authorities of the project districts will occasionally organise events to publicise project activities
- The project is designed to operate in a participatory approach manner where all activities will be implemented in close collaboration with local communities to increase their sense of ownership of the improved facilities to provide under the project.

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**f) Estimated Cost**

- US\$ 10,000 for EIA and monitoring for 5 years

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**g) Implementation schedule and reporting**

The environmental management and monitoring plan will be implemented on the basis of the project implementation schedule, as all activities are mainstreamed in the project design. Problems which will be reported in the BPPR reports should be promptly addressed by the project management and the Bank.