Environmental and Social Management Framework (DRAFT)

March 2014

Sri Lanka: Skills Sector Enhancement Program

CURRENCY EQUIVALENTS
(as of 1 March 2014)

Currency unit – Sri Lanka rupee/s (SLRe/SLRs)

SLRe1.00 = $0.00763
$1.00 = SLRs131.08

ABBREVIATIONS

ADB – Asian Development Bank
CEA – Central Environmental Authority
EA – Executing agency
EIA – Environmental Impact Assessment
EMP – Environmental Management Plan
ESMF – Environmental and Social Management Framework
ESSP – Environmental and Social Safeguard Policy
IA – Implementing agency
IEE – Initial Environmental Examination
GRM – Grievance Redress Mechanism
GSMB – Geological Survey and Mines Bureau
MOE&RE – Ministry of Environment and Renewable Energy
MYASD – Ministry of Youth Affairs and Skills Development
NEA – National Environmental Act
PAA – project approving authority
SPS – Safeguard Policy Statement
SSDP – Skills Sector Development Program
SEEP – Skills Sector Enhancement Program
TOR – Terms of Reference
TVET – Technical and Vocational Education and Training

NOTES

(i) The fiscal year (FY) of the Government of Sri Lanka and its agencies ends on 31 December.

(ii) In this report, "$" refers to US dollars.

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I. INTRODUCTION

1. The Environmental and Social Management Framework (ESMF) of the Ministry of Youth Affairs and Skills Development (MYASD) for the Skills Sector Enhancement Program (SSEP) will support the implementation of the Skills Sector Development Program (SSDP). The SSDP is the first medium-term sector development program for 2014 to 2020 that aims to transform Sri Lanka’s technical and vocational education and training (TVET) system into a market-responsive and inclusive TVET system. It will help increase employability of the Sri Lankan workforce and particularly, the employability of young men and women. This key objective is to be achieved by revamping skills education sector to make it efficient, relevant, and capable of meeting local and foreign labor market demands. This transformation in the sector will be driven by improved quality, relevance, and recognition of vocational training, and by introducing enabling policies, systems and structures for the sector. In this endeavor of SSDP, SSEP will help its implementation from 2014 to 2016.

2. MYASD will be the executing agency (EA) of SSEP and it will be responsible for the overall coordination of SSDP implementation. The MYASD is the key ministry for skills development and is responsible for (i) quality assurance of public and private TVET providers and (ii) coordinating the extensive network of public TVET providers comprising of over 600 training centers. The Department of Technical Education and Training (DTET), Tertiary and Vocational Education Commission (TVEC), Vocational Training Authority (VTA), National Apprenticeship and Industrial Training Authority (NAITA), University of Vocational Technology (UNIVOTEC), National Youth Service Council (NYSC), and National Institute of Fisheries and Nautical Engineering (NIFNE) are initially identified as implementing agencies (IAs) of SSEP. Other agencies will be added as IAs of SSEP, subject to their formal agreement with MYASD, after a fiduciary capacity assessment is completed and measures to mitigate risks, if any, are identified. Each additional IA will also be required to follow this ESMF in planning and implementing any activities under SSEP.

II. SCOPE OF SAFEGUARDS IN SSEP

3. In terms of physical development, SSEP entails upgrading and refurbishing existing colleges and training centers, and constructing several new buildings. Some of the building refurbishment and construction activities of SSEP would trigger the environmental laws and procedures of the Government of Sri Lanka (government) and Asian Development Bank’s (ADB) environmental policy safeguards. However, considering the scope of SSEP, it is unlikely that it would generate significant environmental impacts. Potential environmental impacts of construction and refurbishment activities are site-specific, and any adverse environmental impact or risk can adequately be addressed through mitigation measures. No construction activity will take place in a critical habitat or in an environmentally sensitive area. Any activity which is likely to generate significant environmental impacts will be excluded from SSEP.

4. MYASD will screen its own land or IA-owned land where construction activities of SSEP will take place to ascertain whether the use of such land would cause any involuntary resettlement impacts. If construction activities are likely to have any adverse impacts on non-titled persons such as squatters, encroachers, and indigenous peoples, or on temporary land users such as sharecroppers, leaseholders, agricultural laborers, vendors, and shepherds, MYASD will not use such land for SSEP purposes. Moreover, if MYASD or any government agency had already removed such persons from its own land where SSEP activities will take place in anticipation of ADB support, MYASD will not use such land for refurbishment or construction activities of SSEP.
5. MYASD will obtain additional land, if required, for SSEP from the state land pool or from other ministries who own excess land. No such new land will be used for SSEP activities, if the use of such land is likely to have any adverse impact on non-titled persons such as squatters, encroachers, and indigenous peoples, or on temporary land users such as sharecroppers, leaseholders, agricultural laborers, vendors, and shepherds. MYASD will screen all transfers of state land or land belonged to other ministries to confirm that they are free of encumbrances and no non-titled person or temporary user will be affected by such land transfers, before it takes possession of the land.

6. No SSEP-related refurbishment or construction activity will lead to acquire any land permanently or temporarily from a person, household, business establishment, or from a community. Moreover, no SSEP refurbishment or construction activity will restrict any person’s land use or access to legally designated parks or protected areas. No commons, wetlands, or forest lands will be acquired for or used in SSEP’s activities. The refurbishment of existing buildings or construction of new buildings neither will block or affect persons’ assets, access to assets, income sources, or means of livelihoods.

7. No SSEP-related activity will have any impact on Vaddhas (indigenous peoples) or their culture, human rights, economy and society, or on the land that they own, or on the land that they claim as their ancestral domain to which they have a collective attachment. SSEP activities will not restrict their access to protected areas and use of natural resources. SSEP will not physically or economically displace them. It will not initiate any action which leads to commercial development of their cultural resources and knowledge.

III. ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

A. The Scope of ESMF

8. This ESMF applies only to SSEP. As SSEP will exclude any activity that would generate any involuntary resettlement impacts or impacts on indigenous peoples, from its subprojects, its focus will primarily be on potential environmental impacts of SSEP, applicable safeguard policy and regulatory measures to deal with them, and how to avoid or at least, mitigate adverse environmental impacts of SSEP, while ensuring environmental soundness and sustainability of SSEP.

B. Environmental and Social Safeguard Policy of SSEP

9. MYASD recognizes that refurbishment and construction activities under SSEP would generate adverse environmental impacts. As an environmentally informed and socially responsible ministry of the government, MYASD is committed to avoid, minimize, or at least to mitigate unavoidable adverse environmental and social impacts of SSEP, if any. By combining national environmental safeguard regulatory framework and ADB’s environmental safeguard policy principles, the environmental and social safeguard policy (ESSP) of SSEP will guide screening and categorization, consultation, disclosure, establishment of grievance redress mechanisms, formulation of safeguard plans, implementation, monitoring of results, and adequate reporting of monitoring results.

10. ESSP focuses on environmental safeguard compliance of SSEP, and is guided by MYASD’s commitment to integrate environmental protection into SSEP activities in a proactive manner in order to contribute towards sustainable development. To achieve a balance among developmental imperatives, environmental sustainability, and social well-being of its operations, MYASD:
(i) Will pay close attention to environmental and social considerations of SSEP, and takes action to avoid, minimize, and mitigate environmental and social adverse impacts and risks, if any of SSEP;

(ii) Is committed to comply with all environmental and social policies, laws, and regulations of the government, and will remain fully responsive to environmental and social safeguard policy requirements of ADB and other development partners; and

(iii) Will apply ESSP to all subprojects of SSEP, as per the procedures outlined in the ESMF.

11. ESSP provides an enabling mechanism to meet safeguard requirements of SSEP. It defines roles, responsibilities and procedures for screening, avoiding, minimizing and mitigating any potential environmental adverse impact or risk; and to screen and remove any SSEP activity, which is likely to have a significant environmental impact or risk on any involuntary resettlement impact and any impact on indigenous peoples and their communities.

C. Objectives of Environmental and Social Management Framework

12. The key objective of ESMF is to assist EA and IAs of SSEP to identify potential environmental and social impacts early in proposed subprojects, and to guide them in subproject level safeguard planning and implementation. It also guides EA and IAs in monitoring safeguard compliance of SSEP which, in turn, will help identify improvements in safeguard compliance of SSEP, and its weaknesses, if any, that need further attention.

13. The ESMF is a set of guidelines to help MYASD, IAs, affiliated institutions, colleges, training centers, and district and local government bodies to ensure that SSEP’s physical activities are carried out by paying sufficient attention to environmental and social safeguard impacts and risks. ESMF will also help raise the performance level of country safeguard systems which is one of the key objectives of the results-based lending (RBL) modality.

14. ESMF is based on the government’s environmental laws, regulations, and environmental assessment procedures found in the National Environmental Act of 1980 (NEA), its amendments of 1988 and 2000, and the Gazette Extraordinary No 772/22 of 24 June 1999 and No 1104 of 5 November 1999. These legal instruments provide guidelines and directions on screening of projects, their categorization into “prescribed” and “non-prescribed” projects, scoping their environmental impacts, formulation of terms of reference (TOR) for environmental assessment, obtaining environmental clearance, and environmental compliance monitoring during project construction and operation phases. ESMF also draws best safeguard practices from the environmental safeguard policy of ADB. ESMF also fills in gaps found in the local environmental safeguard requirements when compared with ADB’s environmental safeguard policy principles and best practices. As an RBL program, SSEP has to satisfy applicable safeguard policy principles of ADB, while using local delivery processes and implementing procedures.

15. The ESMF:

(i) Outlines safeguard best practices that will be applied to SSEP.
(ii) Provides a screening and categorizing system to screen potential environmental and involuntary resettlement impacts of SSEP, and its potential impacts on indigenous peoples.

(iii) Helps identify subprojects with potential and significant adverse environmental impacts in order to exclude them from SSEP.

(iv) Helps identify subprojects with any potential involuntary resettlement and/or impacts on indigenous peoples in order to exclude from SSEP.

(v) Helps finding whether avoidance or minimization or mitigation of environmental impacts and risks meet ESSP, that is, requirements of environmental laws and regulations of the government, and ADB’s ESSP.

(vi) Creates awareness among MYASD and its affiliated institutions, colleges, and participating local government agencies about SSEP’s safeguards requirements.

(vii) Guide IAs of SSEP in conducting meaningful consultations with all subproject stakeholders.

(viii) Guides SSEP personnel in preparing Initial Environmental Examination (IEEs) and Environmental Management Plan (EMPs) and their implementation.

(ix) Guides SSEP personnel in disclosing environmental information to all stakeholders.

(x) Outlines institutional arrangements for implementing safeguard planning instruments, monitoring and reporting, and for undertaking corrective action plans, if any.

(xi) Helps enhance institutional capacity for safeguard compliance at MYASD, affiliated institutions and local government agencies, and among SSEP contractors.

IV. THE NATIONAL ENVIRONMENTAL POLICY OF SRI LANKA OF 2003

16. The Constitution of Sri Lanka makes it “the duty of every person in Sri Lanka to protect nature and conserve its riches”. The National Environmental Policy (policy) acknowledges this duty and seeks to provide the direction according to which steps will be taken to conserve and manage Sri Lanka’s environment in all its aspects.

17. The policy renews the commitment of government, in partnership with the people, to effectively to manage the environment for the benefit of present and future generations. The aim of this policy is to ensure sound environmental management within a framework of sustainable development in Sri Lanka. This Policy is supported by many other policies and strategies for other sectors.

18. The policy emphasizes that caring for the environment is the bounden duty of any institution, government or non-government, and of any individual that uses, or otherwise carries out an activity that has an impact on environmental resources.

19. The policy binds all organizations and individuals who use environmental resources or otherwise have an impact on the resources to exercise due care to avoid environmental degradation. The Implementation of the Policy will pave the way for sustainable development.

20. The policy objectives are:

   (i) To promote the sound management of Sri Lanka’s environment in its entirety without compromise, balancing the needs for social and economic development
and environmental integrity, to the maximum extent possible while restricting inimical activities.

(ii) To manage the environment by linking together the activities, interests, and perspectives of all groups, including the people, nongovernment organizations (NGOs) and government at both the central and the local levels.

(iii) To assure environmental accountability.

21. The policy principles are:

(i) The guiding principles of environmental management will be “polluter pays” and the need to reduce consumption, and recycle and reuse materials to the maximum extent possible.

(ii) When living natural resources are used, it will be ensured that such use is wise, sustainable, and consistent with the integrity of ecosystems and evolutionary processes.

(iii) When non-living resources are used, it will be ensured that such use is consistent with environmental best-practice, bearing in mind the need to provide also for future generations.

(iv) Traditional knowledge and practice will be respected in the development of environmental management systems.

(v) Effective governance will be ensured through the decentralization of environmental management services to the maximum extent possible.

22. The policy statements are:

(i) Resources such as land, water, air, minerals, and biodiversity will be managed in a manner consistent with the viability of ecological processes.

(ii) Environmental management will be through participatory, transparent, predictable and accountable decision-making processes at all levels.

(iii) In addition to protecting the environment from abuse, management systems will take into account the need to restore environments damaged in the past.

(iv) Environmental management systems will be encouraged to be flexible so as to adapt to changing situations and adopt the precautionary principle.

(v) The economic value of environmental services will be recognized so as to assure the sustainability of such services for the benefit of the people.

(vi) The state of the environment will continuously be assessed and reported on, through an appropriate institutionalized monitoring framework based on a comprehensive set of indicators.

(vii) The institutional framework for sound environmental management will be strengthened through capacity building, legislative enactments and improved interinstitutional coordination and linkages.

(viii) “Life cycle” and “cleaner production” principles will be applied to improve the efficiency of natural resource use and to improve environmental quality.

V. ENVIRONMENTAL REGULATORY FRAMEWORK OF SRI LANKA

Environmental Laws

A. The Constitution of Sri Lanka

23. The Constitution of Sri Lanka contains several provisions relating to the environment
such as Article 18 ("It is the duty of every person of Sri Lanka to protect nature and conserve its riches") and Article 27 (14) ("The state shall protect, preserve and improve the environment for the benefit of the community"). The 13th Amendment to the Constitution created new institution at the provincial level for environmental protection and management. Each provincial government under this Amendment has legislative and executive powers over environmental matters (Articles 154 (A), 9, 19 and (III) 17). Using such provincial legislative and executive powers, the North Western Provincial Council adopted the North Western Provincial Environmental Authority to supervise and monitor environmental activities in the North Western Province of Sri Lanka.


24. The NEA provides conservation and development guidelines for natural resources management including water, forest, flora and fauna in Sri Lanka. The 1988 amendment appointed the Central Environmental Authority (CEA) as the enforcement and implementing agency of the Act. CEA has special powers to assess and monitor critical environmental conservation programs and to advise the government on environmental protection, conservation, management and development issues.

25. Types of projects that need mandatory environmental clearance ("prescribed projects") were made public after the amendments to NEA was approved in 1988. The Act 1988 states that all prescribed projects undertaken by any government department, corporation, statutory board, local authority, company, firm or an individual will be required to obtain approval under this Act before their implementation. The approval will have to be obtained from the appropriate project approving agencies (PAAs) who are concerned or connected with such prescribed projects. At present, there are 31 such PAAs to deal with review and approval of environmental plans.

26. Subprojects of SSEP could come under the purview of the following sector level Acts according to the specific circumstances. However, screening, scoping, formulation of initial environmental examination (IEE), environmental management plan (EMP) and procedures for IEE and EMP disclosure and public comments will be governed by NEA of 1980 and its subsequent amendments of 1988 and 2000, and by environmental regulations.

C. Coast Conservation Act No. 57 of 1981

27. The Coast Conservation Act provides for the preparation of coastal zone management plans, regulates and controls development activities within the coastal zone, formulates and executes schemes of work for coast conservation within the coastal zones of the country. Section 6 of the Act created a Coast Conservation Advisory Council. It advises on all development activities proposed in the coastal zones, reviews coastal zone management plans, and environmental impact assessments of projects that fall within its purview. The current Coastal Zone Management Plan states that the Director of Coast Conservation Department will call for an environmental impact assessment (EIA) when such activities may have potential impacts on the coastal zone.

D. Pradeshiya Sabha Act No. 15 of 1987

28. Section 12 (2) of the Pradeshiya Sabha Act authorizes the appointment of a committee at the divisional level to advice on environmental matters. Section 105 of the Act prohibits polluting water or any streams, while Section 106 refers to pollution caused by industry and
related offences. The Pradeshiya Sabha grants permission for construction activities within its jurisdiction. Such construction will have to comply with environmental requirements stipulated with permits. It also ensures that public health issues are efficiently dealt with and solid waste collection and disposal are appropriately done under this Act.

E. **Flood Protection Ordinance, Act No. 22 of 1955**

29. This ordinance provides necessary provisions to acquire land or buildings or part of any land or building for the purpose of flood protection.

F. **State Land Ordinance, Act No. 13 of 1949**

30. The State Land Ordinance provides guidelines for:

   (i) The protection of natural water springs, reservoirs, lakes, ponds, lagoons, creeks, canals, and aqueducts.
   (ii) The protection of the source, course and bed of public streams.
   (iii) The construction or protection of roads, paths, railways, and other means of internal communication systems.
   (iv) The prevention of soil erosion.
   (v) The preservation of water supply sources.

31. Section 75 of the Ordinance highlights riparian proprietors’ rights and duties. The occupier of land on the banks of any public lake or public stream has the right to use water in that water body for domestic purpose, but cannot diverted water through a channel, drain or pipe or by any other mechanical device.

G. **Soil Conservation Act, No. 25 of 1951**

32. The Soil Conservation Act provides for the conservation of soil resources, prevention or mitigation of soil erosion, and for the protection of land against damage by floods and droughts. Under the Act, it is possible to declare any area defined as an erodible area and prohibit any physical construction. The following activities are also prohibited under Act:

   (i) weeding of land or other agricultural practices that cause soil erosion;
   (ii) use of land for agriculture purposes within water sources and banks of streams; and
   (iii) exploitation of forests and grassland resources and setting fire in restricted areas.

H. **Mines and Minerals Act No. 33 of 1992**

33. Under this Act, mining falls within the purview of the Geological Survey and Mines Bureau (GSMB). Mining of minerals including sand must be done with a license issued by the GSMB. Mining is not permitted within archaeological reserves or within specified distances from such monuments. New mining licenses are subject to the EIA process, if the type and extent of mining is listed under the EIA regulations. Additionally, GSMB has the power to stipulate conditions including cash deposits and insurance policy for the protection of environment. Regulations made by GSMB under the Act cover a variety of environmental stipulations, criteria and conditions for licensing and operating mines. This also covers the disposal of mine wastes. The Act also deals with the health, safety and welfare of miners. Mining rights on public and private land are subject to licensing by GSMB, and all minerals wherever situated belonging to
the State. The right to mine public land parcels are subjected to the EA procedures.

I. **Fauna and Flora Protection Ordinance, Act No. 49 of 1983**

34. The Act provides for the protection, conservation, and preservation of the fauna and flora of Sri Lanka. Under the Ordinance, five categories of protected areas are established, namely, strict nature reserves, national parks, nature reserves, jungle corridors, and intermediate zones. The Section 9 (a) states that “no person or organization, whether private or state, shall within a distance of 1 mile of the boundary of any national reserve declared by an order issued under Section 2 of the Ordinance carry out any development activity of any description whatsoever, without obtaining the prior written approval of the Director”. Each application for a development activity has to follow the procedures stipulated under NEA. An application falls within the meaning of Section 9(a) has to be supported by an Environmental Impact Assessment (EIA) or Initial Environment Examination (IEE) according to the significance of environmental impacts.

J. **Forest Ordinance, No 17 of 1907 (and amendments)**

35. The Forest Ordinance of Sri Lanka is the law for conservation, protection and management of forest and forest resources. It regulates tree felling, transport of timber, and other forest related matters. The Forest Ordinance was amended by several Acts - Act 34 of 1951, No. 49 of 1954, Act 13 of 1966, Act 56 of 1979, Act 13 of 1982, and Act 84 of 1988. The Act 23 of 1995 replaced the old Ordinance. Under Section 4 of Act 23 of 1995, the Minister who is in charge of forests can declare any specified area of government land or the whole or any specified part of any reserve forest which has unique ecosystems, genetic resources or a habitat or rare and endemic species of flora, fauna, and microorganisms and of threatened species which need to be preserved in order to achieve an ecological balance in the area by preventing landslides and fire hazards. Under Section 5 of the Act, a Forest Officer has powers to stop any public or private watercourse which goes through a reserved forest. It shall be lawful for the District Secretary to determine the amount of compensation to be paid in case that the water course adversely affects the interests or one or more individuals.

36. Under Section 6 of the Act, the following activities are prohibited:

   (i) trespassing or permits cattle to trespass;
   (ii) damage by negligence in felling any tree, cutting or dragging any timber;
   (iii) willfully strips off the bark or leaves from, or girdles, lop, taps, burns or otherwise damages any trees;
   (iv) poisons water;
   (v) mine stone, burns lime or charcoal, or collects any forest produce; and
   (vi) extracts coral or shells or digs or mines for gems or other minerals

K. **National Water Supply and Drainage Board Law of No. 2 of 1974**

37. The National Water Supply and Drainage Board (NWSDB) is the principle water supply and sanitation agency in Sri Lanka. It was established in January 1975 under the Law No. 2 of 1974. NWSDB develops, provides, operates and controls water supply and distributes water for public, domestic and industrial purpose.

L. **National Policy for Rural Water Supply and Sanitation of 2001**

38. The National Policy for Rural Water Supply and Sanitation, approved by the cabinet in 2001, has laid down a framework for water supply and sanitation services to the rural sector,
which is defined as any Grama Niladhari Division within a Pradeshiya Sabha area except for those in former town council areas. It provides guidelines on the delivery of minimum water requirements to ensure health, and on levels of service in terms of quantity of water, haulage distance, adequacy of the source, equity, quality, flexibility for upgrade, and acceptable safe water supply systems.

39. The Policy prescribes ventilated, improved pit latrines as basic sanitation facilities and defines other acceptable options that include piped sewer with treatment, septic tanks with soakage pits, water-sealed latrines with disposable pits. For rural water supply and sanitation, the Policy defines the roles and responsibilities of the government, provincial councils, local authorities, community-based organizations (CBO), non-governmental organizations (NGOs), private sector, and international donors. It also sets the scope of regulations for which the provincial councils and local authorities can enact statutes and by-laws.

M. Prevention of Mosquito Breeding, Act No. 11 of 2007

40. This Act was enacted to prevent and eradicate mosquito-borne diseases such as dengue. Under this Act, it shall be the duty of every owner or occupier of any premises to remove and destroy open tins, bottles, boxes, coconut shells, split coconuts, used tires, or any other article or receptacle found in such premises, and to maintain water wells in such premises to prevent breeding of mosquitoes. People are also bound to empty any artificial pond or pools at least once in a week. Shrubs, undergrowth and all other types of vegetation other than ornamental vegetation and food plants are to be removed.

N. The Urban Development Authority, Law, No 41 of 1978

41. The Urban Development Authority (UDA) promotes integrated planning and implementation of social, economic and physical development of areas which are declared as urban development areas under the UDA Act. UDA provides technical support to local councils who require assistance in developing plans. It has the authority to develop plans when local authorities fail to do. The UDA monitors urban areas, including 1 km. inland from the coasts in all areas of the coastal zone, and develops land use policies for designated development areas.


42. The Municipal Councils and Urban Councils share with Pradeshiya Sabhas powers regarding the approval of buildings plans, control of solid waste disposal, sewerage and other public utilities. Under these laws, new constructions and modifications to current buildings require approval of Municipal or Urban Council or Pradeshiya Sabha. Municipal and Urban councils follow planning and building guidelines of UDA.

43. The Environmental Policy, NEA and its amendments, and several other pieces of legislation relevant to SSEP outlined above show that environmental policies and the legal or regulatory framework is comprehensive and adequate to address and manage potential environmental impacts and risks associated with its refurbishment and construction activities.

VI. ENVIRONMENTAL ASSESSMENT PROCESS IN SRI LANKA

44. The environmental assessment is primarily concerned with assessing direct and indirect impacts of a project on the biophysical and human environment, and ensuring that these
impacts are addressed by appropriate environmental protection and enhancement measures. The environmental assessment system supports project proponents in incorporating environmental considerations in project planning and in determining environmental impacts of their projects.

45. The laws, rules, and procedures for EIA of any project are found in the NEA and its implementing regulations. These laws, rules and procedures are supported and elaborated by sector specific laws outlined above and their regulations adopted by the ministries and departments.

46. The NEA of 1980 recommended the adoption of environmental assessment for development projects. The amendment to NEA in 1988, environmental assessment was made mandatory for projects with significant environmental impacts. The types of projects that need EIA are listed in the Gazette Extraordinary No 772/22 and No 1104 of 1993. This legislation prescribed 31 categories of projects (“prescribed projects”) that need environmental assessment. In addition, all industrial projects that are located close to environmental, archaeological, or culturally sensitive areas require full environmental impact assessments.

47. The evaluation and approval of environmental assessment reports are delegated by CEA to various agencies depending on the nature of the project. Among these PAAs are Ministries of National Planning, Lands, Irrigation, Transport, Highways, Industries, Housing, Energy, Agriculture, Forests, Construction, Fisheries, Aquatic Resources, Plantation Industries, Urban Development authority, Board of Investments, Department of Wildlife Conservation, Urban Development Authority, Geological Survey and Mines Bureau, Ceylon Tourist Board, Mahaweli Development Authority, and CEA. A project proponent cannot perform the functions of PAA for the same project.

48. The environmental assessment process guides projects to report on viable alternatives to ensure that environmentally less damaging options are considered too. In addition, industries that discharge effluents are required to obtain an environmental pollution license from the CEA in addition to submitting an EIA. Unlike the environmental assessment requirement, this license is required of existing industries too.

49. Project proponents are responsible for providing relevant and accurate information and data needed to PAA to review and evaluate the project proposal. An effective review depends on timely, full, and accurate data and information provided by project proponents to PAA.

50. PAA conducts scoping of the proposed project to determine its potential environmental impacts. The PAA solicits the participation of those affected, queries the PP for clarification, and decides whether the proposed project should be categorized as a “prescribed” or “non-prescribed” project. If categorized as a prescribed project, PAA will decide based on the significance of potential environmental impacts of the proposed project, whether an EIA is required or a less comprehensive environmental assessment such as an IEE is sufficient to address and resolve identified adverse environmental impacts of the project. It will prepare the TOR of environmental assessment in either case.

51. Project proponents prepare EIA or IEE with the help of specialists according to the approved TOR. Project proponents submit EIA or IEE report to PAA in Sinhala, Tamil or English for review and approval. These reports are translated into the other two national languages.
52. Public disclosure of an environmental assessment report in the form of EIA or IEE for comments and suggestions is done by PAA. Comment and suggestion from the public will be taken into consideration in approving or rejecting the project proposal and if approved, in finalizing environmental assessment reports. The PAA will announce in national newspapers in three national languages that an EIA or IEE is available for inspection by the public and the time frame (30 days) for comments and complaints and suggestions to submit. It will also disclose the location where it could be examined.

53. PAA and/or CEA review an EIA report. An IEE is reviewed by PAA based on the information, strategies of avoidance and mitigation measures and public grievances, comments and recommendations. A review of an environmental assessment report by CEA and/or PAA is guided by the following criteria:

(i) environmental considerations are integrated into overall project planning;
(ii) environmental assessment is sound; and
(iii) proposed environmental mitigation measures are adequate and effective.

54. If the project is controversial, PAA or CEA may decide to conduct public hearings on the project and environmental assessment. PAA or CEA can also initiate a public hearing if it determines that such hearing would assist in verifying EA’s facts and findings, and suggested mitigation measures.

55. PAA in concurrence with CEA decides as to whether a project is to be allowed. An EIA/IEE can be approved subject to conditions which are to be met by PP within the stipulated timeframe. If the project is rejected, an appeal by project proponents is allowed.

56. If the project is approved, project proponents and PAA should monitor the implementation of EMP which is set out in EA as remedial actions and ensure that meet the standards established.

57. On the whole, the application of environmental laws and regulations to development projects is satisfactory. The environmental assessment process is well understood by government departments, officials, and by the public. The courts have insisted on its proper adherence in important cases such as the Eppawela phosphate mining project. Environmental assessment process has succeeded in introducing mechanisms for transparency, consultation, and disclosure of environmental assessment reports, their results and monitoring reports. It allows the public to review of projects.

58. The environmental training programs conducted by the Ministry of Environment and Renewable Energy (MOE&RE), CEA, universities, development partners have produced hundreds of trained environmental professionals in the government and private sectors, among NGOs and academe. In addition, environmental assessment process is being taught at postgraduate level at several local universities.

VII. ADB’S ENVIRONMENTAL SAFEGUARD POLICY PRINCIPLES

59. As a RBL program, SSEP has to satisfy not only the local environmental laws and regulations, but also the environmental safeguard principles of ADB. The need to comply with ADB’s involuntary resettlement safeguard policy principles and Indigenous Peoples safeguard policy principles does not arise in SSEP, as its scope does not include activities that could have potential involuntary resettlement impacts or impacts on Indigenous Peoples.
60. The environmental safeguard policy principles of ADB are embodied in the Safeguard Policy Statement of 2009. It applies to all projects supported by ADB. Safeguard Policy Statement (SPS) aims to (i) help avoid adverse project impacts on the environment and on affected people and communities, (ii) minimize, mitigate and/or compensate for adverse project impacts, if unavoidable, (iii) help borrowers to strengthen their safeguard systems; and (iv) develop their capacity in managing the environmental and social risks.

61. The environmental safeguards policy principles are:

(i) Use a screening process for each project as early as possible to determine its potential impacts and appropriate environmental assessment.

(ii) Conduct environmental assessment for each proposed project to identify potential direct, indirect, cumulative, and induced impacts and risks.

(iii) Examine alternatives to the project’s location, design, technology, and components, and their potential environmental impacts.

(iv) Avoid, and where avoidance is not possible, minimize, mitigate, and/or offset adverse impacts and enhance positive impacts. Prepare an EMP to address them.

(v) Conduct meaningful consultation at the early stage of project preparation that continues during implementation in an atmosphere free of intimidation or coercion, gender inclusive and responsive, and tailored to the needs of disadvantaged or vulnerable groups. Establish a grievance redress mechanism to address complaints and conflict resolution.

(vi) Disclose draft environmental assessment including the EMP in a timely manner before project appraisal in an accessible place and in a form understandable to affected persons and other stakeholders. Disclose final environmental assessment and EMP and their updates to all stakeholders.

(vii) Implement the EMP and monitor its effectiveness.

(viii) Do not implement project activities in areas of critical habitats unless (i) there are no measurable adverse impacts on the critical habitat that could impair its ability to function, (ii) there is no reduction in the population of any recognized endangered or critically endangered species, and (iii) any lesser impacts are mitigated. If a project is located within a legally protected area, implement additional programs to promote and enhance the conservation aims of the protected area. In an area of natural habitats, there must be no significant conversion or degradation, unless (i) alternatives are not available, (ii) the overall benefits from the project substantially outweigh the environmental costs, and (iii) any conversion or degradation is appropriately mitigated. Use a precautionary approach to the use, development, and management of renewable natural resources.

(ix) Apply pollution prevention and control technologies and practices consistent with international good practices.

(x) Provide workers with safe and healthy working conditions and prevent accidents, injuries, and disease.

(xi) Conserve physical cultural resources and avoid destroying or damaging them by using field-based surveys that employ qualified and experienced experts during environmental assessment.

62. The Program is likely to trigger environment safeguard policy principles i, ii, iv, v, vi, vii, ix, and x, and is unlikely to trigger iii, viii and xi.
VIII. COMPARABILITY BETWEEN NATIONAL ENVIRONMENTAL POLICY AND REGULATORY FRAMEWORK, AND ENVIRONMENTAL SAFEGUARD PRINCIPLES OF SPS

63. The level of compatibility between environmental safeguard principles of SPS and Sri Lanka’s environmental policy and regulatory framework is discussed below (Please see Appendix 1 for further details).

64. The National Environmental Policy and Statement is comprehensive and addresses all relevant aspects of environment protection, environmental sustainability and enforcement. The Policy matches the environmental safeguard policy principles of SPS. NEA, its amendments, and sector level legislation that support it have sufficiently transformed the Policy into a satisfactory environmental regulatory framework.

65. The composite government environmental clearance process, in principle, is consistent with ADB’s environmental assessment process and public disclosure requirements. EIAs for development projects that are categorized as “prescribed” projects were made mandatory under the NEA in 1993. The prescription is based on the magnitude and potential for adverse environmental impacts of a proposed project. The CEA and PAAs have been reviewing and approving EIAs for prescribed projects since 1993 and has developed a solid technical expertise and capacity for this task with technical assistance projects from United States Agency for International Development (USAID), the Netherlands, ADB, and the World Bank over the past 2 decades.

66. Because of the exclusion of significant adverse environmental impacts from SSEP, some of its construction or renovation activities may get categorized under the local environmental regulatory framework as non-prescribed subprojects requiring no further environmental assessment. Those subprojects that would get categorized a “prescribed” projects will certainly be categorized as projects requiring IEEs, not EIAs, given their anticipated non-significant and minor potential environmental impacts. However, although local environmental assessment system applicable to SSEP is broadly similar to the environmental assessment procedures outlined in SPS, SSEP will follow ESMF’s environmental assessment guidelines for site selection, due diligence, design, consultation, disclosure, and monitoring and evaluation of its subprojects. This will ensure that SSEP subprojects comply with both local and ADB’s environmental safeguard requirements.

67. Implementation of EMP of a subproject will be monitored by the District Environmental Officers of the CEA and the PAA that has approved IEE and EMP. ADB will conduct a prior review of a sample of environmental management plans to ensure their compliance with ESMF and then undertake post reviews during routine project monitoring to ensure EMPs meet the conditions of ESMF thereby meeting local environmental regulatory requirements and ADB’s environmental safeguard policy principles.

68. In the following key areas, Sri Lanka’s environmental assessment display some weaknesses and deficiencies for which the following gap-filling measures are adopted from ADB’s environmental safeguard policy principles.

69. As per NEA and its amendments of 1988 and 2000, and regulations, a project proponent provides project-affected persons and other stakeholders an opportunity to express their views, comments, and complaints before finalizing an environmental assessment report. The review process is 21 days for draft IEE and 30 days for draft EIA. The draft environmental assessment
The report is usually kept in local government offices, at district CEA offices and CEA head office in Colombo for examination by the public. In the ordinary course of events, the affected public often does not come to know of the project or the environmental assessment report, until it is too late. Often the affected public is not adequately informed of the issues at hand or able to interpret and understand environmental assessment reports. These difficulties are partially alleviated by public hearings where explanations can be provided face-to-face by the project proponents and environmental assessment consultants in local languages. But such hearing is at the discretion of PAA. Moreover, IEEs are not required to be presented for public consultation. These weaknesses can be overcome by following the public consultation and participation, and disclosure procedures of ESMF which direct to conduct meaningful consultations with all stakeholders including project-affected persons of a project. Such consultations must be conducted periodically starting from project planning through implementation and monitoring.

70. The serious consideration of reasonable alternatives is a powerful feature in the environmental assessment process. However, in some projects, the best alternatives are deliberately avoided, narrowing the choice of the best alternative and focusing on a predetermined alternative as the best alternative. This weakness must be corrected by considering “no-project” as also a valid alternative, and also by considering subproject design, location, technology and components and their potential impacts. It is unlikely that the need to consider reasonable alternatives would arise in SSEP subprojects.

71. NEA and related laws take the primary project area to identify its potential impacts and to prepare a TOR for environmental assessment. ADB’s environmental safeguard policy principles take a much wider view of environmental impacts of a project by taking the area of influence of a project as the area to study. The limited scope of environmental assessment required by local regulatory framework needs to be expanded to a subproject’s area of influence encompassing (i) primary subproject sites; (ii) related facilities that SSEP develops and/or controls such as access roads, borrow pits and disposal areas; and (iii) associated facilities that are not funded as part of a subproject, but whose viability and existence depend exclusively on the subproject and whose goods and services are essential for successful operation of the subproject.

72. The local environmental regulatory framework does not prescribe a due diligence or environmental audit to check existing facilities at subproject site(s) to determine whether they could cause or is causing environmental risks and impacts. ADB’s environmental policy requests environmental due diligence or audit in such circumstances. If the subproject does not foresee any major expansion except refurbishment of existing buildings and facilities, the due diligence or environmental audit constitutes the environmental assessment for the subproject.

IX. ENVIRONMENTAL ASSESSMENT AND APPROVAL PROCESS OF SUBPROJECTS OF SSEP

A. Screening and Categorization of Potential Environmental Impacts

73. During the identification and screening of subprojects, use the screening and categorization system adopted from SPS to identify significance potential environmental impacts of subprojects. The impact category is determined by its most environmentally-sensitive component, including direct, indirect, cumulative, and induced impacts within the project's area of influence. The subproject screening and categorization system for SSEP is given below:
(i) **Category A**: The subproject is likely to have significant adverse environmental impacts that are irreversible, diverse, or unprecedented, and may affect an area larger than the sites or facilities subject to physical works. EIA and a comprehensive EMP are required. *(This category of subprojects is excluded from SSEP.)*

(ii) **Category B**: The subproject is likely to have adverse environmental impacts that are less adverse than those of Category A which are site-specific, few, mostly reversible, and in most cases mitigation measures can be designed more readily than in Category A projects. An IEE and EMP are required.

(iii) **Category C**: The subproject is likely to have minimal or no adverse environmental impacts. No environmental assessment is required although environmental implications of the subproject need to be reviewed.

**B. Consultation and Participation**

74. IAs of subprojects will conduct meaningful consultations with project-affected persons and communities. For this purpose, IAs will prepare a consultation plan with project-affected persons and other stakeholders in consultation with the Safeguard Cell at MYASD. The proceedings and outcome of such consultations will be recorded. In IEEs, the IAs will summarize the manner in which consultations were conducted, key topics discussed, and the decisions arrived at with participants’ support. These decisions will be incorporated in IEEs and EMPs.

75. IAs will discuss with project-affected persons and communities draft IEEs and EMPs to inform them about the subproject and the activities that will take place as part of the subproject, and also to obtain their views, comments and complaints. IAs will actively seek project-affected persons’ participation in formulating IEEs and EMPs and their implementation. Through periodic consultations and grievance redress mechanisms with project-affected persons, IAs will engage them in subproject planning, implementation, and monitoring.

76. Consultations will be conducted in an atmosphere which is conducive to arrive at decisions which are beneficial to the subproject and project-affected persons. Consultations will be free of coercion and intimidation, and is gender-inclusive and tailored to the needs of disadvantaged and vulnerable groups.

**C. Guidelines for the Preparation of IEEs**

77. The following are the main steps in formulating an IEE for a subproject with potential environmental impacts. The site-specific issues and the significance of such issues would decide the degree of scale and sensitivity and the magnitude of its potential environmental impacts. Any activity listed in the List of Prohibited Activities in Appendix 2 will be excluded, as they will not qualify for ADB support.

(i) An executive summary describes the critical factors, significant findings, and recommendations.

(ii) A summary of applicable environmental policies, laws, regulations, and ADB’s safeguard policy principles that are likely to be triggered by the subproject. *(IEE could refer to ESMF without reiterating environmental policy and regulatory framework.)*

(iii) Analysis of alternatives is a key component of an IEE. In SSEP, most of the locations of subprojects are already identified; there may be no need to consider
alternative sites. However, IAs of the subproject will consider alternatives to the proposed technology, design and operations in terms of their potential environmental impacts, the feasibility of mitigating these impacts, their capital and recurrent costs, and their suitability in local conditions.

(iv) Description of the subproject—major components such as refurbishment of existing buildings or the construction of new buildings and facilities.

(v) IEE will be based on current information including an accurate project description, and appropriate environmental and social baseline data. Desk reviews, discussions with project personnel, and field visits and interviews with people in the subproject area will provide the required data and information. Based on the data and information and findings of field visits, the environmental specialist will identify potential impacts and risks of the subproject on physical, biological, socioeconomic, and physical cultural resources. These will be summarized and presented in the IEE.

(vi) The potential environmental impacts and risks will be reviewed against requirements of all applicable laws and regulations and ADB’s environmental safeguard policy principles. It is helpful if a matrix is prepared as part of IEE to indicate what laws and regulations, and ADB’s environmental safeguard policy principles are triggered by the potential environmental impacts of the subproject.

(vii) A subproject’s environmental impacts and risks will be analyzed in the context of the subproject’s area of influence. This includes primary project sites and related facilities, associated facilities, and areas and communities potentially affected by cumulative impacts from further planned development of the subproject, and areas and communities that will potentially be affected by impacts of unplanned but predictable developments caused by the subproject. Environmental impacts and risks will also be analyzed for all phases of the project cycle.

(ix) When a subproject involves existing activities or facilities, an environmental specialist who conducts environmental assessment and formulate the IEE will perform an environmental audit or due diligence exercise to determine the existence of any areas where the subproject may cause or is causing environmental risks or impacts. If the subproject does not foresee any new major expansion, but only refurbishment of existing buildings and facilities, the audit or the due diligence report constitutes the environmental assessment of the subproject. (See Appendix 3 for an outline of an environmental audit/due diligence report)

(x) The IEE will discuss the consultation process undertaken during project design to consult stakeholders, and to disclose subproject information to all of them. The IEE will summarize comments and concerns received from project-affected persons and others, and how these comments and suggestions have been addressed in project design and mitigation measures by paying special attention to the needs and concerns of vulnerable groups including women and the poor. It will also outline how further consultations with stakeholders will be conducted during subproject implementation.

(xi) IEE will outline the grievance redress mechanism for each subproject with potential environmental impacts. The mechanism or framework will detail ex-officio members of grievance redress mechanism (GRM), the guidelines for hearing complaints, the process of GRM, timeframe for hearing and decision making, and budget.

(xii) A detailed environmental plan (Appendix 4).

(xiii) A short summary and conclusion drawn from the assessment and provides recommendation.
D. Guidelines for Preparing Environmental Management Plan

78. Having identified the potential adverse environmental impacts of a subproject, the next step is the preparation of appropriate measures to eliminate, reduce or offset those adverse environmental impacts, guided by environmental best practices. This is done through the formulation of an EMP for the subproject as a vital part of IEE. An EMP provides a link between the impacts predicted and mitigation measures specified to address them. ADB’s environmental safeguard policy principles state that a detailed EMP is essential for Category A projects, but for Category B projects such as SSEP, a simplified EMP would suffice. While there are no standard formats for EMPs, its format should fit the subproject’s circumstances and requirements. EMPs are to be prepared after taking into account comments and recommendations from all subproject stakeholders. The type, scale and magnitude of construction under SSEP will vary from subproject to subproject. In preparing an EMP for a subproject, the following key areas will be addressed by EA/IA (See Appendix 4 for an EMP format)

79. An EMP clearly indicates different phases of a subproject’s physical activities. For each phase, it includes proposed mitigation measures against adverse environmental impacts and risks, institutional arrangements to deliver them, capacity development and training measures, implementation schedule, cost estimates, environmental monitoring indicators, and reporting requirements. The EMP will define expected outcomes as measurable events to the extent possible and will include performance indicators or targets that can be tracked over a defined period of time.

1. Description of mitigation measures

80. Feasible and cost effective measures to minimize adverse environmental impacts are specified with reference to each impact identified during environmental assessment. Furthermore, EMP provides details on the conditions under which the mitigation measure will be implemented. EMP indicates the type of solution proposed (structural and non-structural) and the phase in which it should become operable (design, construction and/or operational).

2. Monitoring program

81. An environmental performance monitoring program will be a part of the EMP. It will ensure that the proposed mitigation measures will have the intended results, and comply with national environmental standards and ADB’s environmental safeguard policy principles. The monitoring program will have the following components:

   (i) monitoring indicators for evaluating the performance of each mitigation measure;
   (ii) monitoring mechanisms and methodologies;
   (iii) monitoring frequency;
   (iv) monitoring locations;
   (v) safeguard compliance reporting; and
   (vi) budget

82. The EMP will also highlight guidelines on the types of information required for monitoring the implementation and effectiveness of mitigation measures, how to obtain them and how to provide feedback on such information.
3. Institutional arrangements

Institutions responsible for implementing the mitigation measures and for monitoring their performance will be clearly stated in the EMP. More often, more than one agency will conduct monitoring of subproject activities. In such a situation, a mechanism for institutional coordination will be established. Each agency will be notified of its specific TOR.

4. Implementing schedules

Timing, frequency, and duration of implementing mitigation measures will be linked to the overall implementation schedule of the subproject.

5. Reporting procedures

Feedback mechanisms to inform relevant agencies and institutions on the progress and effectiveness of the mitigation measures will be specified in the EMP.

6. Cost estimates and sources of fund

Implementation of mitigation measures outlined in the EMP will involve an initial investment cost as well as recurrent costs. The EMP should include costs estimates for each mitigating measure and also identify source of funding.

7. Other Specifications in EMP

To avoid illegal extraction of resources required for construction, EMPs of subprojects will include clauses to ensure that sand, clay, and timber are obtained from authorized locations and sources that are licensed by relevant government authorities. All building construction and refurbishment will adhere to current building and other applicable Codes of Practice (COP) in Sri Lanka that cover the following key environmental issues. To inform building contractors and to ensure that they are responsible to adhere to the following COP, issued by the Institute of Construction, Training and Development (ICTAD), the following COPs will be included in the contract documents:

<table>
<thead>
<tr>
<th>Code of Practice Number</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCA/3/1</td>
<td>Irrigation and land drainage</td>
</tr>
<tr>
<td>SCA/3/2</td>
<td>Water supply, sewerage &amp; storm water drainage</td>
</tr>
<tr>
<td>SCA/3/3</td>
<td>Reclamation works</td>
</tr>
<tr>
<td>SCA/3/4</td>
<td>Ground water exploration and exploitation</td>
</tr>
<tr>
<td>SCA/4</td>
<td>Building works (Vol. I)</td>
</tr>
<tr>
<td>SCA/4</td>
<td>Building works (Vol. II)</td>
</tr>
<tr>
<td>SCA/8</td>
<td>Electrical and mechanical works</td>
</tr>
<tr>
<td>Any other standard specification of the government</td>
<td></td>
</tr>
</tbody>
</table>

88. In addition, the contractor will address the following issues under the EMP:

(i) electromagnetic radiation— issues such as location of telecommunication towers, and consequences of permitting such towers to be built on top of college buildings, buildings near H/T cables etc;
(ii) handling, transportation, and use of asbestos (Appendix 5);
(iii) noise pollution during construction activities;
(iv) preservation of culturally significant buildings;
(v) ecological issues at construction sites;
(vi) transport and access to construction sites;
(vii) appearance of buildings and sites (aesthetics);
(viii) floodwater protection provisions;
(ix) designing appropriate landscaping;
(x) energy conservation and efficiency;
(xi) waste disposal, salvage, re use and recycling of materials;
(xii) avoidance of hazardous materials;
(xiii) safety, security and fire; and
(xiv) energy efficient lighting options.

89. Subprojects with construction contracts, together with Bill of Quantities, under Bill No. 01—Preliminary and General Items, a statement must be included to state that the contractor is bound to implement the approved EMP of the subproject in full. (See Appendix 6 for details)

X. ANTICIPATED ENVIRONMENTAL IMPACTS OF SSEP

90. The refurbishment of colleges and the construction of new buildings at college and training center sites could cause the following environmental impacts and risks:

(i) **Site clearance and preparation.** The sites for the extension of TVET centers do not pose any environmental risks regarding site clearance, as they are already in use. In case of new sites, there can be risks such as drain and waterway blockage during site clearance. Vegetation not properly disposed of could also spread invasive species causing environmental degradation. Pools of stagnant water could generate health risks by creating vector populations. Site clearance could also lead to or aggravate soil erosion, especially during the rainy season.

(ii) **Soil Erosion and Water Contamination.** Gravel and/or soil brought for any filling purpose, if not properly stored and is exposed to the natural elements can be washed off to nearby streams, paddy lands, rivers and low lying areas causing sedimentation. Storm water congestion on site can create inconveniences to college activities and construction work. Improper placement of college/university/training laboratories and latrines can cause groundwater contamination to streams and drinking water sources. Also waste water generated during construction and from labor camps also contaminate drinking water sources, if not properly treated.

(iii) **Noise generation.** Refurbishment and construction of structures cause noise, especially when demolishing buildings and loading and transporting materials. During college teaching hours this may create disturbances to classroom activities and to residents living close to the construction sites.

(iv) **Dust generation.** Demolition of buildings will cause dust. Loading and transportation of debris will increase the dust level. Transportation and storage of new building material also generate dust. Dust pollution poses health hazards to students, workers at sites, and residents in the vicinity.

(v) **Transport.** Transportation of building materials to and from the site will create noise, dust, and disturbances, and can cause injury to children and damage college property if not adequately managed.
Exposure of construction workers to occupational hazards. Construction workers are exposed to occupational hazards, if proper safety procedures are not followed. Some training activities at colleges can cause occupational hazards, especially related to the use of sharp objects, hazardous liquids and compounds, and noise generation equipment. Moreover, construction work will take place in the majority of cases on college premises. If labor camps are constructed on such land, location of camps and workers interactions with students could create negative social impacts.

Lack of drainage, soil erosion, sedimentation, and health hazards. Gravel, sand, and soil brought in to sites for building constructions or resulted from demolitions might, if not properly handled, be washed off to nearby streams, paddy lands, low-lying areas, and wetlands. This can cause sediments blocking natural flows of water and degrading habitats.

Contamination of groundwater and surface water. Wastewater can contaminate drinking water sources through runoff, if not appropriately channeled into disposal pits or other suitable areas. This risk is particularly high when waste water comes from college laboratories and toilets.

Waste generation. Any construction will generate construction debris which unless disposed of appropriately and in a timely manner, will pollute adjoining areas, including potentially sensitive sites and residential areas. The lack of proper construction waste disposal could also block natural drainage systems and create breeding grounds for mosquitos and for waterborne diseases. The planned upgrade of science laboratories can pose a risk, as they would increase the quantities of hazardous waste and organic waste. However, the estimated quantities will be very low since any hazardous materials will be used only in training purposes. The lack of appropriate mechanism to dispose hazardous and toxic waste could lead to the contamination of soil and water resources.

Transport. Heavy vehicle movement during teaching hours could cause accidents, dust, and noise pollution. Open trucks with sand, gravel, and cement could be main sources of such accidents and pollution.

Resource extraction. The planned refurbishment and extension of college physical infrastructure will generate a big demand for materials such as sand, clay for bricks, and timber, creating a burden on natural resources in the subproject area. Sand mining in nearby rivers and stream and extraction of gravel from burrow pits and quarries could create adverse environmental impacts on nearby communities.

Damage to aesthetics of site and/or area. Refurbishment and extension of college buildings could have some impact on aesthetic and scenic characteristics of colleges and their environs. Anticipated disturbances to current aesthetics will be temporary and limited to construction phase. At new sites, the risk of damage is high, if new structures are not consistent with college architectural customs.

Poor sanitary conditions. Inadequate and nonfunctional washing and toilet facilities expose college students to health risks. A shortage of clean drinking water will result in dehydration. At new construction sites, stressed conditions will be accentuated unless the sites are planned to avoid shortages of clean water supply.

Lack of adherence to set standards. During field visits, a limited number of science laboratories which do not meet occupational health and safety standards such as provision of adequate safety equipment, and chemical disposal processes were found.
(xv) **Lack of maintenance in developed infrastructure.** The lack of adequate funds to maintain colleges and training centers leads to their rapid deterioration.

91. The short-term construction-related impacts and risks and safeguard risks of proposed subprojects, outlined above, can be prevented or at least mitigated by adopting standard operational procedures and good construction management practices. Such adoption will require sufficient funds and their proper management.

**XI. SOCIAL SAFEGUARDS**

A. **Exclusion of Subprojects with Potential Involuntary Resettlement Impacts**

92. To find out whether a subproject has potential involuntary resettlement impacts, its IA will have to screen its activities for past, present, and future involuntary resettlement impacts. In SSEP, the rationale of screening is to exclude any activity that could trigger resettlement impacts. As this exclusion depends on the result of the screening of potential resettlement impacts of each subproject, the IA will have to conduct a due diligence to determine whether or not the subproject would trigger any resettlement impacts.

93. A proposed subproject is assigned to one of the three categories depending on the significance of its potential involuntary resettlement impacts:

   (i) **Category A:** A proposed subproject is classified as category A if it is likely to have significant involuntary resettlement impacts. The involuntary resettlement impacts are considered significant, if 200 or more persons will experience major impacts, which are defined as (i) being physically displaced from housing or (ii) losing 10% or more of their productive assets (income generating). (**Subprojects that fall into this category will be excluded from SSEP**)

   (ii) **Category B:** A proposed subproject is classified as category B if it includes involuntary resettlement impacts that are not deemed significant or major. (**Subprojects that fall into this category will also be excluded from SSEP**)

   (iii) **Category C:** A proposed subproject is classified as category C if it is unlikely to have any involuntary resettlement impacts. Once this status of the subproject is established, no further action is required. (**All subprojects funded under SSEP will fall into this category**)

B. **Involuntary Resettlement Due Diligence**

94. The involuntary resettlement due diligence would focus on:

   (i) **Ownership of land that will be used for the subproject.** MYASD land, land owned by another ministry or department, private land, government land, commercial land, and commons and traditional lands. If the subproject acquires any private, commercial, commons or traditional land, depending upon the significance of such acquisition, the subproject falls into either category A or B. If category A or B, the subproject will be removed from SSEP.

   (ii) **Types of land tenure.** Titled, leased (short, medium and long-term), tenanted, customary/communal, non-titled (informal settler, squatter, encroacher), and occupied land with government permission for temporary use. If any of the above types of land tenure is found on existing or new land of the subproject, the
subproject has involuntary resettlement impacts and falls into category A or B. As a result, the subproject will be removed from SSEP.

(iii) **Encumbrances attached to land.** If any encumbrance is found, the IA should ascertain whether it would trigger involuntary resettlement safeguards. If it does, the subproject will be excluded from SSEP.

(iv) **Transfer of Government Land.** If new land is required for the subproject, the date such land was transferred or will be transferred to MYASD need to be noted in the due diligence report.

(v) **Land obtained in anticipation of SSEP.** Did any transfers of government/ministry land take place in anticipation of the subproject? If any such land is found, IA should ascertain whether such land included any type of land tenure outlined above. If such categories of tenure were affected, the subproject should be excluded from SSEP.

(vi) **Temporary Impacts.** Will refurbishment/construction of the subproject have any temporary impacts on livelihood and sources of income of households or access to legally designated parks and protected areas, and common land? If it does, it should be removed from SSEP.

C. **Exclusion of subprojects with impacts on Indigenous People**

95. In Sri Lanka, indigenous peoples are known as **Vaddhas.** They are forest dwelling peoples, who mainly live in the Eastern Province of the island, in scattered, small, remote, and semi-permanent settlements. There are no specific policies or laws pertaining to Vaddhas in Sri Lanka. They are considered as citizens of Sri Lanka. They live in or close to forests and away from towns, cities, and villages.

96. No college, university, or training center of SSEP is or will be located in the vicinity of Veddas settlements or on land that they claim as their traditional or ancestral land. As a result, SSEP’s subproject activities will not affect their identity, dignity, human rights, ancestral lands, cultural and belief systems, sacred places, indigenous knowledge, and livelihoods in a positive or adverse manner. Therefore, the SSEP will not trigger indigenous peoples safeguard policy principles listed in SPS.

97. In screening of a subproject to ascertain whether Veddas are present in its physical area or the physical area of the subproject includes some land that are claimed by them as their ancestral or traditional land, IA of the subproject will use the following screening and categorization system to categorize subproject impacts on them.

(i) **Category A:** A proposed subproject is classified as category A if it is likely to have significant impacts on Vaddhas. Significance of impacts is determined by assessing (i) the magnitude of subproject’s impact on their (a) customary rights of use and access to land and natural resources, (b) socioeconomic conditions, (c) level of cultural and communal integrity, (d) health, education, livelihood, and social security status; (ii) the level of their vulnerability; and (iii) the impacts on the recognition of their indigenous knowledge. *(Category A subprojects will be excluded from SSEP.)*

(ii) **Category B:** A subproject is classified as B if it is likely to have limited impacts on the criteria listed above *(Category B subprojects will be excluded from SSEP).*
(iii) **Category C**: A proposed project is classified as category C if it is not expected to have impacts on Veddhas. They are eligible to be included in SSEP.

98. If screening and categorization of potential impacts of a subproject on indigenous peoples indicate that there are Veddhas in the subproject area, or they have collective attachment to the land where new construction work will take place or the subproject is likely to have any impacts on them, IA will exclude that subproject from SSEP.

**XII. INSTITUTIONAL CAPACITY TO ADDRESS ENVIRONMENTAL SAFEGUARD IMPACTS AND RISKS**

**A. State Level**

1. **EA and IAs**

99. MYASD will be the EA of SSEP and it will be responsible for the overall coordination of SSDP implementation. The Department of Technical Education and Training (DTET), Tertiary and Vocational Education Commission (TVEC), Vocational Training Authority (VTA), National Apprenticeship and Industrial Training Authority (NAITA), University of Vocational Technology (UNIVOTEC), National Youth Service Council (NYSC), and National Institute of Fisheries and Nautical Engineering (NIFNE) are initially identified as implementing agencies (IAs) of SSEP. Other agencies, if added to the IAs list of SSEP, will follow the ESMF in screening, excluding environmental category A subprojects; and involuntary resettlement and indigenous peoples category A and B subprojects. In order to enhance MYASD’s capacity in coordinating and managing the TVET sector through medium-term sector development program, the Sector Development Division (SDD) was established in 2013.

2. **Safeguard Cell at MYASD**

100. All the state level agencies participating in SSEP and each IA of subproject of SSEP will get advice on safeguard policy issues and safeguard compliance from the Safeguard Cell at MYASD. The Cell will be operated by an environmental safeguard specialist and a social development specialist who possess good academic background and at least 10 years of field experience in environmental safeguards and social development, safeguards, and gender. The Cell will be located at MYASD in Colombo.

101. The Safeguard Cell and the SDD at MYASD together with safeguard focal person at each affiliated institution will be responsible for the (i) preparation of checklists, IEEs, and EMPs; (ii) conduct of due diligence and preparing reports; and (iii) monitoring of safeguard compliance. It will also formulate and use safeguards awareness training models on environment and social safeguards.

102. The Cell will ensure that environmental requirements and EMP are included in contract documents of subprojects with potential environmental impacts. It will also ensure that contractors will adhere to the implementation and mitigation measures listed in subproject EMPs.

103. The Cell will organize safeguard awareness programs and training sessions for the staff of MYASD and its affiliated institutions and also for subproject level IAs on safeguard requirements and safeguard compliance. A key function of the Cell is to ensure that SSEP will exclude all activities involving involuntary resettlement impact or impact on indigenous peoples. It will also ensure that SSEP will not include any subproject with significant environmental impacts which
would trigger the classification at category A for environmental impacts. It will prepare safeguard training materials and pamphlets for the benefit of semi-autonomous institutions, training centers, subproject personnel, and subproject contractors. (See Appendix 7)

104. The Cell will establish direct links with colleges, training centers, and new universities. In addition to conducting safeguard awareness programs, it will develop and maintain a safeguard database, especially for environment, and the data will be shared with college level safeguard officials. It would obtain the services from outside, if required, for environmental assessment, safeguard awareness programs, and training sessions. ADB will help in these endeavors.

3. Training Institute/College Level

105. College and/or Training Center Heads will be responsible for overseeing construction work and to ensure that such works are in compliance with safeguard requirements outlined in this ESMF. The Head will appoint an official as the safeguard focal person who will be in direct contact with the Safeguard Cell at MYASD for all safeguard issues at the subproject level. The official will coordinate with district and provincial CEA offices, and will be the focal in obtaining permits and licenses and other clearance for subproject activities that would trigger environmental impacts. The safeguard official’s key role is to ensure that all new construction activities and refurbishment of colleges and training institutes comply with ESMF in a timely and satisfactory manner.

106. Based on the safeguard application to subproject activities and the training received on safeguard policies, their application and monitoring, training centers and colleges will develop construction-related safeguard courses. Such courses will be developed in consultation with the Safeguard Cell and the Institute for Construction, Training, and Development. Some of these courses will be incorporated into curricular of training center and colleges.

107. The Safeguard Cell at MYASD will work with safeguard focal officials at the institutions and colleges to complete an environmental management supervision compliance table to systematically record the monitoring of EMP implementation.

XIII. GRIEVANCE REDRESS MECHANISM

108. At the state level, the CEA is the agency which deals with grievances and complaints regarding environmental safeguard compliance. The CEA has district offices but the district offices often lack resources to carry out safeguard compliance functions. The CEA receives some 10,000 complaints from the public every year. Environmental complaints mainly relate to dust, noise, and water pollution arising from industrial or commercial activities. The CEA has not received any complaint against the TVET system.

109. Complaints pertaining to environmental adverse impacts are initially dealt with by district CEA offices with the help of line department and agencies. Delays in completion of hearings are frequently noted. Resorting to the court system for redress is always an option available to a grievances, in each year, reach the Court of Appeal for arbitration.

110. GRM is a part of any project supported by ADB. The GRM is a bottom-up multitiered structure starting from the subproject level to the division level and district levels and finally to the national level. The local environmental regulatory framework does not provide for an institutionalized GRM. Complaints are recorded and disposed by district offices and several such complaints are arbitrated by CEA in Colombo. SSEP will establish at district level GRM
and outlines procedures of its establishment, functions, powers, membership, and budget.

111. Environmental safeguard principle states that the project authorities will establish a GRM to receive and facilitate resolution of the affected people’s concerns and grievances regarding the project’s environmental performance. This requirement applies to SSEP subprojects. The GRM at a subproject level will have to be scaled to the risks and impacts of each subproject. As a subproject will not generate significant and irreversible environmental impacts and risks, the level of the GRM should commensurate with site-specific environmental issues and the implementation of mitigation measures. The Safeguard Cell at MYASD will facilitate the establishment of a GRM at each subproject level. Clear responsibility of and organizational structure and responsibilities are to be outlined in a document.

112. The GRM at a subproject level will be established and supported by IA in cooperation with local government officials, engineers, and the Divisional Secretariat. A GRM Committee will be established which will represent the agencies involved in the subproject and divisional secretariat representative. Safeguard focal person of the subproject will be the secretary to the Committee. Representatives of the project-affected persons will also be members of the Committee. The Committee will give publicity to institutional mechanism. Expenses of Committee meetings will be borne by the IA of the subproject.

113. The GRM will be responsive to affected-persons’ needs, and to facilitate this, it will develop approaches which would enable all affected persons to gain access to GRM. Cultural appropriateness of the constitution of the Committee and procedures of hearings will be governed by cultural traditions in the project area. A feedback mechanism has to be built into GRM to check how its clients treat it and their acceptance of GRM as an impartial and fair mechanism open to all project-affected persons.

114. The GRM Committee will address affected persons’ concerns and complaints promptly, using an understandable and transparent process that is gender responsive, culturally appropriate, and readily accessible to the affected persons at no cost or without retribution.

115. Each complaint will be recorded and acknowledge by the GRM Committee Secretary. A complaint will be dealt with within 4 weeks and the decision of the GRM Committee will be conveyed to the complaint in writing.

116. A decision of the Committee could be appealed to the District level CEA Office for relief. If not satisfied with the district level decision, the complainant could appeal to CEA in Colombo.

117. The GRM will not impede an affected-person’s access to Sri Lanka’s judicial or administrative remedies.

**XIV. CAPACITY BUILDING AND TRAINING FOR SAFEGUARD COMPLIANCE**

118. As a part of the capacity building provided during the implementation of SSEP, training programs will be conducted at MYASD, institutions and colleges and/or training centers on environmental and social safeguards policies, and how to prepare safeguard planning and monitoring instruments and implement them. The college level training will focus on the awareness about safeguard requirements among engineers and technical officer and development officers attached to divisional secretariat level who will involve in activities related to construction and/or renovation of colleges and construction of new colleges and universities.
119. During program review missions, ADB will assess environmental compliance of subprojects and will recommend safeguard strengthening exercises, if required. It will also support the strengthening of the application of environmental safeguard policy principles to subprojects, safeguard compliance, and monitoring of safeguard compliance.

**XV. MONITORING AND REPORTING**

120. SSEP as an RBL program has to ensure that environmental safeguard impacts and risks are adequately addressed. Periodic monitoring by MYASD of subproject’s safeguard compliance, and ADB’s assistance in program action plans to address weaknesses will help to enhance country safeguard system’s application to SSEP. MYASD will develop a mechanism with ADB’s assistance to reduce safeguard risks through credible results verification mechanism built into SSEP. The exclusion of category A environmental activities and Category A and B involuntary resettlement activities and activities that would impact Indigenous Peoples from SSEP will help reduce these safeguard risks of subprojects.

121. EA of SSEP and ADB will have their own safeguard compliance monitoring systems. At the state level, the Safeguard Cell of MYASD will develop a safeguard monitoring methodology for SSEP. The monitoring methodology will be a contributing component of the SDD’s monitoring and evaluation, and reporting of SSDP activities. The Safeguard Cell will:

(i) establish and maintain procedures to monitor the progress of implementation of safeguard implementation plans. In SSEP, the key safeguard implementation plan will be EMP of each subproject;
(ii) verify subprojects’ compliance with safeguard measures and their progress toward intended outcomes, by the EA with the assistance of IAs;
(iii) document and disclose monitoring results and identify necessary corrective and preventive actions in biannual monitoring reports. Submit monitoring reports on safeguard measures, as agreed with ADB (Appendix 8).
(iv) follow-up on these actions to ensure progress toward the desired outcomes.

122. Based on the environmental data and information generated by due diligence and environmental screening exercises at the subproject level, the Safeguard Cell at MYASD will identify key environmental monitoring indicators. These indicators will be used by each IA of SSEP to monitor biannually safeguard compliance of refurbishment and construction activities of subprojects. The findings will be presented in a report and transmitted to the Safeguard Cell to prepare the bi-annual consolidated Safeguard Monitoring Report of SSEP. This monitoring report will be sent to ADB for review. The Report will be the basis for formulation of corrective actions plans, if required, for a subproject of SSEP.

123. The monitoring data of each subproject will be fed into the safeguard database maintained at MYASD. Such data will be the baseline for verification of results in the sphere of environmental safeguard application, adequacy, and sustainability.

124. MYASD will submit for ADB’s review environmental checklists, EMPs, and monitoring reports. A consolidated environmental compliance reports will be submitted to ADB on a biannual basis. During program review missions, ADB will monitor safeguard compliance of selected subprojects of SSEP and work with program authorities to develop action plans, if significant lapses in safeguard compliance are noted.
XVI. DISCLOSURE OF SAFEGUARD DOCUMENTS

125. The ESMF and Program Safeguard System Assessment (PSSA) of SSEP will be disclosed to the public and will be made available for public review at the Ministry of Education, MYASD, affiliated institutions, and subproject offices. Both draft and final ESMF will be uploaded on the websites of ADB and MYASD. It will serve as a guidance document for IEE and EMP formulation. A summary of ESMF will be translated into Sinhala and Tamil and will be made available for project-affected persons, other stakeholders, and at colleges and training centers before the commencement of any subproject activities.

126. Subproject specific safeguard planning documents—IEEs, EMPs, mitigation plans, and corrective action plans will be disclosed to project-affected persons and other stakeholders and at the Safeguard Cell of MYASD, affiliated institutions, and subproject sites where construction work will take place. Environmental safeguard monitoring reports of subprojects too will be disclosed to project-affected persons and other stakeholders, and copies will be made available at subproject offices and MYASD. These will also be uploaded in the ADB website. In addition, summaries of such reports will be translated into Sinhala or Tamil according to the location of the subproject and made available in a timely manner and in accessible places to inform project-affected persons and others. All such documents will be sent to ADB for review. MYASD will submit to ADB the following documents for review and disclosure on ADB’s website:

(i) draft IEE (including the draft EMP);
(ii) final IEE with EMP;
(iii) new or updated IEE and corrective action plans, if any, during subproject implementation; and
(iv) environmental monitoring reports.

XVII. ESMF UPDATE

127. MYASD maintains ESMF on its website and welcomes comments and suggestions on it. It periodically reviews and updates ESMF. Such updates may arise from the need to consolidate field experience accumulated through the application of safeguard principles and EA processes to subprojects, or from significant changes in the government’s environmental policy and the regulatory framework, or from the revision of ADB safeguard policy principles. The revision and update of the ESMF will be the responsibility of the Safeguard Cell at MYASD. Any ESMF revision or update will be done in concurrence with ADB.
### ASSESSMENT OF TVET SAFEGUARD SYSTEM WITH ENVIRONMENTAL SAFEGUARD POLICY PRINCIPLES OF ADB

<table>
<thead>
<tr>
<th>ADB Policy Principle</th>
<th>Triggered by the Program</th>
<th>Gap Analysis</th>
<th>Assessment of Implementation Capacity</th>
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</thead>
<tbody>
<tr>
<td>1. Use a screening process for each proposed project, as early as possible, to determine the appropriate extent and type of environmental assessment</td>
<td>Yes</td>
<td>The NEA of 1980, its 1988 amendment and Gazette Extraordinary No. 772/22 and No. 11064 of 1993 provide for screening of each proposed project by a project proponent. The project proponent needs to submit preliminary information about the project to PAA in order to initiate the EIA/IEE process. The project proponents are advised to submit preliminary information at a very early stage in the project cycle. The project proponent could submit the preliminary information through a Basic Information Questionnaire which could be obtained from the CEA Head Office or Provincial/District Offices, or downloaded from the CEA website. As in case of SPS screening criteria, NEA screening guidelines use the type, scale, and magnitude of the proposed project as well as its location in determining the category—prescribed or non-prescribed. If the category is “prescribed”, then the PAA decides whether EIA or IEE should be prepared as part of environmental assessment process. Thus SPS environmental safeguard policy principle is congruent with that of Sri Lanka’s screening process which is applicable to SSEP.</td>
<td>The CEA and PAAs have done this satisfactorily over the past 20 years. The capacity in screening and categorization is present and adequate.</td>
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<tr>
<td>2. Conduct an environmental assessment for each proposed project to identify potential direct, indirect, cumulative, and induced impacts and risks to physical, biological, socioeconomic, and physical cultural resources in the context of the project’s area of influence.</td>
<td>Yes</td>
<td>PAA provides the TOR for environmental assessment. PAA guide project proponents to select qualified experts to do necessary fieldwork and consultations. SSEP limits its activities to subprojects with limited adverse environmental impacts and will prepare only IEEs. This is the low threshold of “prescribed” projects. The regulatory system applicable to SSEP is adequate for this task.</td>
<td>MYASD does not have required environmental safeguard expertise. Through hiring qualified specialists to Safeguard Cell and outsourcing the conduct of environmental assessment to competent agencies or persons, this weakness could be overcome. The anticipated adverse environmental impacts of SSEP are not significant. MYASD displays a high awareness about potential</td>
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<td>ADB Policy Principle</td>
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<td>3. Examine alternatives to the project’s location, design, technology, components, and their potential environmental and social impacts and document the rationale for selecting the particular alternative proposed. Also consider the “no project” alternative.</td>
<td>Partially Yes</td>
<td>Not applicable to the Program’s college refurbishment activities as it will have all construction works at current sites. If new sites outside the college premises are selected for construction, this principle would trigger. The local environmental regulatory framework through PAA provides sufficient guidelines on examining alternatives to the project location, design, and technology.</td>
<td>See above.</td>
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<tr>
<td>4. Avoid, and where avoidance is not possible, minimize, mitigate, and/or offset adverse impacts and enhance positive impacts by means of environmental planning and management. Prepare an EMP that includes the proposed mitigation measures, environmental monitoring and reporting requirements, related institutional or organizational arrangements, capacity development and training measures, implementation schedule, cost estimates, and performance indicators.</td>
<td>Yes</td>
<td>See note on Principle 1 above. Each “prescribed” subproject with environmental impacts will require an EIA or IEE and an EMP. The environmental regulatory framework provides limited directions on the actual formation of IEE and EMP when compared with ADB’s safeguard requirements, although through TOR, PAA provides guidance for IEE and actions to overcome the adverse environmental impacts. The Program’s ESMF will provide sufficient and comprehensive guidance in this regard. The EMP is considered an integral part of IEE and is not submitted separately to PAA for review. IEE includes all action plans to overcome adverse impacts. Under SSEP, a format of an EMP is provided and listed in ESMF (Appendix 4).</td>
<td>During consultations and field visits, it was observed that some mitigation measures included in previous programs have not been fully implemented at the college level. The main areas where mitigation had not been fully accomplished include water and sanitation, hazardous waste management, provisions for laboratory safety, and health and safety measures during construction. Management of mitigation measures need to be addressed during the planning phase and during supervision of works. Capacity building measures such as the appointment of the Safeguard Cell at MYASD and conduct of safeguard training programs have to start before the commencement of the Program.</td>
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<td>5. Carry out meaningful consultation with affected people and all other stakeholders.</td>
<td>Yes</td>
<td>The environmental regulatory framework provides limited opportunity for consultation with affected persons and other stakeholders although consultations are part</td>
<td>There is no institutional vehicle to ensure consultation with all stakeholders at MYASD or at its</td>
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<td>ADB Policy Principle</td>
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<tr>
<td>Continue consultations during project implementation.</td>
<td>of IEE/EIA formulation and approval under NEA. It is limited to presenting comments, complaints, and recommendation at the IEE review phase. 21 days are given for such public response in case of an IEE. PAA could hold a public hearing to ascertain facts and to get affected persons views and recommendation which will be incorporated into IEE when final document is prepared. Consultation during implementation of a project is the responsibility of the project proponents and PAA.</td>
<td>affiliated institutions or colleges. This needs development as part of capacity development. The establishment of the Safeguard Cell and appointment of focal safeguard officer at each affiliated institution and college would resolve this capacity deficiency.</td>
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<tr>
<td>6. Disclose a draft environmental assessment (including the EMP) in a timely manner, before project appraisal, in an accessible place and in a form and language(s) understandable to affected people and other stakeholders. Disclose the final environmental assessment, and its updates if any, to affected people and other stakeholders.</td>
<td>Yes</td>
<td>Environmental regulatory framework directs PAA to disclose draft EIA/IEE to the public and to seek their views, comments and recommendations. Public meetings could be organized by PAA for public hearing. The Framework however, does not provide for the disclosure of final EIA/IEE to the public.</td>
<td>To enable MYASD and affiliated institutions and colleges to ensure timely disclosure of safeguard processes and documentation in local languages, it is necessary to build institutional capacity through the establishment of the Safeguard Cell at MYASD and safeguard training at subproject level. The training has to extend to PAAs and to the Municipal Engineering Departments that will handle the building permit applications.</td>
</tr>
<tr>
<td>7. Implement the EMP and monitor its effectiveness. Document monitoring results, including the development and implementation of corrective actions, and disclose monitoring reports.</td>
<td>Yes</td>
<td>Limited scope in the local regulatory framework to monitor the implementation of actions in EIA/IEE and the formulation of corrective actions, if required. The ESMF has elaborated these requirements and provide guidance on this aspect.</td>
<td>EMPs are currently seldom parts of the contract documents in the building permit process. Hence, the probability that contractors follow good safeguard practices is low. Training and capacity building is needed in the implementation of the EMP, particularly at the Municipal Engineering Departments, which handles building permit applications.</td>
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<tr>
<td>ADB Policy Principle</td>
<td>Triggered by the Program</td>
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<td>Assessment of Implementation Capacity</td>
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<td>8. Do not implement project activities in areas of critical habitats. If a project is located within a legally protected area, implement additional programs to promote and enhance the conservation aims of the protected area. Use a precautionary approach to the use, development, and management of renewable natural resources.</td>
<td>No</td>
<td>The regulatory framework provides for the protection of critical habitats and environmentally sensitive areas. In the case of SSEP, if new sites are considered, the sites will always be on government land. Hence, no development will be planned in sensitive areas, as CEA will not approve such proposals without special precautions and requirements. Projects in environmentally sensitive areas will fall into EIA category of “prescribed” projects under NEA 1980.</td>
<td>Not applicable to SSEP</td>
</tr>
<tr>
<td>9. Apply pollution prevention and control technologies and practices consistent with international good practices as reflected in internationally recognized standards such as the World Bank’s Environmental, Health and Safety Guidelines. Adopt cleaner production processes and good energy efficiency practices. Avoid pollution, or, when avoidance is not possible, minimize or control the intensity or load of pollutant emissions and discharges, including direct and indirect greenhouse gases emissions, waste generation, and release of hazardous materials from their production, transportation, handling, and storage. Avoid the use of hazardous materials. Purchase, use, and manage pesticides based on integrated approaches.</td>
<td>Yes</td>
<td>NEA provides sufficient instructions in this regard. Environmental regulatory framework generally meets the World Bank’s Environmental, Health and Safety Guidelines. ESMF will have elaborated them further.</td>
<td>The general recommendation for more training and capacity building for all stakeholders involved is valid also for this item.</td>
</tr>
<tr>
<td>ADB Policy Principle</td>
<td>Triggered by the Program</td>
<td>Congruence Between TVET System and SPS Environmental Safeguard Requirements</td>
<td>Assessment of Implementation Capacity</td>
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<tr>
<td>pest management approaches and reduce reliance on synthetic chemical pesticides.</td>
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<tr>
<td>10. Conserve physical cultural resources and avoid destroying or damaging them by using field-based surveys that employ qualified and experienced experts during environmental assessment. Provide for the use of “chance find” procedures that include a pre-approved management and conservation approach for materials that may be discovered during project implementation.</td>
<td>No</td>
<td>The environmental regulatory framework provides for the conservation of physical cultural resources and to protect such resources. Not applicable to refurbishment of existing buildings under SSEP. If new sites are considered, the sites will always be on government land. Hence, no development will be planned in a sensitive or “unexplored” area.</td>
<td>Not applicable to SSEP</td>
</tr>
<tr>
<td>11. Provide workers with safe and healthy working conditions and prevent accidents, injuries, and disease. Establish preventive and emergency preparedness and response measures.</td>
<td>Yes</td>
<td>The local laws and procedures cover sufficiently these aspects.</td>
<td>The implementation is poor due to lack of proper training, financial resources. Need better training on safety of workers and communities and resources to buy equipment and maintain them.</td>
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</tbody>
</table>
ADB PROHIBITED INVESTMENT ACTIVITIES LIST

The following investment activities will not qualify for ADB support:

(i) Production or activities involving harmful or exploitative forms of forced labor\(^1\) or child labor;\(^2\)

(ii) Production of or trade in any product or activity deemed illegal under host country laws or regulations or international conventions and agreements or subject to international phase outs or bans, such as (a) pharmaceuticals,\(^3\) pesticides, and herbicides,\(^4\) (b) ozone-depleting substances,\(^5\) (c) polychlorinated biphenyls\(^6\) and other hazardous chemicals,\(^7\) (d) wildlife or wildlife products regulated under the Convention on International Trade in Endangered Species of Wild Fauna and Flora,\(^8\) and (e) transboundary trade in waste or waste products;\(^9\)

(iii) Production of or trade in weapons and munitions, including paramilitary materials;

(iv) Production of or trade in alcoholic beverages, excluding beer and wine;\(^10\)

(v) Production of or trade in tobacco;\(^10\)

(vi) Gambling, casinos, and equivalent enterprises;\(^10\)

(vii) Production of or trade in radioactive materials,\(^11\) including nuclear reactors and components thereof;

(viii) Production of, trade in, or use of unbonded asbestos fibers;\(^12\)

(ix) Commercial logging operations or the purchase of logging equipment for use in primary tropical moist forests or old-growth forests; and

(x) Marine and coastal fishing practices, such as large-scale pelagic drift net fishing and fine mesh net fishing, harmful to vulnerable and protected species in large numbers and damaging to marine biodiversity and habitats.

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\(^1\) Forced labor means all work or services not voluntarily performed, that is, extracted from individuals under threat of force or penalty.

\(^2\) Child labor means the employment of children whose age is below the host country’s statutory minimum age of employment or employment of children in contravention of International Labor Organization Convention No. 138 “Minimum Age Convention” (www.ilo.org).

\(^3\) A list of pharmaceutical products subject to phaseouts or bans is available at http://www.who.int.

\(^4\) A list of pesticides and herbicides subject to phaseouts or bans is available at http://www.pic.int.

\(^5\) A list of the chemical compounds that react with and deplete stratospheric ozone resulting in the widely publicized ozone holes is listed in the Montreal Protocol, together with target reduction and phase-out dates. Information is available at http://www.unep.org/ozone/蒙特利尔协议.shtml.

\(^6\) A group of highly toxic chemicals, polychlorinated biphenyls are likely to be found in oil-filled electrical transformers, capacitors, and switchgear dating from 1950 to 1985.

\(^7\) A list of hazardous chemicals is available at http://www.pic.int.

\(^8\) A list is available at http://www.cites.org.

\(^9\) As defined by the Basel Convention; see http://www.basel.int.

\(^10\) This does not apply to investee companies who are not substantially involved in these activities. Not substantially involved means that the activity concerned is ancillary to an investee company’s primary operations.

\(^11\) This does not apply to the purchase of medical equipment, quality control (measurement) equipment, and any equipment for which ADB considers the radioactive source to be trivial and adequately shielded.

\(^12\) This does not apply to the purchase and use of bonded asbestos cement sheeting where the asbestos content is less than 20%. 
OUTLINE OF AN ENVIRONMENTAL AUDIT/DUE DILIGENCE REPORT

I. EXECUTIVE SUMMARY

II. SUBPROJECT DESCRIPTION

III. ITS PAST AND CURRENT ACTIVITIES

IV. SUMMARY OF NATIONAL ENVIRONMENTAL LAWS, REGULATIONS, AND STANDARDS AND ADB SAFEGUARD PRINCIPLES APPLICABLE

V. AUDIT AND SITE INVESTIGATION PROCEDURE

VI. FINDINGS AND AREAS OF CONCERN

VII. CORRECTIVE ACTION PLAN TO ADDRESS AREAS OF CONCERN

VIII. BUDGET/COST

IX. TIMEFRAME
# ENVIRONMENTAL MANAGEMENT PLAN (EMP)

<table>
<thead>
<tr>
<th>Environmental impacts</th>
<th>Mitigation measure(s)</th>
<th>Monitoring sources</th>
<th>Responsible party(ies)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. PLANNING PHASE</strong></td>
<td></td>
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</tr>
<tr>
<td>a) Forest Land</td>
<td>Damage to vegetation and ecosystems</td>
<td>Design so as to minimize clearing or disturbance</td>
<td>Evaluation of designs and plans</td>
</tr>
<tr>
<td></td>
<td>Contributing to potential flooding</td>
<td>Avoid destroying rare or unique species</td>
<td>Observation and reporting</td>
</tr>
<tr>
<td></td>
<td>Sedimentation of streams and surface water</td>
<td>Consult with local populations about current use of forest and preferences for preservation</td>
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<tr>
<td></td>
<td>Contamination of water supplies</td>
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<tr>
<td></td>
<td>Biodiversity loss</td>
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<tr>
<td>b) Wetlands</td>
<td>Damage to ecosystems</td>
<td>Find alternative site. Wetlands and riparian ecosystems (those sited next to a body of water) are extremely sensitive. Wetlands provide important environmental services such as water storage, bird and animal habitat, flood control, and filtering toxins and nutrients from runoff</td>
<td>Evaluation of designs and plans</td>
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<tr>
<td></td>
<td>Sedimentation of streams and surface water</td>
<td>If no alternative is available:</td>
<td>Observation and reporting</td>
</tr>
<tr>
<td></td>
<td>Contamination of water supplies</td>
<td>• Set back any infrastructure as far as possible from the water body/wetland and minimize the amount of wetland destroyed by infrastructure construction.</td>
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<tr>
<td></td>
<td>Biodiversity loss</td>
<td>• Revegetate as soon as possible</td>
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<tr>
<td></td>
<td>Contributing to flooding potential</td>
<td></td>
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<tr>
<td>c) Hilly landscape with sloppy terrain</td>
<td>Sedimentation of streams and surface water</td>
<td>Design facility and apply construction practices that minimize risks, e.g.,</td>
<td>Evaluation of designs and plans</td>
</tr>
<tr>
<td>Environmental impacts</td>
<td>Mitigation measure(s)</td>
<td>Monitoring sources</td>
<td>Responsible party(ies)</td>
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<tr>
<td>Contamination of ground and surface water supplies</td>
<td>use sand stacks or hay to control erosion during construction</td>
<td>Observation and reporting</td>
<td>Contractor</td>
</tr>
<tr>
<td>Cause erosion and damage to terrestrial and aquatic ecosystems during construction or use</td>
<td>Pay particular attention to potential erosion and redirection of water flows during design and construction. Re-vegetate as soon as possible</td>
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<tr>
<td></td>
<td>Maintain design features</td>
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<tr>
<td><strong>d) Site prone to flooding</strong></td>
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<tr>
<td>Be destroyed and/or subject workers or inhabitants to risk of injury or death</td>
<td>Find alternative site or design infrastructure so it is raised above flood plain, if possible. Design infrastructure to minimize risk, e.g. design with proper grading and drainage</td>
<td>Evaluation of designs and plans</td>
<td>Head, College Divisional Engineer/TO</td>
</tr>
<tr>
<td>Cause environmental damage from accidental release of toxic, infectious or otherwise harmful material during flooding</td>
<td>Maintain design features such as drainage structures</td>
<td>Observation and reporting</td>
<td>Contractor</td>
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<tr>
<td>Contaminate drinking water</td>
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<td></td>
<td>Avoid constructing sanitation or other facilities that will use and store harmful materials at flood-prone areas</td>
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<td></td>
<td>Choose dry sanitation options or closed disposal systems, instead of wet ones such as septic tanks or detention ponds</td>
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<td><strong>e) Area and/site prone to landslides</strong></td>
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<tr>
<td>Expose workers or inhabitants to risk of injury or death</td>
<td>Find alternative site on stable ground if not possible</td>
<td>Evaluation of designs and plans</td>
<td>Head, College National Building Research Organization</td>
</tr>
<tr>
<td>Cause environmental damage from accidental release of toxic, infectious or otherwise harmful material</td>
<td>Design infrastructure to minimize risk, e.g., plant trees all around facility</td>
<td>Observation and reporting</td>
<td>Divisional Engineer/TO</td>
</tr>
<tr>
<td>Contaminate water supplies</td>
<td>Maintain protective design features</td>
<td></td>
<td>Contractor</td>
</tr>
<tr>
<td></td>
<td>Avoid constructing sanitation or other</td>
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<tr>
<td>Environmental impacts</td>
<td>Mitigation measure(s)</td>
<td>Monitoring sources</td>
<td>Responsible party(ies)</td>
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| facilities that will use and store hazardous or bio hazardous materials at landslide-prone sites | If that is not possible:  
  - Design storage area so that hazardous materials are stored in leak-proof containers.  
  - Chose dry sanitation options or closed disposal systems, instead septic tanks                                                                                                                                   |                                     |                        |
| f) Cutting trees for clearing land as well as for materials for reconstruction         | Loss of trees and vegetation may lead to:  
  - Disaster related issues (i.e. soil erosion, landslides).  
  - Lack of ventilation and shading to students and teachers  
  - Consider alternate options to reduce the loss of trees and vegetation  
    A green fence will be raised with native tree species around the school/training centers  
    Plant the same species of trees and vegetation as compensatory measures  
    Minimize use of wood for construction  
    Use local materials as much as possible  
    Innovations shall be integrated in the design plan  
    Make schools more child and environmentally friendly  
    Contractor will supply kerosene or LPG at camps and restrict cooking and heating using firewood  | Trees planted  
  Progress reports                                                                                              | Head, College                        |
<table>
<thead>
<tr>
<th>Environmental impacts</th>
<th>Mitigation measure(s</th>
<th>Monitoring sources</th>
<th>Responsible party(ies)</th>
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</thead>
<tbody>
<tr>
<td>g) Worker welfare facilities at the construction site</td>
<td>Lack of proper worker welfare facilities including toilets, meal room, first aid, etc, may lead to social issues within the school community and lack of worker satisfaction and safety</td>
<td>Worker welfare facilities to be included in the design and construction plan</td>
<td>Head, College Divisional Engineer/TO Contractor</td>
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<td></td>
<td></td>
<td>Provision of temporary toilet with washing facility for the construction workers</td>
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<td>Check for such facilities on construction site</td>
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<tr>
<td>h) Disaster Management</td>
<td>Extreme climate (e.g. cyclone, storm surge), natural disasters (e.g. earthquake), and fire may cause damage to lives and properties</td>
<td>Adoption of appropriate adaptation and disaster risk reduction strategy, emergency preparedness and recovery, training/orientation program for teachers and students on climate change, disaster and earthquake, etc.</td>
<td>Head, College Disaster Management Centre</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Construction of school/training centers with disaster/cyclone shelter to cover the urgent needs of community, student, and teachers</td>
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<td></td>
<td>School building located in the cyclone and earthquake prone areas should be designed and constructed in way to be disaster and earthquake resilient or “climate-proof”</td>
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<td></td>
<td></td>
<td>Create awareness about natural calamities and extreme climate to teachers and students</td>
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<td></td>
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<td>Fire safety management and mock drill</td>
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<td></td>
<td>Ensure emergency equipment and facilities like fire extinguisher/water hose, first aid boxes, whistles, torchlights, etc are readily available</td>
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<tr>
<td>Environmental impacts</td>
<td>Mitigation measure(s)</td>
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<td>Responsible party(ies)</td>
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<tr>
<td>2. DESIGN PHASE</td>
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</table>

**a) Provision of health and sanitary services in school**

| Discharge untreated or insufficiently treated sewage would result in: |
| --------------- | ------------------- |
| • Contaminates drinking water (ground and surface) |
| • Spreads diseases |
| • Degrades aquatic ecosystems |

- Number of sanitary facilities comply with Ministry of Education's standards
- Obtain building certification standards and requirements of the local authority
- Avoid sites where water table is high or underlying geology makes contamination of groundwater likely
- Choose dry sanitation options or closed disposal systems instead of wet ones such as septic tanks or detention ponds
- Ensure adequate and maintained sanitary facilities. Maintain required ratio of male and female toilets
- Maintain the drainage system cleanly without water logging
- Check whether there is building certification for the school sanitary facility
- Check whether there is adequate number of sanitary facilities provided with respect to the student population
- Head, College Divisional Engineer/TO Contractor

**b) Construction of Science Laboratory**

| Expose workers or student population to toxic, carcinogenic, and teratogenic materials such as heavy metals, dyes, solvents, acids, etc. |
| --------------- | ------------------------------------------------- |
| Lack of properly designed disposal mechanisms for chemical waste may lead to contamination of surface and ground water resources |
| Lack of safety measures within the |

- Design with proper storage, handling and treatment facilities
- Avoid site near wetlands or bodies of water
- Review the design plans and inspect the sitting of the building initially
- Head, College Divisional Engineer/TO Contractor
<table>
<thead>
<tr>
<th>Environmental impacts</th>
<th>Mitigation measure(s)</th>
<th>Monitoring sources</th>
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</thead>
<tbody>
<tr>
<td>design will lead to fire and increase occupational safety hazards</td>
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<tr>
<td>c) Construction of sports grounds</td>
<td>Water logging may subject workers or student to risk of injury or death</td>
<td>Site visit and observation</td>
<td>Head, College Divisional Engineer/TO</td>
</tr>
<tr>
<td></td>
<td>Will be a breeding ground for mosquitoes and other vectors due to flooding</td>
<td>air quality monitoring</td>
<td>Contractor</td>
</tr>
<tr>
<td></td>
<td>Adopt a well-planned drainage system to avoid water logging</td>
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<td></td>
<td>During level and land transformation adopted mitigation measures to avoid dust generation</td>
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<tr>
<td></td>
<td>Take measure to limit particulate emission and noise generation</td>
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<tr>
<td>3. DEMOLITION PHASE</td>
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<tr>
<td>a) Refurbishment /renovation of school facilities</td>
<td>Spoil material generated would obscure the landscape may be a health risk to the surrounding community and the student population.</td>
<td>Spot check and site observations on a quarterly basis.</td>
<td>Head, College Divisional Engineer/TO</td>
</tr>
<tr>
<td></td>
<td>Deposal of solid waste according to the guidelines of the local authority.</td>
<td></td>
<td>Contractor</td>
</tr>
<tr>
<td></td>
<td>Make arrangements with the local authority for disposal of waste.</td>
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<td></td>
<td>Demarcate an area for waste collection until disposal within the construction premises and practice waste minimization practices such as recycling and composting.</td>
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</tr>
<tr>
<td>b) Safe handling of asbestos</td>
<td>Health and safety hazards with loose asbestos fibers for the workers.</td>
<td>Follow the rules outlined in the NEA. (Guidelines are also provided as part of the ESMF)</td>
<td>Divisional Engineer/TO Contractor</td>
</tr>
<tr>
<td></td>
<td>Follow the rules outlined in the NEA. (Guidelines are also provided as part of the ESMF)</td>
<td>Where needed, only bonded asbestos cement sheeting that contains less than 20% of asbestos should be used in any construction under this project</td>
<td></td>
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<tr>
<td>Environmental impacts</td>
<td>Mitigation measure(s)</td>
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<td>Responsible party(ies)</td>
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<tr>
<td><strong>4. CONSTRUCTION PHASE</strong></td>
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</table>
| **a) Expansion of school facilities involving new construction within already existing school premises** | Lack of solid waste management on site can lead to the lack of general cleanliness due to waste material resulting from the demolition of old buildings  
The waste material would be hazardous to the children’s health and safety (i.e. injuries from corroded metal waste) | Make arrangements with the local authority on disposal of solid waste generated during construction  
Observation of cleanliness and good housekeeping practices onsite  
Demarcated waste storage area in operation  
Under no circumstances should the solid waste be burned on site | Head, College Divisional Engineer/TO Contractor |
|                                                                                      |                                                                                      | Solid waste storage is demarcated  
All construction solid waste removed at end of construction |                                               |
| Dust generation during construction activities may impact workers and community       | Wet down and spray water in construction as required  
Take steps to avoid dust emissions during loading and unloading of construction material | Observations—controlled dust emissions and the spraying of water  
Check whether the construction material is stored properly to avoid dust emission | Head, College Divisional Engineer/TO Contractor |
| Transportation of construction materials may block the access roads and may lead to accessibility problems | Construction materials and machinery should not be placed in a manner that blocks any roads, paths, or local accesses  
Unloading of construction materials should be carried in a manner and time so as to avoid blockage of roads/paths/access  
Waste must not be placed on the road | Observation and field check | Head, College Divisional Engineer/TO Contractor |
<table>
<thead>
<tr>
<th>Environmental impacts</th>
<th>Mitigation measure(s)</th>
<th>Monitoring sources</th>
<th>Responsible party(ies)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction noise can disturb surroundings and the school environment</td>
<td>Conduct work during daytime and if possible during non-school hours. Adhere to noise levels stipulated under NEA and adopt mitigation measures that would be mentioned in the CEA recommendation letter on site based on the each project that will be undertaken</td>
<td>Noise at boundary should not exceed 55 decibels (A) or as specified under the NEA</td>
<td>Head, College Divisional Engineer/TO Contractor</td>
</tr>
<tr>
<td>Injury due to lack of occupational safety measures and also health risks</td>
<td>Workers should adopt necessary safety measures</td>
<td>Check for existence of first aid measures in the premises</td>
<td>Head, College Divisional Engineer/TO Contractor</td>
</tr>
<tr>
<td></td>
<td>First aid provisions will be made available on site</td>
<td>Check whether the workers are using the safety gear that is provided</td>
<td></td>
</tr>
<tr>
<td>Occupational safety issues:</td>
<td>Train maintenance and operation-staff to monitor and repair machines so that it will increase the efficiency of the machines while reduce the vibration and noise. Noise levels should be maintained within stipulated limits for the construction site</td>
<td>All workers are inappropriate safety attire</td>
<td>Head, College Divisional Engineer/TO Contractor</td>
</tr>
<tr>
<td>• Noise generated from cement pre-casting machines concrete, pilling may pose an occupational health issue</td>
<td>Train the workers on occupational risks involved in lifting heavy construction equipment and occupation risk and safety measures in the project site and environment. Train the workers on managing risks, emergencies anon first aid</td>
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<tr>
<td>• Activities such as loading and unloading shuttering and metal poles and handling of heavy objects may result in accidental injury or crushing</td>
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<tr>
<td>• In the absence of non-functional sanitary facilities, health issues may arise among the student population</td>
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</table>

**b) Development of**

<p>| Setting up of a storage facility will | Well should be metered and the | Review water extraction | Head, College |
|--------------------------------------|---------------------------------|--------------------------|---------------------|---------------|</p>
<table>
<thead>
<tr>
<th>Environmental impacts</th>
<th>Mitigation measure(s)</th>
<th>Monitoring sources</th>
<th>Responsible party(ies)</th>
</tr>
</thead>
<tbody>
<tr>
<td>water infrastructure (expected to be minimal)</td>
<td>require water for worker consumption and potential cleaning of equipment</td>
<td>Water Resources Board consulted on appropriate extraction levels</td>
<td>Divisional Engineer/TO Water Resources Board/ National Water Supply and Drainage Board Contractor</td>
</tr>
<tr>
<td></td>
<td>Water in the well should be periodically monitored for quality and quantity</td>
<td>Dug wells should maintain at least 2 meters of water depth to maintain drinking water quality</td>
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<tr>
<td></td>
<td>To ensure minimal wastage of water, train maintenance and operation staff to monitor and repair leaks from cracked containment structures, broken pipes, faulty valves and similar structures</td>
<td>Periodic water quality testing (also indicated under construction)</td>
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<td></td>
<td>A suitable sump and overhead tank should be constructed taking into account the daily requirement of water to ensure uninterrupted water supply</td>
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<tr>
<td>Unprotected wells can lead to safety and health issues</td>
<td>Dug well(s) within premises should have a protective wall and appropriate covering to prevent external material from entering the well</td>
<td>Well protected water sources in place and maintained</td>
<td>Head, College Divisional Engineer/TO Contractor</td>
</tr>
<tr>
<td>Arsenic contamination in drinking water may case health related problems</td>
<td>Analyze local surrounding arsenic test results and recommend for tube-wells or not</td>
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<td></td>
<td>Adopt rain water harvesting, ponds and filter, and piped water supply</td>
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<td></td>
<td>After installation of tube-wells, presence of arsenic in the drinking will be tested and be used only if it satisfies the Sri Lanka standards</td>
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<tr>
<td>Environmental impacts</td>
<td>Mitigation measure(s)</td>
<td>Monitoring sources</td>
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<tr>
<td><strong>5. OPERATION AND MANAGEMENT PHASE</strong></td>
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</tr>
<tr>
<td><strong>a) Solid waste management</strong></td>
<td></td>
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</tr>
<tr>
<td><strong>Domestic solid waste disposal</strong></td>
<td>Lack of management of domestic waste water may cause health risks and obscure the landscape</td>
<td>Waste is disposed by the Local Authority&lt;br&gt;Adhere to CEA guidelines of waste disposal applicable to the cement precasting industry&lt;br&gt;Ensure demarcated solid waste storage area with source separation for organic waste and other domestic non-organic waste. This storage facility should be able to accommodate solid waste up to 7 days.&lt;br&gt;Certain schools have adopted measures to decompose domestic solid waste by composting or by recycling. Under the environmental conservation activities taken up by schools “Environmental Brigades” have been formed to maintain a clean environment within the school premises. Productivity program sponsored by the National Productivity Centre promotes competitions based on 5S concept. However, there has not been a proper assessment on schools which maintain good quality physical environment</td>
<td>Construction waste disposed of weekly on schedule and in arrangement with the Local Authority&lt;br&gt;Cleanliness and good housekeeping practices on site&lt;br&gt;Review solid waste management plan in place and in operation during site visits</td>
</tr>
<tr>
<td></td>
<td>Since solid waste collection will not be on a daily basis, there is risk of solid waste piling up on site&lt;br&gt;These can lead to an increase in vector population and health risks</td>
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<tr>
<td><strong>Domestic liquid waste disposal</strong></td>
<td>Lack of disposal of the domestic waste water will result in health issues to the worker</td>
<td>Ensure that the domestic wastewater is directed to soakage pits in conformance to local authority guidelines</td>
<td>Check the design plans for cesspits and soakage pits</td>
</tr>
<tr>
<td>Environmental impacts</td>
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<td>Monitoring sources</td>
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<tr>
<td><strong>Hazardous waste disposal</strong></td>
<td>Lack of a disposal mechanism for chemical waste may lead to pollution of surface</td>
<td>Disposal of chemical waste according to the stipulated guidelines under NEA on</td>
<td>Head, College</td>
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<td></td>
<td>water resources and land due to leachate</td>
<td>Hazardous waste regulation.</td>
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<tr>
<td></td>
<td>Potential for increase health risk of students and teachers</td>
<td>Explore the private and public partnership on disposal mechanism on the hazardous</td>
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<td></td>
<td>Lack of a disposal mechanism for computer and IT-based waste management</td>
<td>waste for a nominal fee</td>
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<td>Identify a check list and standard mechanism for disposal of hazardous chemical</td>
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<td>Establish a central deposit for the collection of hazardous waste so that</td>
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<td></td>
<td></td>
<td>disposal will be easier</td>
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<td></td>
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<td>Checking for adoption of existing disposal guidelines and plans</td>
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</tr>
<tr>
<td><strong>b) Advance level and Ordinary level Science Laboratory</strong></td>
<td>Lack of properly designed disposal mechanisms for chemical waste may lead to</td>
<td>Ensure regular maintenance on the gas tubes, taps to ensure the maintenance of the</td>
<td>Checking for adoption of existing disposal</td>
</tr>
<tr>
<td></td>
<td>contamination of surface and ground water resources</td>
<td>fume cupboards</td>
<td>guidelines and plans</td>
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<tr>
<td></td>
<td>Lack of safety measures within the design will lead to fire and increase occupational</td>
<td>Provision of safety measures in the design such as good ventilation and thermal</td>
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<tr>
<td></td>
<td>safety hazards</td>
<td>circulation</td>
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<td>Take measure to install fire extinguishers</td>
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<td>Display the laboratory safety manual so that students and teachers can follow</td>
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<td></td>
<td></td>
<td>Provision of safety wear - face mask, goggles, and noise isolating ear plugs.</td>
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<tr>
<td><strong>c) Sanitary facilities</strong></td>
<td>Discharge of untreated or</td>
<td>Ensure proper maintenance of the</td>
<td>Observation and site</td>
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<tr>
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<tr>
<td>insufficiently treated sewage, and due lack of maintenance of sanitary facilities may lead to:</td>
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<tr>
<td>- Contamination of drinking water (ground and surface)</td>
<td>sanitary facilities</td>
<td>reports to check the proper maintenance of pipes in sanitary facilities</td>
<td></td>
</tr>
<tr>
<td>- Spreading of diseases among the student population and surrounding community</td>
<td>To ensure proper function and operation, train maintenance and operation staff to monitor and repair leaks from cracked containment structures, broken pipes, faulty valves, and similar structures</td>
<td></td>
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<tr>
<td>- Degradation of aquatic ecosystems</td>
<td>Provide a suitable sump and overhead tank, taking into account the daily requirement of water to ensure uninterrupted water supply for the sanitary faculties</td>
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<td></td>
<td>A minimum distance of 15 meters should be maintained between a tube-well and a latrine to prevent contamination of water resources. In case of shallow hand tube-wells, this distance should be 20 meters as horizontal filters are used in this type of tube-wells</td>
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<td></td>
<td>Provide separate toilets at adequate distance between boys and girls washrooms</td>
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<td></td>
<td>Water supply is available in the toilets</td>
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<td></td>
<td>One latrine should be designed for about 30 pupils (20 for girls and 40 for boys)</td>
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<tr>
<td><strong>d) Canteen</strong></td>
<td>Lack of domestic waste management may lead to land and water contamination and increase vector-borne diseases and obscure</td>
<td>Adopt domestic waste management mitigation measures discussed above</td>
<td>Head, College</td>
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<td></td>
<td>Adopt domestic waste management monitoring measures discussed above</td>
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<tr>
<td>Environmental impacts</td>
<td>Mitigation measure(s)</td>
<td>Monitoring sources</td>
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<td>the aesthetic beauty of the school environment and give rise to odor</td>
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<tr>
<td>Lack of training in canteen commodity handling can lead to wastage and hygiene issues</td>
<td>Provide training in food handling to minimize wastage</td>
<td>Check for compliance and adoption of procedures as indicated under the National Regulation on Food (Hygiene) 2011 under the Food Act, No. 26 of1980</td>
<td>Head, College Public Health Inspector</td>
</tr>
<tr>
<td></td>
<td>Ensure that food handlers maintain personal hygiene and inform the supervisor in case an employee is sick or has an injury</td>
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<tr>
<td></td>
<td>Maintain good house-keeping practices as per the food hygiene regulations</td>
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</table>

CEA = Central Environment Authority, ESMF = Environmental and Social Management Framework, NEA = National Environmental Act, TO = Technical Officer.
1. The main risks of exposure to asbestos is where fibers are easily made airborne under little pressure, such as cutting of Asbestos Cement (AC) products that can release fibers. Renovations, repairs, and decommission of buildings containing AC products such as roof sheets can pose a risk.

2. Health hazards from breathing asbestos dust include:
   (i) Asbestosis—a lung scarring disease
   (ii) Form of cancer such as mesothelioma.

3. In AC corrugated sheets, the fiber is present in the non-friable form which means that fiber is embedded in cement and cannot be easily airborne. Such materials are known to have little health risk once (i) the roof has been completed and (ii) given that material is in good condition and not disturbed.

4. Although the World Bank Group’s Good Practice Note on Asbestos, and its Health and Safety Guidelines do not encourage the use of asbestos products in construction, in light of the practical uses for construction of college infrastructure, the costs, its availability in local markets and lack of feasible alternatives, the use of asbestos is the most feasible option at some worksites. However, to minimize the health risks that asbestos products do pose, the following guidelines adapted from the World Bank’s Health and Safety Guidelines and other sources are recommended to be followed. As Sri Lanka has no regulations regarding the use of Asbestos, the use of International Labour Organization (ILO) convention guidelines as stated above are recommended as well.

5. ILO asbestos convention requirements include:
   (i) Work clothing to be provided by employers.
   (ii) Double changing rooms and wash facilities to prevent dust from going home on street clothes.
   (iii) Training of workers about the health hazards to themselves and their families,
   (iv) Periodic medical examinations of workers.
   (v) Periodic air monitoring of the work environment, with records retained for 30 years.
   (vi) Development of a work plan for demolition work, to protect workers and provide for proper waste disposal.
   (vii) Protection from retaliatory and disciplinary measures of workers who remove themselves from work because of their fear that they are exposed to serious health risks.

A. Construction Phase
   (i) To minimize the risk of damage of AC sheets for roofing, transportation of material must be done with care. Where possible, sheets should be transported in airtight containers or with dust covers.
   (ii) During installation of sheets, ensure that damage is minimized. Use of power tools to drill holes that may release particles needs to be kept to the minimum.
(iii) Use a protective sheet (i.e. insulation foil) between the AC sheets and the classrooms and lecture theaters to reduce the risk of minute particles entering the rooms.

(iv) Workers who handle and install AC sheets should take precautions to minimize exposure by wearing protective masks and showering to minimize spread of dust. Work clothes used during the installation of sheets should be washed and workers change to clean clothes before leaving the construction site.

(v) Workers should be made aware of the risks of AC sheets, and how to minimize these risks.

B. Decommissioning

(i) Contractors should dispose of waste containing asbestos in a manner that does not pose a health risk to the workers concerned or the population in the vicinity. Disposal at approved landfills and prompt burial under various levels of material apply to friable asbestos waste. Contractors should consult the Local Authority and Central Environmental Authority to obtain guidance on proper disposal of material.

(ii) Contractor should be encouraged to develop an asbestos management plan that identifies the content (whether it is in friable form and has potential to release fibers), and proper removal procedures.

(iii) During the removal of AC sheets, workers should wear proper protective gear such as masks and shower to prevent the spread of dust. Clothes worn during this process should be washed and workers should change into clean clothes prior to leaving construction site.

(iv) Workers who are, or have been, exposed to asbestos in their occupational activities should be provided, in accordance with national laws and practices, with such medical examinations as are necessary to supervise their health in relation to the occupational hazard, and to diagnose occupational diseases caused by exposure to asbestos. For the prevention of disease and functional impairment related to exposure to asbestos, all workers assigned to work involving asbestos exposure should be provided with:

(v) a preassignment medical examination:
   - periodic medical examinations at appropriate intervals (at least every 3 years);
   - other tests and investigations, in particular chest radiographs and lung function test, which may be necessary to supervise their state of health in relation to the occupational hazard and to identify early indicators of disease caused by asbestos; and
   - a copy of their medical records.

6. The above requirements will be based on the type of construction and its magnitude. The Ministry of Education and Provincial Ministries should apply above guidelines to the extent practical, within the context of the specific construction requirements.
ENVIRONMENTAL SAFEGUARD REQUIREMENTS IN CONTRACTS

1. The following environmental safeguard requirements are to be included in contracts as part of Environmental Management Plan.

A. General

(i) The Contractor and contractor's employees adhere to the mitigation measures set down in EMP and take all necessary measures required to prevent harm, and to minimize the impact of operations on college, training center, and university environment.

(ii) The Contractor shall avoid the use of heavy or noisy equipment and/or activities during teaching hours at college, training center or university.

(iii) The contractor, on completion of construction should take full responsibility in ensuring a clean and safe construction premises.

B. Disposal of solid waste and debris

(i) All construction debris and residual spoil material including any left earth shall be disposed by the contractor at a location approved by the Local Authority for such a purpose.

(ii) The debris and spoil shall be disposed in such a manner that (i) waterways and drainage paths are not blocked; (ii) the disposed materials will not be washed away by floods; and (iii) such materials should not cause public nuisance.

C. Protection of Ground Cover and Vegetation

Contractor shall provide necessary instructions to his workers not to destroy ground vegetation cover unnecessarily.

D. Soil Erosion

(i) Contractor shall take all steps necessary to ensure the stability of slopes including those related to temporary works.

(ii) Work that will lead to heavy erosion shall be avoided during the rainy season. If such activities need to be continued during rainy season, prior approval must be obtained from implementing agencies and local authorities by submitting a proposal on actions that will be undertaken by the contractor to prevent erosion.

(iii) The work, permanent or temporary, shall consist of measures as per design to control soil erosion, sedimentation and water pollution. Typical measures would include grass cover, slope drains, retaining walls etc.

E. Labor Camps

(i) Labor camps shall be provided with adequate and appropriate facilities for disposal of sewage and solid waste. The sewage systems shall be properly designed, built and operated so that no pollution to ground or adjacent water bodies/watercourses takes place. Garbage bins shall be provided in the camps and regularly emptied. Garbage should be disposed of in a hygienic manner.

(ii) Contractor shall ensure that all camps are kept clean and hygienic. Necessary measures shall be taken to prevent breeding of vectors and diseases.
(iii) Contractor shall report any outbreak of infectious disease of importance at a labor camp to the Medical Officer of Health (MOH) or to the Public Health Inspector (PHI) of the area immediately.

(iv) Contractor shall remove the labor camps fully after its need is over, empty septic tanks, if instructed by the engineer shall be closed, remove all garbage, and debris; and clean and restore the area back to its former condition.

F. Dust Management

(i) To prevent dust pollution during the construction period, the Contractor shall carry out regular watering of the construction site and shall cover material stocks onsite to prevent dust and other particles getting airborne.

(ii) All vehicles delivering materials shall be covered to avoid spillage and dust emission.

G. Health and Safety

(i) Contractor shall take necessary actions to prevent breeding of mosquitoes at places of work, labor camps, material stores, etc. Stagnation of water in all areas including gutters, used and empty cans, and containers shall be prevented.

(ii) Contractor shall keep all places of work, labor camps, plus office and store buildings clean and devoid of garbage to prevent breeding of rats and other vectors such as flies.

(iii) Construction vehicles, machinery, and equipment shall be used and stationed only in designated areas of the work site and should not pose any danger to students, teachers, and administrative staff.

(iv) Material stockpiles shall be located sufficiently away from the areas frequently used by students, teachers, and administrative staff.

(v) Construction sites should be fenced out temporarily in order to avoid any risk posed to students, teachers and administrative staff from construction activities.

(vi) The contractor shall enforce vehicle speed limits for construction vehicles in areas near and inside construction premises.

H. Sourcing of Raw Material

The contractor shall ensure that all raw materials such as sand, rubble, metal, and timber required for the construction of the building are sourced from licensed sources. If the contractor plans to operate own quarry/sand pit, all necessary approvals should be obtained from relevant authorities.
1. The Cell will directly engage two full-time specialists—environmental specialist and a social development specialist. The social development specialist will have some field experience in involuntary resettlement in addition to gender and social development. The two specialists will work at the Safeguard Cell of Ministry of Youth Affairs and Skills Development and report to Director, Sector Development Division. The specialists should have a Masters level degree in environmental science/engineering/sociology/economics/planning with at least 5 years of field experience in development projects and programs. Previous experience in conducting environmental assessment and preparing Environmental Impact Assessment/Initial Environmental Evaluation, Environment Management Plan and obtaining environmental clearance is an added qualification. The Social development specialist should be able to conduct socioeconomic surveys, social audits and monitoring of development results of subprojects.

2. The Safeguard Cell will deliver the following services:

(i) Conduct or supervise safeguard compliance review of each subproject.
(ii) Check adequacy and effectiveness of initial environmental evaluation, due diligence reports, environmental audits, and environmental management plans.
(iii) Prepare gender checklists, conduct gender inclusive socioeconomic surveys, and develop social development indicators to monitor gender inclusiveness of development outputs and targets.
(iv) Prepare sector-specific checklists, guidelines, reporting formats, and reports.
(v) Coordinate with implementing agencies in environmental in assessment, monitoring, and review, as required.
(vi) Prepare safeguard progress and performance reports.
(vii) Recruit and coordinate with safeguard training specialists.
(viii) Update Environmental and Social Management Framework based on Skills Sector Enhancement Program’s operational experience.

1 MYASD will engage its staff currently responsible for gender inclusion to conduct social safeguards activities at the Safeguard Cell.
EMP COMPLIANCE REPORTING TABLE

Name of person filling the table

Date of visit

Name of Subproject, and Location Details:

Contractor's name and details:

<table>
<thead>
<tr>
<th>Construction Activity (from EMP)</th>
<th>Mitigation Measures proposed in the EMP (From EMP)</th>
<th>Describe level of compliance</th>
<th>Reasons for non-compliance</th>
<th>Suggestions for improvement</th>
<th>Any other Remarks</th>
</tr>
</thead>
</table>
