Environmental and Social Management Plan (ESMP)

1. Classification:

1.1 The project is classified as Category II. Mitigation measures have been prescribed for the effects of the construction of the 2 new technical and agricultural schools. The two institutions will have their learning environment improved through the provision of laboratories, workshops, classrooms, a library and sanitation facilities. There will be no displacement of people by the project. The project environmental issues and management/ mitigation measures are provided in the Environmental and Social Management Plan (ESMP) summary below.

1.2 Brief description of the project and key environmental and social components:

The operation is an investment project. It will assist in financing the implementation of the following activities:

- Construction of two (2) technical schools one for TVET and the other for agriculture training
- Training of adult groups non-formal skills
- Training of TVET Teaching and Support Staff in further skills
- Curriculum review of TVET
- Quality Assurance of TVET
- Promotion of work experience and linkages with industry and employment sectors.
- Support to increase female enrolment in TVET and agricultural training, HIV awareness, and special needs sensitization

1.3 Major environmental and social impacts

Positive Impacts
- Development of environment friendly technical training and teaching facilities leading to improved skills
- High quality dormitory environment for trainees leading to reduced incidence of diseases in the work place.
- Installation of solar water heating and solar pack up power systems leading to saving on fossil fuels energy sources for the constructed schools.
- Improved laboratories and workshops in the TVET schools providing better environment for training in TVET and agriculture technology.
- Rain water harvesting to be incorporated to improve water availability in the schools and this to be used to do gardening and tree planting and general cleaning.

Potential Negative Impacts
- New construction will lead to de-vegetation, soil erosion, dust emission and noise during construction.
- Use of excessive forest resources in construction and furniture
• Debris from construction containing materials like glass and ceramic tiles being dumped on areas reserved as green parks/riparian systems.

1.4 Enhancement and mitigation program

The following mitigation measures represent the main outline of the ESMP and will form an integral part of the project:
• Improved sanitation facilities and sewerage and sewage treatment systems in the school campuses for proper disposal of solid waste;
• Provision adequate water supply systems to offer safe drinking water; 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.
• Waste disposal collection and disposal systems on the school campuses to be provided with incinerator provided for disposal of any toxic laboratory waste and sanitary pads from the dormitories.
• Existing trees and greenery on the project sites to be preserved to protect the soils from erosion, provide shade, and serve as wind shields for the buildings.
• Improved landscaping to be adopted after construction and new trees and vegetation planted to produce green compounds.
• Ensure that contractors dumping waste and debris from sites are done according to national environment agency guidelines.
• Use of non-indigenous forest products, and reusable steel to be adopted for construction materials, furniture and construction scaffolding to be adopted;
• Solar water heating, and power supply back up to be adopted to reduce fossil fuel power consumption in the new schools.
• Improved energy saving cookers and water boilers to be installed to reduce energy consumption in preparation of meals.
• Support to enhancement of agricultural production units which would enhance food security and new methods of farming that preserve fragile environment and produce higher efficiency per acre of arable land. This will conserve more forests likely to be deployed in favour of poorly managed agricultural practices.
• ESMP to be adopted as part of the maintenance tools for the physical facilities and equipment.
• ESMP to be part of the training of the students and the adult non formal skills programs.

1.5 Monitoring program and complementary initiatives
• The MOE and PMU will follow up on all ESMP matters in the new schools to ensure that the above are adopted.
• Bank supervision missions to follow up the implementation of the ESMP.
• Works supervision consultants will be charged with responsibility of ensuring that the ESMP is adhered to by contractors.
1.6 Institutional arrangements and capacity building requirements

- The Project 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.

1.7 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 all stakeholders to increase their sense of ownership of the improved facilities to be provided under the project.

1.8 Cost of implementation of the ESMP

- Estimated Cost for Environmental and Social Management Plan per annum is UA 30,000 for EIA and monitoring for 5 years

1.9 Implementation schedule and reporting

The ESMP 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 quarterly project progress reports should be promptly addressed by the project management and the Bank.

1.10 Gender: In Eritrea, girls’ access to post primary education is considered as the most important challenge to gender equality in education. At the secondary level, females made 42.26% of total enrolment in 2012. Female enrolment was 30% in TVET schools during the same period. In technical institutes and colleges, which are part of tertiary education, 25.58% of enrolment was female in 2012. In the design of the SSDEE project, emphasis is laid on ensuring that establishment of the two new schools target higher enrolment of girls, and the training centers for adults support higher enrolment of women. In construction of both new schools, the design will include separate dormitories and sanitation facilities to encourage girls’ participation in the program. The project will work against segregation of men and women in different trades, and promote a woman friendly environment with the increase of female teachers and women’s participation in decision making of the project. The project will also genderize all its research and documents and provide disaggregated monitoring and evaluation data. The Education Sector Development Plan 2013-2017 considers gender and the promotion of women as a priority. This document advances that significant differences exist between boys and girls in school enrolment. The Gender Parity Index is 0.81, 0.80 and 0.74 at elementary, middle, and secondary levels respectively for the 2011/2012 school year. The gender gap widens with successive levels of the education system. Significant differences also exist in rates of youth literacy aged 15-24 by gender. It has been estimated that 88.3% of Eritrean men are literate, compared with only 61.4% of the women (EPHS 2010). The participation of girls and women in technical-vocational education and training is also low. Only about 36.6% of the students enrolled in intermediate technical and vocational schools in 2010/11 were female and 38.4% in the post-secondary level technical and vocational schools. These fields are perceived as male domains, yet they are areas where women could acquire important employable skills. This document of national policy recognized that there is considerable scope for ‘on the job’ training, notably in agriculture and construction, but also in small scale enterprises engaged in such sectors as apparel, dressmaking and other sectors.