DRAFT

Environmental and Social Management Planning Framework

September 2018

Urban Regeneration Program, Sri Lanka

Urban Development Authority
Prepared for the Asian Infrastructure Investment Bank Financing Component

Table of Contents

LIST OF TABLES

APPENDICES

ABBREVIATIONS

AIIB	-	Asian Infrastructure Investment Bank
BOD	-	Biochemical Oxygen Demand
CEA	–	Central Environmental Authority
COD	-	Chemical Oxygen Demand
EA	–	Executing agency
EIA	–	Environmental Impact Assessment
ESMP	–	Environmental and Social Management Plan
ESMPF	–	Environmental and Social Management Planning Framework
ESP	–	Environmental and Social Policy
ESS	-	Environmental and Social Standard
ESIA	-	Environmental and Social Impact Assessment
IA	–	Implementing Agency
IEE	–	Initial Environmental Examination
GRM	–	Grievance Redress Mechanism
GSMB	–	Geological Survey and Mines Bureau
GOSL	-	Government of Sri Lanka
MOMDE	–	Ministry of Mahaweli Development and Environment
MMWD	–	Ministry of Megapolis and Western Development
NEA	–	National Environmental Act
NGOs	-	Non-Government Organizations
PAA	–	Project Approving Authority
TOR	-	Terms of Reference
UDA	-	Urban Development Authority
URP	-	Urban Regeneration Program

I. INTRODUCTION

A. The Scope and Purpose of the ESMPF

1. This Environmental and Social Management Planning Framework (ESMPF) is only applicable to the URP under UDA. An ESMPF has been identified as a necessity as this is a programmatic project. As URP will involve involuntary resettlement when liberating the lands identified for development and construction of improved housing for the underserved communities, a stand-alone RPF has been developed to go hand in hand with the ESMPF. The primary focus of the ESMPF will be on potential environmental impacts of the URP, applicable safeguard policy and regulatory measures to deal with them, and how to avoid or minimize any adverse environmental impacts through appropriate mitigation measures to ensure environmental soundness and sustainability of the overall program. The ESMPF outlines the roles, responsibilities and procedures for screening, avoiding, minimizing and mitigating any potential environmental adverse impact or risk. It provides an enabling framework to meet safeguard requirements of the URP.

2. The ESMPF is based on the GOSL environmental laws, regulations, and environmental assessment procedures stipulated under 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, prescription of the nature of the environmental assessment necessary, obtaining environmental clearance, and environmental compliance monitoring during project construction and operation phases. The framework is also in line with the AIIB ESP and ESS, and captures any gaps found in the local environmental and social safeguard requirements.

3. The main purpose of the ESMPF is to enable UDA to identify potential environmental and social impacts early on for the proposed subprojects under the AIIB financed URP component, and to provide a guide in safeguard planning and implementation at the subproject level including the identification of the depth of the Environmental and Social Impact Assessment (ESIA) required. It also provides a guideline for monitoring and reporting on safeguard compliance. The ESMPF also looks at the institutional capacity and structure for the implementation of the safeguards activities.

B. Environmental and Social Safeguard Policy/Vision of URP

4. Prior to this project, UDA safeguard due diligence has been outsourced to the project supervising consultant and has not been based on an institutional framework such as an ESMPF. Especially the environmental safeguards have been only directed by clearances from CEA which have been monitored by the consultant supervisor (usually an engineering firm) and reports provided to UDA. Action is often taken if any issues arise. This can lead to comprises in safeguard implementation.

5. Under the current project, UDA recognizes that demolition, land preparation and construction activities under the URP would generate some adverse environmental impacts to varying degrees depending on the sensitivity of the environment and magnitude of the project. As an informed and socially responsible government authority, UDA is committed to avoid or minimize unavoidable adverse environmental and social impacts of the URP. The environmental and social safeguards policy of the URP is a combination of the national environmental safeguard regulatory framework and AIIB’s Environment and Social Policy. This policy will guide screening and categorization, consultation, information disclosure, implementation of a sound grievance redress mechanism, formulation of

environmental and social management plans, implementation, monitoring of results, and adequate reporting as outlined in the ESMPF.

6. The ESMPF focuses on environmental and social safeguards compliance of the URP, and is backed by UDA's commitment to integrate environmental and social mitigations in a proactive manner in order to contribute towards sustainable development. In order to ensure a balance among developmental imperatives, environmental sustainability, and social well-being within URP's implementation, UDA is committed to the following:

(i) Environmental and social considerations of URP will be followed closely by UDA, and necessary action will be taken to avoid, minimize, and mitigate any adverse impacts or risks;
(ii) UDA will comply with all environmental and social policies, laws, and regulations of the GOSL, and will be responsive to environmental and social requirements under AIIB's Framework.
(iii) The procedures outlined in the ESMPF will be applied to all subprojects of URP under AIIB financing.

II. PROJECT DESCRIPTION

A. Description

7. Over fifty percent of the Colombo city population lives in shanties, slums or dilapidated old housing schemes, which occupied nine percent of the total land extent of the city. The Urban Development Authority (UDA) has identified 68,812 families living in 1,499 community clusters (underserved settlements spread over an area of 900 acres) which do not have a healthy environment for human habitation and access to basic infrastructure facilities such as clean water, electricity, sanitation etc. The Environmental and Social Management Framework (ESMPF) of the Urban Development Authority (UDA) under the Ministry of Megapolis and Western Development (MMWD) for the Urban Regeneration Program (URP) will support the implementation the program activities ensuring that appropriate environmental and social safeguards are adopted to be in line with the national regulations and to meet that of AIIB.

8. The Asian Infrastructure Investment Bank (AIIB) is in the process of preparing a project that would initially support six subprojects that will provide housing for low income people (Applewatte, Colombege Mawatha, Madampitiya, Obeysekerapura, Stadiumgama and Ferguson) under URP. Under Component 1 (USD 220M), it would finance the construction of housing for approximately 5,500 families. Under Component 2 (USD 50 M), AIIB would support the redevelopment of the freed land as a result of this project including the provision of public amenities. Component 3 (USD 10M) would support additional technical support and project management including systems to improve the sustainability and quality of apartment building maintenance, and support to strengthen UDA capacity to manage environmental and social issues. Under the initial six subprojects, resettlement of a total of 128 households is anticipated (30 at Applewatte, 38 at Obeysekerapura and 60 at Madmpitiya). MMWD will be the executing agency (EA) of the URP and the UDA will be the implementing agency (IA). The UDA will be responsible for the overall coordination of URP implementation. All activities carried out under the URP in anticipation of AIIB financing will adopt all guidelines provided in the ESMPF.

B. Scope of Safeguards in URP

9. Under the URP which was started in 2011, UDA aims to construct 70,000 housing units of acceptable standard for relocation of underserved settlements of the city of Colombo and its immediate

suburbs. This is in accordance with government policy to enhance the livelihoods of the under privileged communities. The URP is consistent with the Government of Sri Lanka's (GOSL) housing policy aim of ensuring affordable access to adequate housing for everyone, and with the Megapolis Master Plan, which envisages the relocation of households currently living in slums into new housing schemes with adequate standards and optimization of land use of prime locations for high utility and economic returns, as an important step towards transforming Colombo into a city with a clean and pleasing environment and a model for national development. In terms of physical development, URP entails demolition, new construction and redevelopment of liberated lands. Demolition and construction activities of URP would trigger the environmental laws and procedures of GOSL and AIIB's environmental and social policy safeguards. However, considering the scope of URP, it is unlikely that it would generate significant negative environmental impacts. Potential environmental impacts of construction activities are site-specific and temporary, and any adverse environmental impact or risk can adequately be addressed through mitigation measures. Essentially this program envisages a positive environmental impact. 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 under URP.

10. UDA will screen its own land where demolition, construction and redevelopment activities of URP will take place to ascertain whether the use of such land would cause any involuntary resettlement impacts. If involuntary resettlement is to be carried out it would be carried out within the Resettlement Policy Framework of the UDA (The RPF executive summary is provided as Appendix 1). All land used for URP will be land owned by UDA or government agencies. In event that private land has to be acquired, national land acquisition process will be followed.

11. URP construction activity will not restrict any person's land use or access to legally designated parks or protected areas. No commons, wetlands, forest lands, or any other environmentally sensitive ecosystems will be acquired or used for URP activities.

12. URP-related activities will not have any impact on the *Vaddha* community (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. Their domains are not within or near any of the URP project locations.

III. LEGAL AND INSTITUTIONAL FRAMEWORK

A. Environmental Policy of Sri Lanka

13. The Constitution of Sri Lanka makes it "the duty of every person in Sri Lanka to protect nature and conserve its riches". The policy aims to promote the sound management of the environment while balancing social and economic development needs. It aims to manage the environment by linking together the activities, interests and perspectives of different stakeholders with equitable sharing of benefits and costs. It emphasizes participation, transparency and public accountability in the management of natural resources. The policy emphasizes that environmental sensitivity is an obligation of any institution, government or non-government, and of any individual of Sri Lanka that uses or carries out any activity that has an impact on environmental resources. All are required to exercise due care to avoid environmental degradation.

14. 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.

15. 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.

16. 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 inter-institutional 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.

B. The Constitution of Sri Lanka

17. 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).

C. Main National Laws and Regulations Applicable

18. The main environmental legislations that are applicable under the URP are the National Environmental Act (NEA) and its amendments and the Cost Conservation Act (CCD). These two determine the level of environmental examination required and categorization of projects in the country. Other related relevant laws include the Sri Lanka Land Reclamation and Development Cooperation Act and its amendments which become important in the protection of low lying areas and water bodies especially relevant to the URP subproject locations. All the above and other relevant laws are summarized in Appendix II.

19. Under the 13th Amendment to the Constitution of Sri Lanka, the approval process falls under the Local Authority. The Urban Development Authority Amendment Act No. 04 of 1982 makes UDA the governing body for any development activity within a declared urban development area and thereby requires approval from UDA under the provisions given under Development Authority Act No. 41 of 1978. Subsequently UDA delegated the authority of giving approvals for development activities to the respective local authorities under the direction, supervision & control of UDA. This will be applicable for URP activities. ICTAD Regulations proposed by the Construction Industry Development Authority under the Ministry of Housing and Construction are key national regulations that will be followed during construction.

20. Other applicable laws and regulation include those associated with resettlement (discussed separately in the RPF) which is very significant under the URP. Occupational and safety regulations are important considerations under URP during demolition and construction activities and these include the National Institute of Occupational Safety and Health Act (mainly addressing mosquito vectors), Municipal Council Act which deals with public health and waste collection and disposal. The Condominium Management Authority Law will become relevant once the operation of the URP apartments is transferred from UDA. Sri Lanka has signed and ratified the ILO Convention 138 on the Minimum Age for Employment and C182 on the Worst Forms of Child Labor which would not allow anyone under the age of 18 to be employed at the construction sites. The other main law that is relevant to employment of children is The Employment of Women, Young Persons and Children' Act (EWYPC) 2003 and Amendment in 2006, which is in line with the ILO Convention with exceptions for family engagement. All the relevant laws are summarized in Appendix II.

D. Environmental Assessment Process in Sri Lanka

21. Environmental assessment is primarily concerned with assessing direct and indirect impacts of a project/subproject on the biophysical and human environment. The assessment process also ensures that any impacts on the natural environment and the people that live and use it are addressed by adopting appropriate environmental protection and mitigation measures. This system supports project proponents in incorporating environmental considerations from the onset at the project planning stage through to the implementation.

22. The laws, rules, and procedures for environmental assessment (including IEE, EIA, EPLs, etc.) for any project/subproject are provided under the NEA and its implementing regulations. These are executed by the CEA except for coastal areas which come under CCD. 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 in terms of scale or environmental sensitivity. The types of projects that need EIA are listed in the Gazette

Extraordinary No 772/22and No 1104 of 1993. The project approving agencies (PAA) are listed in Gazette Extraordinary No 859/14 of 1995 in which ministries with 14 subject areas (e.g., forest, energy, etc.) and eight statutory bodies have been identified. This legislation prescribed 31 categories of projects ("prescribed projects") that need environmental assessment. These projects irrespective of size if located in the coastal zone will undergo the approval process that is laid down in the Coast Conservation Act. However, projects located outside the coastal zone will be subjected to the approval process laid down in the NEA. In addition, all industrial projects that are located close to environmental, archaeological, or culturally sensitive areas require full environmental impact assessments irrespective of their magnitude.

23. Any prescribed project submitted for approval requires submitting either an Initial Environmental Examination (IEE) report or Environmental Impact Assessment (EIA) report. The prescribed projects which do not have complex environmental issues require an IEE report while the projects which involve complex environmental issues require an EIA report. EIA / IEE process involves 6 major steps as identified by CEA

(i) screening
(ii) scoping
(iii) preparation of the EIA / IEE report
(iv) review of the report (by the public and the PAA)
(v) approval with terms and conditions or rejection with reasons
(vi) post approval monitoring. The step wise process has been defined in the EIA regulations which have been published in the Gazette No. 772/22 of 24.06.1993

24. Project proponents prepare EIA or IEE with the help of specialists according to an approved TOR. The EIA or IEE report will be submitted to PAA in English for review and approval. These reports will thereafter be translated into Sinhala and Tamil for public disclosure for comments and suggestions. The PAA will notify the public via 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. It will also disclose the location where it could be examined. Comment and suggestion from the public will be taken into consideration in approving or rejecting the project proposal. An EIA/IEE can be approved subject to conditions which are to be met by the project proponent within the stipulated timeframe. In event the project is rejected, an appeal by project proponents is allowed. If the project is approved, project proponents and PAA will monitor the implementation of ESMP throughout the project cycle. If the project is controversial, PAA or CEA may decide to conduct public hearings on the project and the environmental assessment. PAA or CEA can also initiate a public hearing to verify the environmental assessment facts, findings, and suggested mitigation measures.

25. In addition to the IEE/EIA process, under the NEA certain activities require an Environmental Protection License (EPL). The Gazette Notification No.1533/16 dated 25.01.2008 identifies all prescribed activities that have to obtain an EPL. Whilst the EIA process takes place during project planning, the EPL process technically commences with a formal application one month prior to the commencement of operation.

26. 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. Environmental assessment process has succeeded in introducing mechanisms for transparency, consultation, and disclosure of environmental assessment reports, their results and monitoring reports. One drawback is that all disclosed reports are kept in a notified location as a hard copy which may not be easily accessible to all. However, under donor financing, disclosure of documents on the web is becoming more prevalent.

27. The URP subprojects are unlikely to fall within the "prescribed" category of projects as all are within an urban built up setup. The subproject locations focus on underserved areas that are expected to benefit in terms of the environmental and social conditions for the affected people. All adverse environmental impacts associated with demolition and construction activities are essentially temporary and minimal and those that can be mitigated appropriately. Environmentally sensitive or culturally sensitive areas will not be acquired for URP development activities.

E. AIIB's Environmental and Social Policy and Standards

28. Under the AIIB loan to support Phase II or the URP, UDA will satisfy not only the local environmental laws and regulations, but also the Environmental and Social Policy (ESP) and Standards (ESS) of AIIB. Under URP, ESS 1: Environmental and Social Assessment and Management and ESS 2: Involuntary Resettlement are likely to be triggered. The ESMPF will address ESS 1 and the RPF will address ESS 2. Standards on Indigenous Peoples (ESS 3) will not be triggered under URP.

29. The AIIB ESP recognizes that environmental and social sustainability is a fundamental aspect of achieving outcomes consistent with its mandate to support infrastructure development and enhance interconnectivity in Asia. The objective of this overarching policy is to facilitate achievement of these development outcomes, through a system that integrates sound environmental and social management into projects. The ESP sets forth mandatory environmental and social requirements for each Project. The ESP and the ESSs provides an environmental and social management approach designed to:

i. Support decision-making by the Bank.
ii. Provide a robust structure for managing operational and reputational risks of the Bank and its shareholders in relation to environmental and social risks and impacts in Projects.
iii. Provide for environmental and social screening and categorization of Projects.
iv. Analyze potential environmental and social risks and impacts of Projects. Identify actions to avoid, minimize, mitigate, offset or compensate for environmental and social impacts of Projects.
v. Support integration of environmental and social management measures into Projects.
vi. Specify environmental and social management provisions to be included in agreements governing Projects.
vii. Provide a mechanism for public consultation and disclosure of information on environmental and social risks and impacts of Projects.
viii. Provide for monitoring and supervision of environmental and social management measures under Projects.
ix. Facilitate development and dissemination of lessons learned from Projects to improve environmental and social management practices.

30. The Bank requires each Client (UDA) to manage the environmental and social risks and impacts associated with its Project/subprojects in a manner designed to meet the ESP and the applicable ESSs in accordance with the Environmental and Social Management Plan (ESMP), and Environmental and Social Management Framework (ESMPF). ESMPs will be developed for all subprojects under Component 1 (6 subprojects to be identified) and Component 2 (10 plus subprojects to be identified) following the ESMPF that outlines all required considerations. All subprojects are expected to be Category B with some subproject sites under Component 2 expected to have some environmental liabilities which will require special attention (an example is 87 Watte which is next to the Blomendale Garbage Dump).

31. All projects/subprojects will be screened to determine the nature and level of the required environmental and social review, type of information disclosure and stakeholder engagement for the

Project. The categorization takes into consideration the nature, location, sensitivity and scale of the Project, and is proportional to the significance of its potential environmental and social risks and impacts. As part of this process, the Bank also screens the Project to determine which of the ESSs applies. The Bank determines the Project's category by the category of the Project's component presenting the highest environmental or social risk, including direct, indirect, cumulative and induced impacts, as relevant, in the Project area. The Bank conducts a review of environmental and social risks and impacts associated with the Project, regardless of the categorization being considered. As an element of the categorization process, the Bank may conduct field-based review of the Project to provide for a refined understanding of the environmental and social risks and impacts and support the Client's preparation of a site-specific approach to assessment of these risks and impacts. The Bank may adjust the categorization during the life of the Project, if warranted by changes in the environmental and social risks and impacts.

32. Category A. If it is likely to have significant adverse environmental and social impacts that are irreversible, cumulative, diverse or unprecedented. These impacts may affect an area larger than the sites or facilities subject to physical works and may be temporary or permanent in nature. This would require an environmental and social impact assessment (ESIA) or equivalent environmental and social assessment including an ESMP. URP will be classified as A due to involuntary resettlement which is the higher impact than on the environment.

33. Category B. When: it has a limited number of potentially adverse environmental and social impacts; the impacts are not unprecedented; few if any of them are irreversible or cumulative; they are limited to the Project area; and can be successfully managed using good practice in an operational setting. This requires an initial review of the environmental and social implications of the Project.

34. Category C. When it is likely to have minimal or no adverse environmental and social impacts. The Bank does not require an environmental and social assessment, but does require the Client to conduct a review of the environmental and social implications of the Project.

35. Category FI. If the financing structure involves the provision of funds to or through a financial intermediary (FI) for the Project, the Bank delegates to the FI the decision-making on the use of the Bank funds, including the selection, appraisal, approval and monitoring of Bank-financed subprojects. The Bank requires the FI Client, through the implementation of appropriate environmental and social policies and procedures, to screen and categorize subprojects as Category A, B or C, review, conduct due diligence on, and monitor the environmental and social risks and impacts associated with the Bank-financed subprojects, all in a manner consistent with this ESP. For further details on categorization visit https://www.aiib.org/en/policies-strategies/_download/environment-framework/20160226043633542.pdf.

F. Comparison of the National Environmental Policy and AIIB Environmental and Social Framework

36. The National Environmental Policy and Statement is comprehensive and addresses all relevant aspects of environment protection, environmental sustainability and enforcement. The Policy is essentially in line with the AIIB ESP and Framework.

37. The composite government environmental clearance process, in principle, is consistent with the AIIB 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. However, there is a difference in classification criteria of projects where some of the non-prescribed projects under the national legislation get A or B classification under the Banks ESP.

38. Because of the exclusion of significant adverse environmental impacts from URP, demolition and construction activities may get categorized under the local environmental regulatory framework as non-prescribed subprojects requiring no further environmental assessment. Subprojects that are categorized as “prescribed” projects will be required to carry out IEEs, not EIAs, given their anticipated impacts are non-significant and minor. Although the local environmental assessment system applicable to URP is broadly similar to the environmental assessment procedures outlined in the AIIB Environmental and Social Framework, site selection, due diligence, design, consultation, disclosure, and monitoring and evaluation of its subprojects will be carried out in conformity to this ESMPF. This will ensure that URP subprojects comply with both local and AIIB environmental and social safeguard requirements.

39. Under URP, all subprojects projects will be screened and categorized using the ESMPF checklists (see Appendix III for checklists). All subprojects will have to undergo and environmental easement and an ESMPF prepared and implemented.

40. Sri Lanka’s environmental assessment display some weaknesses and deficiencies for which some gap-filling measures will be adopted from AIIB’s environmental and social framework and policy. As per the 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 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 can partly be resolved by public consultations. Such a 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 the UDA ESMP. Consultations must be conducted periodically starting from project planning through implementation.

41. The serious consideration of reasonable alternatives is a powerful feature in the environmental assessment process. However, in the local context, sometimes, 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 a “no-project” alternative, and also by considering subproject design, location, and technology alternatives. Under URP, it is unlikely that there would be a need to consider reasonable alternatives as subprojects are in already developed lands.

42. The NEA and related laws consider the primary project area to identify its potential impacts and to prepare a TOR for environmental assessment. The ESP considers 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 local environmental assessment needs to be expanded to a subproject’s area of influence encompassing

(i) primary subproject sites; (ii) related facilities that URP 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.

43. The local environmental regulatory framework also does not require a due diligence or environmental audit to check existing facilities at a subproject site(s) if any. to determine whether they could cause or is causing environmental risks and impacts. AIIB requires Due Diligence requires:

(a) The identification of all key potential environmental and social risks and impacts of the Project;
(b) Project design and ESMP to incorporate effective measures to avoid, minimize, mitigate, offset or compensate for the adverse impacts;
(c) The understanding of the ESP and ESSs by the Client and has the commitment and capacity, or has made arrangements to strengthen its capacity, necessary to manage the Project's environmental and social risks and impacts adequately;
(d) The role of third parties to be appropriately defined in the ESMP; and
(e) Consultations with affected people are conducted in accordance with requirements of the ESP and ESSs.

44. Also as part of its due diligence, AIIB will: (a) assess whether the Project can be implemented in accordance with the ESP and ESSs; (b) assess the Project's potential reputational risks to the Bank: and (c) consider the costs and responsibilities for mitigation and monitoring measures; and (d) review the timing of mitigation and monitoring activities in the schedule for implementation of the Project. The Bank may retain independent consultants to assist in its due diligence.

IV. ENVIRONMENTAL BASELINE INFORMATION

A. Area of Influence

45. The URP subprojects will all be located within the city limits of Colombo and some of its suburbs (including Sri Jayawardenapura Kotte and Dehiwala Mount Lavinia). Colombo's urban area extends beyond the boundaries of Colombo Municipal Council, encompassing other municipal and urban councils such as Sri Jayawardenepura Kotte Municipal Council, Dehiwala Mount Lavinia Municipal Council, Kolonnawa Urban Council, Kaduwela Municipal Council and Kotikawatte Mulleriyawa Pradeshiya Sabha. Colombo's geography is a mix of land and water. The city has many canals and, in the heart of the city, sits the 65-hectare Beira Lake. The lake is one of the most distinctive landmarks of Colombo, and was used for centuries by colonists to defend the city[1]. The Northern and North-Eastern border of the city of Colombo is bounded by the Kelani River, which meets the sea at Moderai which means river delta. A large part of Colombo is below the 30 meter mean sea level and, some areas in the east of Colombo are below sea level. Rivers (essentially Kelani) are supplemented by numerous canals either draining the rainwater from the low-lying land or constructed for water transportation purposes (The case of Colombo, Sri Lanka, by Sevanatha)

46. Colombo is a multi-religious, multi-ethnic and multi-cultural city. The population of Colombo is a mix of mainly Sinhalese, Tamils and Muslims. As at the last census in 2012, According to the 2012, Colombo's population is 2,324,349. Among them 1,140,472 were male and 1,183,877 were female.

[1] The lake in the middle of Colombo, *Lanka Library*

Table 1: Census population numbers and average annual growth rate for the Western Province[2].

Census Population	1953	1963	1971	1981	2001	2012
Sri Lanka	**8,097,800**	**10,582,100**	**12,689,897**	**14,846,750**	**18,797,257**	**20,263,723**
Western Province	**2,232,276**	**2,838,877**	**3,401,779**	**3,919,807**	**5,381,197**	**5,821,710**
Colombo District	1,708,726	2,207,420	1,498,393	1,699,241	2,251,274	2,309,809
Gampaha District*			1,173,872	1,390,862	2,063,684	2,294,641
Kalutara District	523,550	631,457	729,514	829,704	1,066,239	1,217,260
Average Annual Growth Rate		**'53-'63**	**'63-71**	**'71-'81**	**'81-'01**	**'01-'12**
Sri Lanka		**2.71%**	**2.30%**	**1.58%**	**1.19%**	**0.69%**
Western Province		**2.43%**	**2.29%**	**1.43%**	**1.60%**	**0.72%**
Colombo District		2.59%	2.42%	1.27%	1.42%	0.23%
Gampaha District*				1.71%	1.99%	0.97%
Kalutara District		1.89%	1.45%	1.30%	1.26%	1.21%

Note:* Gampaha district was declared as a new administrative district, separated from Colombo District in 1978.
Source: Census of Population and Housing 2001 and 2012, Department of Census and Statistics

B. Land Use

47. The land use pattern in Colombo is urban with predominately mixed development. In the Colombo Municipal Council (CMC) area, business and commercial land use areas are concentrated around Fort, Pettah, Maradana, Kolupittiya, and Borella and along the Galle Road. Large scale government and institutional facilities are seen around the Cinnamon Gardens and Maradana areas with many small ones being scattered around the city. Parks and playgrounds are predominant the Cinnamon Gardens where rich green environments can still be found. The northern parts of the city show that the lands are used in a mixed manner whereas, residential uses predominate the southern part of the city. Almost 42 % is residential land use, 3.5% is dedicated to commercial use and 4.5% to business use. Beyond the CMC area, the residential use increases. Other important uses are educational facilities and government/institutions with each occupying more than 5% of the CMC. Wetland areas including water bodies also occupy around 5%. Table 2 provides a summary of land use in Colombo[3].

[2] Department of Census and Statistics, 2012
[3] Urban Transport Master Plan

Table 2:.Land use breakdown for Colombo

Land Use Classes	Colombo DSD (km^2)	Thimbirigasyaya DSD (km^2)	Colombo Municipal Council (km^2)	Share (%)
11- Commercial	0.7	0.7	1.4	3.5%
12 - Residential	5.4	11.5	16.9	41.9%
13 - Business	1.1	0.7	1.8	4.5%
14 - Health	0.1	0.4	0.5	1.2%
15 - Education	0.7	1.7	2.4	6.0%
16 - Industries / Distribution	2.2	0.5	2.7	6.7%
17 - Government / Institutions	0.7	1.3	2.0	5.0%
18 - Transport	2.5	0.2	2.7	6.7%
19 - Other Built-up Land	0.3	0.7	1.0	2.5%
21 - Open Land	0.8	1.8	2.6	6.5%
22-1 - Wet Land	0.3	0.1	0.4	1.0%
22-2 - Water Bodies	1.5	0.3	1.8	4.5%
23 - Roads	1.6	2.5	4.1	10.2%
Total	17.9	22.4	40.3	100.0%

Source: CoMTrans Study Team

C. Environmental parameters

48. **Climate**. The climate of the city is warm and humid for the greater part of the year. The mean temperature is 27°C and the mean rainfall is 2,500 mm/year. The only major change in the Colombo weather occurs during the monsoon seasons from May to August and October to January. This is the time of year where heavy rains can be expected. Rainfall in the city averages around 2,500 mm/year [4].

49. **Ambient water quality** – There are no set regulations regarding ambient water quality in Sri Lanka. There are several agencies such as the Sri Lanka Standards Institute (SLSI) that have issued standards for. CEA does not have onsite standards however, they can take legal action for polluting the environment. Studies carried out by the NWSDB show that the urban canal systems (relevant under URP) are highly polluted with excessive levels of *E.coli*, COD, BOD and TSS parameters[5].
URP subprojects will adhere to wastewater quality standards provided by SLSI (see Table 3) for any discharge of wastewater to ensure no further contribution to the degradation of the ambient water quality

[4] https://en.climate-data.org/location/944/#temperature-graph
[5] NWSDB 2014 (researched by University of Peradeniya). http://wepa-db.net/activities/2014/20141127/pdf/2_3_WEPA%20Gemunu%20Herath%20Final%2028-11-14.pdf

of Colombo. Any release of sanitary sewage discharge should conform to IFC-WB EHS standards. This is in line with the AIIB ESP requirements. See Table 4 for standards

Table 3: Waste water quality standards provided by SLSI (in line with European Standards)

Parameter	**Unit**	**Bathing Water**	**Raw water for Drinking**	**Agriculture Water**
Colour	Pt units.	-	100	-
pH	-	6.0-9.0	6.0-9.0	6.0-8.5
Conductivity	dS/m	-	-	0.7
Nitrates	mg/l	5	5	5
Total phosphate	mg/l	0.7	0.7	0.7
BOD5	mg/l	4	5	5
Total coliform	MPN/100 ml, (*P=95%)	1000	5000	1000
Fecal coli form	MPN/100 ml, (*P=95%)	50	-	-
Aluminum	mg/l		0.2	0.5

Table 4: Sanitary sewage discharge water quality standards comparison

NEA standards Tolerance limits for discharge of effluents into public sewers with central treatment plants			IFC-WB EHS Guidelines 2007 Indicative Values for Treated Sanitary Sewage Discharges	
	Unit type of limit	Tolerance limit values	Units	Guideline Value
pH			pH	6-9
BOD	mg/1, max.	350	mg/l	30
COD	mg/1, max.	850	mg/l	125
Total nitrogen	mg/1, max.	500	mg/l	10
Total phosphorus			mg/l	2
Oil and grease	mg/1, max.	30	mg/l	10
Total suspended solids	mg/1, max.	500	mg/l	50
Total coliform bacteria			MPNb / 100 ml	400a

50. **Ambient air quality:** Studies carried out in 2016 show that highest values of ambient air quality are observed in high traffic congested areas compared to other surrounding areas typically indicative of Colombo city. Average levels of SO_2 and NO_2 within the 24-hour average of National Ambient Air Quality standard levels (issued by CEA, see Table 5). However, the average NO_2 and SO_2exposure levels in Colombo exceeded the annual WHO Guideline levels[6]. The main source of ambient air pollution in Sri

[6] VET Project of RMV, NBRO 2106

Lanka is vehicular emissions, which contributes to over 60% of total emissions in Colombo[7]. URP under AIIB support will adhere to the IFC-WB EHS Guidelines 2007 (see Table 5).

Table 5. Ambient air quality standards comparison

	NEA standards		IFC-WB EHS Guidelines 2007	
	Averaging Period	Guideline value in **m**g/m3	Averaging Period	Guideline value in **m**g/m3
Sulfur dioxide (SO2)	24 hrs	80	24hrs	125 (Interim target-1)* 50 (Interim target-2) 20 (guideline
Nitrogen dioxide (NO2)	24hrs	100	1-year 1-hour	40 (guideline) 200 (guideline)
Ozone	8-hour daily Maximum	-	8-hour daily Maximum	160 (Interim target-1) 100 (guideline

51. **Ambient Noise**: Ambient noise levels recoded within the City of Colombo currently exceeds the national ambient standards and has been identified as a cause for concern. Recoded noise levels in Colombo indicate ranges from 76.6dB (at BOC roundabout, Colombo 12) to 84.0dB (at Lipton's roundabout, Colombo 07), well above the maximum permissible noise level (63dB) for municipal council areas. All recorded values were more than 80dBs in Colombo 5, 9, 10, 13 and 14 with the median value at 81.0dB. Environmental noise levels in Colombo city are well above (13.3dB to 21.0dB) the levels recommended in the National Environmental (Noise pollution) Act of Sri Lanka and the WHO recommendation of 55.0 dB (an increase of 21.6 to 29.0 dB)[8][9]..Therefore URP activities are not anticipated to create a major impact however, under AIIB recommendations, all subprojects will adhere to the IFC-WB EHS Guidelines 2007 guidelines on noise also in line with the WHO standards which override the national requirement (see Table 6)..

Table 6. Ambient noise standards

NEA standards			IFC-WB EHS Guidelines 2007	
	Day time 6am-7pm	Night time7pm-6am	Daytime 07:00 - 22:00	Nighttime 22:00 - 07:00
Commercial Areas	65	55	70	70
Industrial Area	70	60	70	70
Mixed Residential/ Residential; institutional; educational55	63	55	55	45

[7] Yatagama Lokuge S Nandasena, Ananda R Wickremasinghe, and Nalini Sathiakumar.2010. Air pollution and health in Sri Lanka: a review of epidemiologic studies.

[8] *Environmental noise levels in the city of Colombo, Sri Lanka*. Available from: https://www.researchgate.net/publication/280625108_Environmental_noise_levels_in_the_city_of_Colombo_Sri_Lanka 2013

[9] *Environmental Pollution by Traffic Noise in the City of Colombo, Sri Lanka*. Available from: https://www.researchgate.net/publication/305431182_Environmental_Pollution_by_Traffic_Noise_in_the_City_of_Colombo_Sri_Lanka 2016

D. Cultural heritage and recreational sites

52. As part of the Urban Regeneration Program of the Government of Sri Lanka, many old sites and buildings within the Colombo city were renovated to modern public recreational spaces and shopping precincts. These include Independence Memorial Hall Square, Pettah Floating Market and Old Dutch Hospital among others. In all instances the old colonial heritage is maintained. Though there are no declared heritage sites declared in Colombo, there are many buildings that have been declared under the list of Archaeological Protected Monuments in Colombo District. These include the Colombo Dutch Museum, Colombo Post Master General Office Building, Elihouse ancient water tanks, Gafoor building, Maligawatte Muslim Cemetry, Obeysekera Walauwa, Gangarama Temple, etc (Wikipedia). The full list of buildings and locations can be accessed at https://en.wikipedia.org/wiki/List_of_Archaeological_Protected_Monuments_in_Colombo_District. When carrying out the ESIAs for the subprojects, it is important to identify if any of these sites are within close proximity and to take adequate precautions not to cause any impacts on them.

53. The most significant recreational areas in Colombo include the Galle Face Green which is located in Colombo 3 near the heart of the city along the Indian Ocean. It is a popular destination for tourists and residents alike. The Galle Face Hotel is a historic landmark on the southern edge of this promenade (https://en.wikipedia.org/wiki/Colombo). The Viharamahadevi Park (formerly Victoria Park) is an urban park located next to the National Museum of Colombo and the Town Hall. It is the oldest and largest park in Colombo and features a large Buddha statue.

V. ANTICIPATED ENVIRONMENTAL IMPACTS OF URP

54. Anticipated environmental impacts under the URP are primarily expected during the demolition and construction phases. Some of the primary anticipated environmental impacts and risks are summarized below. Appendix IV (ESMP) provides a detailed identification of potential environmental and social impacts and potential mitigation measures:

(i) **Site clearance and preparation.** The sites for the development of apartment complexes for the underserved may pose environmental impacts mainly where there is demolition. These impacts revolve around occupational safety issues, disposal of asbestos, and disposal of general demolition waste. During site preparation, waterways can get blocked. This is essentially important as the project area is (Colombo and immediate suburbs) are predominantly low lying with network of canals that function as the storm water drainage system. 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 waterways, paddy lands, rivers and low lying areas causing sedimentation. Storm water congestion on site can create inconveniences to construction work. Also waste water generated during construction and from labor camps can contaminate surface waters if not properly managed.

(iii) **Noise generation.** Demolition and construction of structures cause noise, especially when demolishing buildings and loading and transporting materials. This may become a nuisance to residents living close to the construction sites. It can also be an occupational safety hazard to the workers. Special attention should be paid in instances of sensitive

locations (schools, hospitals, places of religious worship, etc.) within close proximity to the site.

(iv) **Dust generation.** Demolition of buildings will generate dust as will loading and transportation of debris. Transportation, storage of new building material, and certain construction activities such as grinding and tiling also generate dust. Dust pollution will pose health hazards to workers at sites, and residents in the vicinity. Special attention should be paid in instances of sensitive locations (schools, hospitals, places of religious worship, etc.) within close proximity to the site.

(v) **Transport.** Transportation of building materials to and from the site will create noise, dust, and disturbances. Open trucks with sand, gravel, and cement could be main sources of such pollution. Transportation on narrow roads may hinder travel and accessibility to other residents and road users. Also, transportation of construction material may damage roads being used.

(vi) **Exposure of construction workers to occupational hazards.** Construction workers are exposed to occupational hazards, if proper safety procedures are not followed. Also, if adequate protective measures are not adopted including using protective gear such as hard hats, eye protection, gloves etc., it can lead to accidents and injuries.

(vii) **Contamination of groundwater and surface water.** Wastewater and sewage can contaminate and further degrade the natural surface and ground water system in Colombo and suburbs, if they are not treated or channeled to appropriate disposal pits, treatment plants or the central sewer system. This risk is particularly high as under URP, the volume generated would be very high.

(viii) **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 environments 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. Domestic waste generation from labor camps and thereafter during the operation of the apartment complexes can also lead to environmental pollution unless properly managed. The waste generation volume anticipated from the operation phase is high and may lead to severe pollution issues and associated heath issues unless planned and managed form the onset.

(ix) **Poor sanitary conditions.** Inadequate and nonfunctional washing and toilet facilities may expose construction workers to health risks. A shortage of clean drinking water will result in dehydration. Stressed conditions may arise unless the sites are planned to avoid shortages of clean water supply including potable water. During the operation phase, poor sanitary conditions within the apartment complexes may arise due to lack of awareness and due to the time taken to adjust to the new lifestyle. Poor sanitation and cleanliness may lead to associated diseases/illnesses and unpleasantness.

(x) **Contaminated lands.** If contaminated lands are considered for development either in Component 1 or 2 where there may be major garbage issues, special attention should be given to cleansing of the land and appropriate disposal of the garbage to ensure there is no further environmental pollution. Under Component 2, if there are any land fill sites being considered, special plan should be developed with **additional expertise** on landfill site development and also on appropriate shift of the land fill material to other sites. Unless these are carried out it will lead to continued environmental pollution of surrounding waterways of existing site, may lead to accidents associated with landfills (gas build up etc), and may lead to environmental degradation of the new site (to which it is to be moved).

(xi) **Labor camps.** Issues such as child labor, discrimination between ethnic groups/ origin of labor source and labor camp management may arise. Special attention should be paid if labor is brought in from other areas of the country as they will require accommodation, transport, etc. All laws on child labor will be applicable and good housekeeping practices including cleanliness and equity among all workers will be have to be practices to ensure smooth functioning.

(xii) **Resource extraction.** The planned infrastructure development under URP 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 the geography and geology of the land and on the natural resources.

(xiii) **Aesthetics of site and/or area.** Demolition and new development could have some impact on aesthetic and scenic characteristics of the environment. Anticipated disturbances to current aesthetics will be temporary and limited to the construction phase. Under URP, this impact is expected to be positive as in most instance underserved areas are being liberated and improved housing is provided with provision for landscaping and improvement of the environment.

(xiv) **Lack of adherence to set standards.** Unless required building standards and protocol are followed stringently, there can be structural faults in the apartment complexes. This can lead to safety issues such as structural instability, fires, etc. These are long term impacts that will eventually cost more to undue if done inadequately at the onset. Unless energy and resource saving technologies of good quality are adopted it will lead to an excessive drain on the countries resources as these apartment complexes will be heavily used areas.

(xv) **Lack of maintenance in developed infrastructure.** The lack of adequate funds and a proper mechanism to maintain the apartment complexes including the common areas can lead to their rapid deterioration.

55. 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.

VI. ENVIRONMNETAL MANAGEMENT PLANNING FRAMEWORK

A. Screening and Categorization of Subprojects

56. During the identification and screening of subprojects, the screening and categorization will be carried out as identified in the AIIB ESP. Screening and categorization forms to be used are provided in Appendix III. These will assist in the identification of any potentially significance environmental impacts of the 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 URP will be as provided is section III E (above):

B. Guidelines for the Preparation of Environmental and Social Impact Assessment

57. The main steps in carrying out an Environmental and Social Impact Assessment (ESIA) are

outlined below to be in line with AIIB's ESP. The scope of the ESIA may vary from subproject to subproject based on the environmental impact it has and the scale of the subproject. 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 Environmental and Social Exclusion List of AIIB (see Appendix V) will be excluded, as they will not qualify under AIIB financing. An ESIA should consist of the following components.

(i) Executive summary: describes the critical factors, significant findings, and recommendations.

(ii) Description of the subproject— major components such as demolition and construction activities.

(iii) Summary of applicable environmental policies, laws, regulations, and AIIB's safeguard policy principles that are likely to be triggered by the subproject. (ESIA could refer to the ESMPF without reiterating environmental policy and regulatory framework.)

(iv) Environmental and Social Assessment.

- Conduct an environmental and social assessment for the subproject to identify direct, indirect, cumulative and induced risks and impacts to physical, biological, socioeconomic and cultural resources in the subprojects area of influence; these include impacts on air and water quality, including environmental health; natural resources, including land, water and ecosystems; livelihoods; vulnerable groups; gender; worker and community health and safety; and cultural resources.
- Assess potential trans-boundary and global impacts, including climate change as they relate to the subproject;
- Ensure that the scope and depth of the assessment reflects the magnitude of the subproject's potential risks and impacts and the categorization assigned by the Bank;
- Apply a mitigation hierarchy in the environmental and social assessment, by: (a) anticipating and avoiding risks and impacts; (b) where avoidance is not possible, minimizing or reducing risks and impacts to acceptable levels; (c) once risks and impacts have been minimized or reduced, mitigating; and (d) where residual risks or impacts remain, compensating for or offsetting them, where technically and financially feasible; and
- As part of the environmental and social assessment, conduct an assessment of its legal obligations under national law (including international agreements that are relevant) applicable to the subproject.

(v) Examination of alternatives is a key component of an IEE. Under URP, 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. With and without project scenarios will be examined. Under URP subprojects the examination of alternative locations may not be necessary as they are all previously developed sites with anticipated improvements to the location.

(vi) ESIA 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.

(vii) Potential impacts and mitigations. 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. The environmental coverage will be inclusive of:

- Environmental risks and impacts; Biodiversity considerations and impacts; Critical habitats; Protected areas; Sustainability of land and water use; Precautionary Approach; Pollution prevention; Resource efficiency; Climate change; and Greenhouse gases (refer ESS 1 guidelines on pg 32 of the environmental and social framework of AIIB)

The social coverage under the ESIA will be inclusive of assessing:

- Social risks and impacts; scope of social coverage; vulnerable groups and discrimination, gender and natural resource access; loss of access to assets or resources or restrictions on land use and cultural resources.

The ESIA will also consider working conditions and community health and safety and will cover:

- Safe working conditions and community health and safety; Child labor and forced labor; Building safety; and traffic and road safety.

These will be summarized and presented in the ESIA. The potential environmental impacts and risks will be reviewed against requirements of all applicable laws and regulations and AIIB's ESP. Environmental impacts and risks will also be analyzed for all phases of the project cycle.

(viii) 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.

(ix) The ESIA will describe the consultation process undertaken during project design to consult stakeholders, and to disclose subproject information. The ESIA 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 the plan for further consultations with stakeholders during subproject implementation.

(x) The ESIA will outline the grievance redress mechanism (GRM) for each subproject with potential environmental impacts. It will identify the guidelines for hearing complaints, the process of GRM, timeframe for hearing and decision making. The budget for the process will be determined by UDA at the onset of each subproject.

(xi) A detailed ESMP will be developed and provided as an appendix for each subproject

(xii) A short conclusion and a set of recommendations will be provided.

C. Guidelines for Preparing ESMPs

58. Having identified the potential adverse environmental impacts of a subproject, appropriate measures to eliminate, reduce or offset those adverse environmental impacts have to be identified. These should be guided by environmental best practices wherever possible. A detailed ESMP will be prepared for all subprojects under URP including those identified under Component 1 (new apartment complexes) and Component 2 (liberated lands identified for re-development). Under Component 1, ESMP will consider impacts of existing environment, demolition activities, preparation of land, construction activities and operation of apartments. Under Component 2, the ESMPs will focus on existing environment, demolition waste handling and actions required for land preparation/re-development. ESMPs for all subprojects will be completed prior to commencement of any subproject activities. ESMPs will be prepared after taking into account comments and recommendations from all subproject stakeholders. See

Appendix IV for an ESMP format/general ESMP which can be adopted for all subprojects with changes as required.

59. The ESMP will clearly indicate 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, implementation schedule, cost estimates, environmental monitoring and reporting requirements. The main components of the ESMPF are provided below.

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

61. Monitoring program: An environmental performance monitoring program will be a part of the ESMP. It will ensure that the proposed mitigation measures will have the intended results, and comply with national environmental standards and AIIB's ESP. The monitoring program will have the following components:

- monitoring indicators for evaluating the performance of each mitigation measure;
- monitoring mechanisms and methodologies;
- monitoring frequency;
- monitoring locations;
- safeguard compliance reporting; and
- budget

62. Institutional arrangements: Institutions/relevant department responsible for implementing the mitigation measures and for monitoring their performance will be clearly stated in the ESMP. Each agency will be notified of its specific TOR (e.g. Construction component of the ESMP will form part of the agreement with the Contractor).

63. Implementing schedules: Timing and frequency of carrying out of mitigation measures will be given in the ESMP. It will be linked to the overall implementation schedule of the subproject.

64. Reporting procedures: Feedback mechanisms to inform relevant agencies and institutions on the progress and effectiveness of the mitigation measures will be specified in the ESMP.

65. Cost estimates and sources of fund: Implementation of mitigation measures outlined in the ESMP will involve an initial investment cost as well as recurrent costs. The ESMP should include costs estimates for each mitigating measure and should also identify source of funding (to be provided by UDA). Currently, such a mechanism is unavailable; however, UDA will look into preparing separate cost estimates for the implementation of the ESMP especially under the planning, design, demolition and operational phases.

66. Other Specifications in ESMP: To avoid illegal extraction of resources for construction, ESMPs will include clauses to ensure that sand, clay, and timber are obtained from authorized locations and sources only. All building construction will adhere to current building and other applicable Codes of Practice (COP) in Sri Lanka. To ensure that building contractors comply with the COP, issued by the Institute of Construction, Training and Development (ICTAD), the following COPs will be included in the contract documents: In addition, Appendix VI provides environmental safeguard requirements in contracts. This will be incorporated in the construction Contractor's agreement.

Code of Practice Number	Activity

SCA/3/1	Irrigation and land drainage
SCA/3/2	Water supply, sewerage & storm water drainage
SCA/3/3	Reclamation works
SCA/3/4	Ground water exploration and exploitation
SCA/4	Building works (Vol. I)
SCA/4	Building works (Vol. II)
SCA/8	Electrical and mechanical works
Any other standard specification of the government	

D. Labor Management

67. Labor management during demolition, construction and land pre-development activities of URP Components 1 and 2 will be the responsibility of the awarded Contractor. Proper management of the labor workforce and potential labor camps will have to strictly enforced. This will have to be monitored to ensure that they are in compliance with the national regulation and that of AIIB and do not pose any risk or nuisance to the host community. All workers should be educated on the required code of conduct (including expected behavior, sexual harassment, discrimination, noise, theft, etc.) by the Contractor prior to commencement of work at the subproject sites. Labor force if brought in from outside, will have to be provided with adequate and appropriate labor camps. Labor camp settings and facilities will have to be draw up by the contractor and will have to the satisfactory of the Consultant Supervisor appointed by UDA.

68. In event that there are any, issues such as child labor, discrimination between ethnic groups/gender/ origin of labor source and labor camp management may arise. All laws on child labor will be applicable. Sri Lanka has signed and ratified the ILO Convention 138 on the Minimum Age for Employment and C182 on the Worst Forms of Child Labor which would not allow anyone under the age of 18 to be employed at the construction sites. The other main law that is relevant to employment of children is The Employment of Women, Young Persons and Children' Act (EWYPC) 2003 and Amendment in 2006, which is in line with the ILO Convention with exceptions for family engagement. Under the Sri Lankan regulations children between 14 and 18 are allowed to work provided they are low risk. Attendance of school is mandatory till they are 14 years of age, Women will be provided with equal opportunities to engage in the labor force and will be treated equally in in all term, regulations and rights. An appropriate code of conduct by the labor force will be expected and should not be violated under any circumstances (Appendix VI).

69. Good housekeeping practices including cleanliness and equity among all workers will be have to be practices to ensure smooth functioning. Contractor will have to prepare the Code of Conduct which will include a section on labor management (refer Appendix VI).

VII. STAKEHOLDER ENGAGEMENT AND CONSULTATION

70. Stakeholder engagement will be carried out by UDA from the onset of the project involving project-affected persons and communities under URP. The three main steps to be adopted for stakeholder engagement are:

- Identification of stakeholders. For each subproject, the affected persons will be identified (persons to be resettled, host community, relevant authorities such as local authority, SLLRDC, NWSDB, Fire Department, Condominium Authority, etc).

- Identification of methodology for effective stakeholder engagement. UDA will come up with a stakeholder engagement plan.
- Implementation of the stakeholder engagement plan in a timely manner. Consultation meetings have already been started with the persons to be resettled under the URP. Further, a stakeholder meeting will be held for the identified stakeholders to introduce the project and the processes to be adopted in November 2018.

71. Stakeholders will be informed about the subproject and the activities that will take place as part of the subproject. An awareness component will be carried out on the overall URP during the initial engagements. This may be carried out as part of the stakeholder consultation process. Their views, comments and any concerns will be entertained and addressed. UDA links with other relevant authorities will also be established through this process. The proceedings and outcome of such all stakeholder engagements will be recorded and they will be considered in the ESIAs and ESMPs for implementation.

72. Meaningful consultations will form an important part of the stakeholder engagement process. UDA will discuss draft ESIAs and ESMPs with project-affected persons and communities in event that they are identified as “prescribed projects” under the national legislations. Under URP, post subprojects will be “non-prescribed” however AIIB classification will require ESIA and ESMP. These documents will be disclosed on the web in all three national languages. UDA will engage subproject affected people in subproject planning, implementation, and monitoring. All subprojects will maintain a grievance and redress mechanism to uptake any complaints and issues during their implementation.

73. Meaningful consultation will:

- be started early in the preparation stage of the subproject and is carried out on an ongoing basis throughout lifecycle;
- ensure that all parties have a voice in consultation, including national and subnational government, the private sector, nongovernmental organizations and affected people;
- provide additional support as needed to ensure participation of women, elderly, young, disabled, minorities, and other vulnerable groups;
- provide timely disclosure of relevant and adequate information that is understandable and readily accessible to the people affected; and
- be undertakes in an atmosphere free of intimidation or coercion.

VIII. GRIEVANCE REDRESS MECHANISM AND INSTITUTIONAL ARRANGEMENTS

A. Grievance Redress Mechanism

74. At the state level, CEA will deal 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. Environmental complaints are often related to dust, noise, and water pollution arising from construction activities. Complaints pertaining to negative environmental 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 grieved party. A few grievances, reach the Court of Appeal for arbitration each year.

75. To overcome the need to go for formal grievance process, UDA will further strengthen its existing

GRM for URP. Currently Tier 1 and Tier 2 (see below for description) are functional. Tier 3 will be re-appointed before the commencement of the overall project. This GRM will receive and facilitate resolution of the affected people's concerns and grievances regarding the subprojects environmental performance. This will apply to all subprojects under of URP. 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.

76. The GRM to be adopted for environmental and social issues will form part of the overall GRM identified under the RPF to handle land and resettlement issues (refer RPF document for details). This mechanism is identified at four tiers and is summarized below:

- **Tier 1: Social Marketing Officer/Environmental officer at the field level**. Grievances can be addressed informally by contacting these officers through telephone or in person. If the grievance cannot be resolved informally, an aggrieved party must submit a complaint on the Tier I Complaint Form. If the complaint is resolved within 15 working days, the relevant Land and/or Social Marketing Officer will communicate the decision to the aggrieved party in writing. If the grievance cannot be resolved through Tier 1 to the satisfaction of the aggrieved party or if the issue is outside the authority of the Land and/or Social Marketing Officer/ Environment Officer, an aggrieved party may submit a complaint to the GRC on the Tier 2 Complaint Form.
- **Tier 2: Grievance Redress Committee (GRC) at the MMWD**. Principal contact will be the PMU Sociologist /Environment Specialist. The proposed composition of the GRC is DDG Planning (Chairman), Sociologist - PMU (Secretary), Legal Director or nominee (member), Additional Project Director Planning –PMU (member), Environmental Specialist – PMU (member). MMWD will forward all grievances to the PMU.PMU screens the grievance and determine if its related to URP. If it is unrelated, the aggrieved party must be notified in writing and the way forward must be outlined to them including the necessary government institutions for follow up. The Sociologist (Secretary) at the PMU will be the contact person in processing a grievance through the Second Tier. The PMU, if required, will discuss the matter with relevant institutions and attain views from them. The PMU will also arrange site visits and hold onsite discussions and meetings if deemed necessary. The response time has been identified at 15 days with a possible extension of a further 15 day. If the grievance is not resolved to the satisfaction of the aggrieved party within 15 working days of submission of the grievance to tier 2 then the aggrieved party may notify the MMWD, in writing, of the intention to move to tier 3.
- **Tier 3: Independent Grievance Panel (IGP).** Additional Secretary, Urban Development, MMWD will act as Chair and nodal person of the panel. The IGP will comprise of representatives from Ministry of Land and Land Development, Ministry of Women Affairs, Department of Valuation, The Central Environmental Authority, a lawyer, a retired senior government officer and a representative of a recognized Civil Society Organization. The IGP Chair will convene the panel members as and when a case is to be heard. The IGP will discuss the matter with relevant institutions, hold onsite discussions and meetings if deemed necessary. The response time will be 15 days with possibility of a further 15-day extension. IGP will inform PMU of the decision, who in turn will communicate the decision to the aggrieved party in writing.

- **Tier 4: Judiciary Power / Assistance to Vulnerable Persons beyond the Project's Grievance Redress Mechanism.** Judiciary system is an option for an aggrieved person and/or community in case that the other tiers have not been effective.

77. The GRM will be publicly displayed at the subproject site as well as the Condominium office at the field level. GRM will also be made available on the websites of URP and MMWD including contact details of the contact person in each tier to facilitate submission. All complaints forms will also be accessible online. Complaint forms may be sent by email to **pmuurpcc@gmail.com** sent by registered post addressed to the Sociologist, URP or in event the affected person is unable to submit a written complaint, he/she can come to the URP office and complain directly to the Project Director or the URP Sociologist. All submitted complaints will be channeled through a fully computerized database which will be set up prior to the commencement of the project that will be maintained by the PMU under the purview of the Project Director.

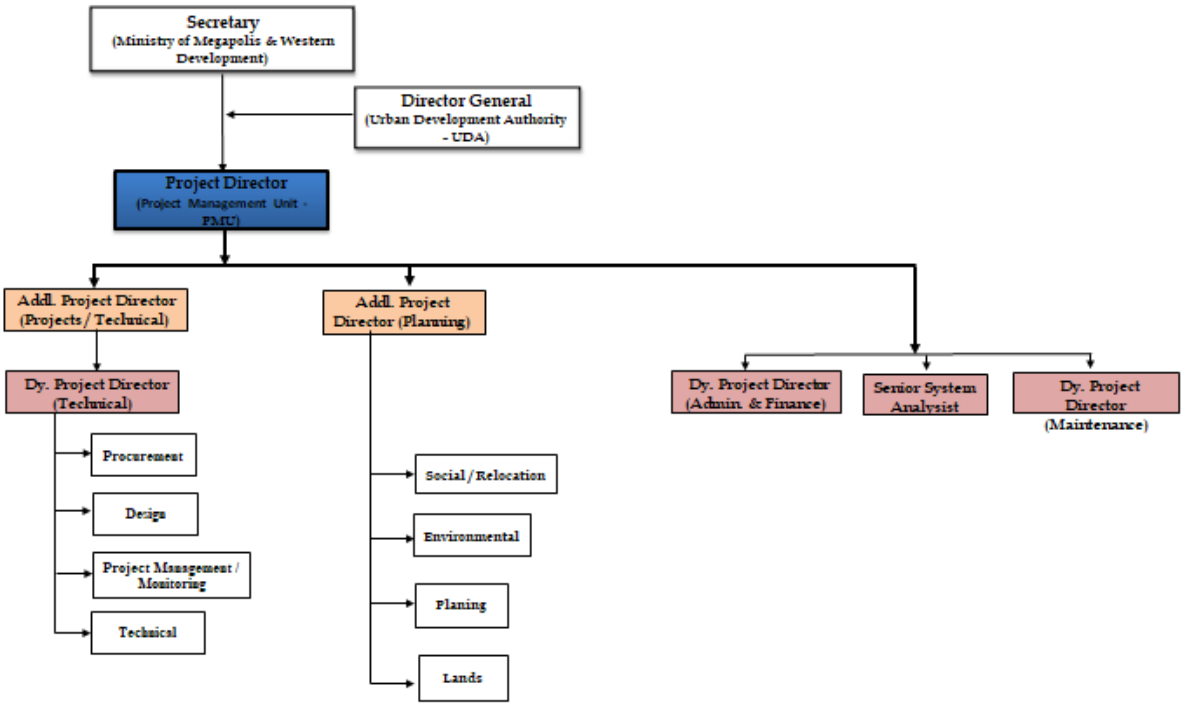
B. Institutional Arrangements

78. The institutional arrangement of UDA is provided in the figure below. Most of the environmental and social management activities related to this subproject will come directly under the Additional Project Director (Planning). Under the current setup, there is a well-established social division to carry out the social work related to the subprojects. However, it appears that some expert inputs may be required to guide this unit in survey development identification of necessary studies that are required.

79. The environment component is currently lacking, though 2 cadres have been identified (environment specialist and officer). UDA needs to recruit these cadres without delay. Upon recruitment, they may also require some level of capacity building unless they have worked in similar environments. The environmental team will have to be responsible for all reporting and monitoring activities.

80. During the defect liability period and the transition period thereafter (maximum 1 year) of the operation phase, The Building Manager coming under the Project Director (Maintenance) will also have a major role to play. He will have to be made aware of the requirement. The apartments will thereafter be handed over to the Condominium Management Authority where they will establish a Management Corporation for the maintenance.

Proposed Organization Structure - Project Management Unit (PMU)



81. The environment team will comprise an Environment officer and a Environment Specialist . The Environment Officer will be mobilized by November 2018. The Environmental Specialist will be called in as required on a Consultant basis. This team will be responsible for all environmental requirements and the implementation/monitoring of the ESMP. They will be responsible for ensuring inclusion of the construction section of the ESMP in contract documents of subprojects with potential environmental impacts. The team will also ensure that the contractors adhere to the implementation and mitigation measures listed in subproject ESMP section relevant to them. During demolition, land preparation and construction work, the Contractor will be responsible for implementing the ESMP under that component supervised by the Consultant Supervisor which will be further monitored by the URP environment team at regular intervals.

C. Monitoring and Reporting

82. UDA will ensure that environmental safeguard impacts and risks are adequately addressed. Monitoring of ESMP implementation and compliance will be the responsibility of UDA. The Environment team will:

(i) Establish and maintain procedures to monitor the progress of implementation of safeguard implementation plans. Under URP, the key safeguard implementation plan will be the ESMP of each subproject;

(ii) verify subprojects' compliance with safeguard measures and their progress toward intended outcomes

(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 AIIB.

83. Based on the environmental data and information generated by due diligence and environmental screening exercises at the subproject level, UDA will identify key environmental monitoring indicators for monitoring purposes. Monitoring reports will be sent to AIIB for review. The Report will be the basis for formulation of corrective actions plans, if required, for a subproject under URP. UDA will submit environmental checklists, ESMPs, and monitoring reports to AIIB for review. A consolidated environmental compliance reports will be submitted to AIIB on a biannual basis for all subprojects.

IX. CAPACITY BUILDING AND TRAINING

84. Current capacity at UDA for the implementation of environmental and social safeguards to meet the requirements of the ESMPF is not sufficient due to lack of awareness, capacity and regular practice. Certain areas such as environmental safeguards have to be urgently strengthened with new recruitment of an environment officer to be supported by a specialist who will be brought are as required. Though the social component of UDA is existent, further training and awareness is required to increase the knowledge base especially on effective GRM implementation. Hence training and awareness raising programs for UDA officials at various levels ranging from management, to safeguards officers to field level officers will form part of the capacity building provided during the implementation of URP under AIIB support. Awareness programs on safeguard requirements by the contractors and monitoring officers during the implementation of construction activities will also be targeted as part of the capacity building program.

85. AIIB will continually assess environmental and social compliance of subprojects and will recommend further safeguard strengthening exercises including the application of environmental and social safeguard standards to subprojects, safeguard compliance, and monitoring of safeguard compliance.

X. DISCLOSURE OF SAFEGUARD DOCUMENTS

86. The URP ESMPF and the RPF will be disclosed to the public and will be made available for public review at URP office at Sethsiripaya, and at the subproject site locations (hard copies) and will also be made available on their website by 2nd October, 2018. The ESMPF will serve as a guidance document for ESIA (IEE/EIA) and ESMP formulation while the RPF will provide guidelines for any resettlement activities. These documents will be translated into Sinhala and Tamil as well.

87. Subproject specific safeguard planning documents including ESIAs, ESMPs, RAPs and corrective action plans will be disclosed on the website. Environmental and social safeguard monitoring reports of subprojects too will be disclosed to project-affected persons and other stakeholders where copies will be made available at the URP office for reference. In addition, summaries of such reports will be translated into Sinhala or Tamil if required.

XI. UPDATING OF THE ESMPF

88. UDA will maintain the current ESMPF on its website and welcomes comments and suggestions on it. The ESMPF will be periodically reviewed and updated as required and directed by AIIB. Such updates may arise from the need to consolidate field experience accumulated through the application of safeguard principles and processes to subprojects, or from significant changes in the government's

environmental policy and the regulatory framework. The need may also arise if there is revision of AIIB's safeguard policies. The revision and update of the ESMPF will be the responsibility of the UDA and will only be done in concurrence with AIIB.

APPENDICES

APPENDIX I: RPF EXECUTIV SUMMARY

Project description: The overall program aims to move 50,000 lower and lower-middle income households living in underserved areas into high-rise apartments. The AIIB Project will include three components. Component 1 (US$220M) will finance the construction of housing for approximately 5,500 families. Six sub-projects are at an advanced stage of preparation and will provide 4,074 housing units. The additional sub-projects will be identified during Project preparation or once the project is in implementation. Component 2 (US$50M) will support the redevelopment of the areas made available by the housing program, including the provision of public amenities in these areas. Ten potential areas have been identified, from which a majority of the people has already moved, and it is envisaged that the Project will also finance the redevelopment of some of the areas vacated when households move into the housing to be provided under Component 1. Component 3 (US$10M) will finance additional technical support and project management.

Social impacts: As the UDA has decided to develop the new housing units on available public land, the issues that remain to be addressed are mainly related to the resettlement and rehabilitation (R&R) of the occupants of the sites identified for construction and the occupants of the underserved settlements that will be resettled once the new housing complexes are completed. Key social risks and impacts associated with the proposed investments include the resettlement of households living in underserved settlements, loss of potential income sources, dislocation of social and ethnic groups, and possible issues resulting from unfamiliarity with high-rise living.

Legal framework: All activities under the proposed Project will be consistent with the laws, regulations and notifications that are relevant to the resettlement efforts. It is the responsibility of the PMU to ensure that Project activities are consistent with the legal/regulatory framework of Sri Lanka. Additionally, the Project activities will also be aligned with AIIB's Environmental and Social Policy (ESP) and Environmental and Social Standards (ESS).

Eligibility criteria, entitlements and definitions: This framework, in addition to setting out the principles and guidelines, elaborates on the key steps to be taken in involuntary resettlement planning and execution. For example, the cut-off date for eligibility for entitlements for titleholders is the date of notification under the Land Acquisition Act (LAA) and the date of resettlement impact survey for non-titleholders. Persons who encroach on the area after the cut-off date are not entitled to claim compensation or any other form of resettlement assistance. Similarly, the Entitlement Matrix explains the category and type of loss and the eligible category for entitlements. As the LAA does not address all types of losses, the relevant involuntary resettlement policies (GoSL's NIRP and AIIB's ESP and ESS) have been applied to address such issues. All losses as a result of implementation of the Project will be compensated.

Consultation and stakeholder engagement: Stakeholder consultation is an important part of Project preparation and implementation. Consultations will ensure active participation and will reduce the potential for conflicts and minimize the risk of Project delays. Stakeholder consultations will also enable the Project to better design the R&R and livelihood restoration programs as a comprehensive development program to suit the needs and priorities of the affected households, thereby maximizing the economic and social benefits of GoSL investments.

Pre- and post-resettlement programs: As the relocated families are from underserved settlements, they may not have an understanding of high-rise living. They will enjoy certain rights by being an

owner of a housing unit, but they will also share common utilities and services with their neighbors. When sharing common facilities, these residents have obligations to each other to ensure cordial relationships. Thus, to promote peaceful co-existence, the UDA (with the help of hired consultants, CSOs) will undertake programs of information, education and communication (IEC) campaigns.

Income restoration and improvements to their livelihoods are crucial to enable the relocated families to recover from the stress and economic difficulties of relocation and to re-establish their lives. As a result, the entitlement matrix provides for income restoration measures that will be implemented as part of the post resettlement strategy. RAPs will accordingly provide opportunities for increasing the income levels and living standards of the affected people. Government and external agencies can be hired to provide the necessary skill training.

Grievance redress mechanism (GRM): A multi-stage GRM will be established with the field-based Land and/or Social Marketing Officer working as the first point of contact. If the grievance cannot be resolved through Tier 1 to the satisfaction of the aggrieved party or if the issue is outside the authority of the Land and/or Social Marketing Officer, an aggrieved party may submit a complaint to the Grievance Redress Committee (GRC) on the Tier 2 Complaint Form. The GRC will take a decision in consultation with the aggrieved party concerned within 15 days. If the GRC's decision too is not acceptable to the aggrieved party, he or she can appeal to the Independent Grievance Panel (IGP). The IGP will comprise of representatives from the Ministry of Land and Land Development, Ministry of Women Affairs, Department of Valuation, a lawyer, a retired senior Government officer and a representative of a recognized Civil Society Organization. If the decision given by the Chair - Additional Secretary (Urban Development), Ministry of Megapolis & Western Development - is not acceptable to the aggrieved party concerned, he or she can have recourse to Courts of Law.

Monitoring and evaluation: Monitoring is a continuous process during project implementation. It will determine the Project's actual progress, its likelihood of success, any difficulties arising, and facilitate adjustments to implementation of the Project implementation as soon as possible. It consists of internal and external monitoring. Similarly, evaluation will be carried out under the Project in the form of an assessment at a specified time on the impact of relocation and whether the objectives have been achieved. An independent, evaluation specialist (individual or firm) will be hired to assess all resettlement activities at mid-term and at Project completion.

APPENDIX II: RELEVANT NATIONAL REGULATIONS

National Environmental Act No. 47 of 1980 (and its amendments of 1988 and 2000)

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.

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.

Under the NEA, environmental protection governed by

- Regulations for environmental protection;
- Wastewater discharge standards (CEA)
- Environmental Protection License Scheme for industries
- Regulation for Air Quality – Vehicle exhaust emission, air emission standards – Ambient Air Quality guidelines (CEA/SLSI)
- Noise Quality guidelines
- Waste Management guidelines and
- EIA guidelines

Coast Conservation Act No. 57 of 1981

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. This act becomes relevant to projects located wholly or partly within the coastal zone (the area lying within a limit of three hundred meters landwards of the Mean High Water line and a limit of two kilometers seawards of the Mean Low Water line) must undergo the approval process that is laid down by the CCA irrespective of its size. Therefore, any development work taking place within this zone falls under the jurisdiction of CCD. 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.

According to the CCA, Director of the CCD has the discretion to request for an EIA/IEE from the project proponent if the initial screening reveals significant impacts in the coastal areas by the project. The process is very much similar to the NEA except that the Director of the CCD reserves the right to request for an EIA/IEE and also to make the final decision.

Any person desiring to engage in a development activity within the Coastal Zone will be required to obtain a permit issued by the Department prior to commencing the activity. Engaging in any development activity prior to obtaining a permit issued by the Director, and/ or noncompliance with conditions stipulated in the permit are contravention. The CCA specifies penalties for contravention of the provisions of the Act.

Penalties may include fines and imprisonment and/or confiscation of equipment and machinery and /or demolishing of unauthorized structures.

The Urban Development Authority, Law, No 41 of 1978

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. Sec. 3(1) of the Urban Development Authority Law No. 41. of 1978 (the principal Act) provides for the Minister to declare areas "where he is of the opinion that any area is suitable for development... to be a Development Area". Sec. 3 (2) also empowers the Minister to define the area. What these two sections mean is that the "suitable" area in the Minister's opinion does not necessarily co-terminate with any of the existing area boundaries such as GN divisions, Municipal wards, Local Authorities, or Divisions.

The Urban Development Authority Amendment Act No. 04 of 1982 makes UDA the governing body for any development activity within a declared urban development area and thereby requires approval from UDA under the provisions given under Development Authority Act No. 41 of 1978. Subsequently UDA delegated the authority of giving approvals for development activities to the respective local authorities under the direction, supervision & control of UDA. This is relevant for any large scale buildings.

Condominium Management Authority Law, No. 10 Of 1973

This Law may be cited as the Condominium Management Authority Law. A law to provide for the establishment of a public authority known as the Condominium Management Authority for the Control, Management, Maintenance and Administration of the Condominium Property, Semi Condominium Property and Provisional Condominium Property and for the provision of common amenities thereto, and for matters connected therewith or incidental thereto.

This Law shall apply to any building or buildings having two or more stories on alienated land, held as one land parcel capable of being subdivided into parcels, and to any building or buildings having only one storey on the same land capable of being subdivided into parcels, (hereinafter referred to as "Condominium Property"), any building proposed to be or in the process of being erected on alienated land, held as one land parcel and which shall be capable of being subdivided into parcels (hereinafter referred to as "Provisional Condominium Property") and any partly completed building in which there are more than one completed condominium parcels fit for human habitation shown in the registered Provisional Condominium Plan (hereinafter referred to as "Semi Condominium Property").

Municipal Council Ordinances and Acts – Urban Council Ordinance 61 of 1939, Act 29 of 1947, Act 18 of 1979, and Act 13 of 1979

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.

Sri Lanka Land reclamation and development cooperation Act No. 15 of 1968, Act No. 52 of 1982, Act, Act No. 35 of 2006

This act provides powers to establish Sri Lanka Land Reclamation and Development Corporation. It is responsible for the reclamation and development of low- lying marshy areas while recognizing the need to have adequate retention areas for flood waters. It has powers to undertake construction work and consultancy assignments in the field of engineering; and for matters connected with wetland management. The Corporation also undertakes reclamation and development of lands on a commercial basis to solve the problem of the lack of developed lands essential for development programs.

As per the recent amendment to the act, by act no. 35 of 2006 the corporation will be ESM Powered to take legal action against unauthorized reclamation activities and pollution of inland water bodies as well. Flood Protection Ordinance, Act No. 22 of 1955 This ordinance provides necessary provisions to acquire land or buildings or part of any land or building for the purpose of flood protection.

State Land Ordinance, Act No. 13 of 1949

The State Land Ordinance provides guidelines for:

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

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.

Soil Conservation Act, No. 25 of 1951

1. 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:

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

Mines and Minerals Act No. 33 of 1992

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 theGSMB. 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.

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

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.

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

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.

Prevention of Mosquito Breeding, Act No. 11 of 2007

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 ESMPty 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.

National Heritage Wilderness Areas Act (No. 3 of 1988).
This act declares a National Heritage Wilderness Areas while it protects and preserves such areas and its resources. It focuses on declaring and protecting wildness areas.

Irrigation ordinance
Deals with environment aspect of water and land uses in irrigation agriculture. It is enforced by the Irrigation department.

Water Resources Board Act No. 29 of 1964, Amendment No.42 of 1999

Control, regulation and development (including conservation and utilization) of water resources; prevention of pollution of rivers, streams and other water resources; formulation of national policies relating to control and use of water resources.

National Institute of Occupational Safety and Health Act, No. 38 Of 2009

This Act may be cited as the National Institute of Occupational Safety and Health Act, No. 38 of 2009 and shall come into operation on such date as the Minister may appoint by Order published in the Gazette. The general objective of the act is to advise the Government in the formulation of a national policy on occupational safety and health and on the working environment both for employers and employees taking into consideration the nature of the occupation and the safety of the employers and employees.

National Child Protection Authority Act, No. 50 Of 1998

An act to provide for the establishment of the national child protection authority for the purpose of formulating a national policy on the prevention of child abuse and the protection and treatment of children who are victims of such abuse; for the co-ordination and monitoring of action against all forms of child abuse; and for matters connected therewith or Incidental.

The Employment of Women, Young Persons and Children' Act (EWYPC): is the main law pertaining to work by children. No. 8 of 2003 and Amendment Act of 2006 Section 14 states that: Under the constitution of Sri Lanka, children are considered as below 18 years. It is mandatory for all children to attend school till the age of 14 years.

- A child may not be employed except:
  - by his parents or guardian in light agricultural or horticultural work or,
  - similar work carried on by members of the same family
  - before the commencement of regular school hours or after the close of school hours;
  - in any school or other institution supervised by a public authority and imparting technical education or other training for the purpose of any trade or occupation.

Section 20 states that children under the age of eighteen cannot take part in performances which endanger their life or limb.

ILO Convention 138 on the Minimum Age for Employment and C182 on the Worst Forms of Child Labor. Sri Lanka has signed and ratified this convention. Under the this, hazardous child labor is defined by Article 3 (d) of ILO Convention concerning the Prohibition and Immediate Action for the Elimination of the Worst Forms of Child Labor, 1999 (No. 182) as: Work which, by its nature or the circumstances in which it is carried out, is likely to harm the health, safety or morals of children.

APPENDIX III: CATEGORIZATION FORMS

INVOLUNTARY RESETTLEMENT IMPACT CATEGORIZATION

Date: _____

A. Instructions

XII. (i) The project team completes and submits the form to the Environment and Safeguards Division (RSES) for endorsement by RSES Director, and for approval by the Chief Compliance Officer (CCO).

(ii) The classification of a project is a continuing process. If there is a change in the project components or/and site that may result in category change, the Sector Division submits a new form and requests for recategorization, and endorsement by RSES Director and by the CCO. The old form is attached for reference.

(iii) In addition, the project team may propose in the comments section that the project is highly complex and sensitive (HCS), for approval by the CCO. HCS projects are a subset of category A projects that ADB deems to be highly risky or contentious or involve serious and multidimensional and generally interrelated potential social and/or environmental impacts.

XIII. B. Project Data

XIV.	Country/Project No./Project Title	XV.	:	XVI.
XVII.		XVIII.		XIX.
XX.	Department/ Division	XXI.	:	XXII.
XXIII.	Processing Stage	XXIV.	:	XXV.
XXVI.	Modality	XXVII.	:	XXVIII.

[ ] Project Loan [ ] Program Loan [ ] Financial Intermediary [ ] General Corporate Finance
[ ] Sector Loan [ ] MFF [ ] Emergency Assistance [ ] Grant
[ ] Other financing modalities:

XXIX. **C. Involuntary Resettlement Category**
XXX.
XXXI. [] New [ ] Recategorization — Previous Category [ ]

XXXII.	**XXXIII.**	**XXXIV.**	**XXXV.**
Cate[ ] A	C[ ]gory B	C[ ]gory C	XX[ ] Category FI

D. Comments

Project Team Comments:	SDES Comments:

E. Approval

Proposed by:	**Reviewed by**:
Project Team Leader, {Department/Division} Date:	Social Safeguard Specialist, SDES Date: **Endorsed by**:
Social Development Specialist, {Department/Division} Date:	Director, SDES Date:

Endorsed by:	**Approved by**:	☐ Highly Complex and Sensitive Project
Director, {Division} Date:	Chief Compliance Officer Date:	

Involuntary Resettlement Impact Categorization Checklist

Probable Involuntary Resettlement Effects	**Yes**	**No**	**Not Known**	**Remarks**
Involuntary Acquisition of Land				
1. Will there be land acquisition?				
2. Is the site for land acquisition known?		-		
3. Is the ownership status and current usage of land to be acquired known?				
4. Will easement be utilized within an existing Right of Way (ROW)?				
5. Will there be loss of shelter and residential land due to land acquisition?				
6. Will there be loss of agricultural and other productive assets due to land acquisition?				
7. Will there be losses of crops, trees, and fixed assets due to land acquisition?				
8. Will there be loss of businesses or enterprises due to land acquisition?				
9. Will there be loss of income sources and means of livelihoods due to land acquisition?				
Involuntary restrictions on land use or on access to legally designated parks and protected areas				
10. Will people lose access to natural resources, communal facilities and services?				
11. If land use is changed, will it have an adverse impact on social and economic activities?				
12. Will access to land and resources owned communally or by the state be restricted?				
Information on Displaced Persons:				
Any estimate of the likely number of persons that will be displaced by the Project? [ ] No [ ] Yes If yes, approximately how many? _____				
Are any of them poor, female-heads of households, or vulnerable to poverty risks? [ ] No [ ] Yes				
Are any displaced persons from indigenous or ethnic minority groups? [ ] No [ ] Yes				

Note: The project team may attach additional information on the project, as necessary.

Rapid Environmental Assessment (REA) Checklist

Instructions:

(i) The project team completes this checklist to support the environmental classification of a project. It is to be attached to the environmental categorization form and submitted to the Environment and Safeguards Division (SDES) for endorsement by the Director, SDES and for approval by the Chief Compliance Officer.

(ii) This checklist focuses on environmental issues and concerns. To ensure that social dimensions are adequately considered, refer also to ADB's (a) checklists on involuntary resettlement and Indigenous Peoples; (b) poverty reduction handbook; (c) staff guide to consultation and participation; and (d) gender checklists.

(iii) Answer the questions assuming the "without mitigation" case. The purpose is to identify potential impacts. Use the "remarks" section to discuss any anticipated mitigation measures.

Country/Project Title:

Sector Division:

Screening Questions	Yes	No	Remarks
A. Project Siting Is the project area…			
▪ Densely populated?			
▪ Heavy with development activities?			
▪ Adjacent to or within any environmentally sensitive areas?			
• Cultural heritage site			
• Protected Area			
• Wetland			
• Mangrove			
• Estuarine			
• Buffer zone of protected area			
• Special area for protecting biodiversity			
• Bay			
B. Potential Environmental Impacts Will the Project cause…			

Screening Questions	Yes	No	Remarks
▪ impacts on the sustainability of associated sanitation and solid waste disposal systems and their interactions with other urban services.			
▪ deterioration of surrounding environmental conditions due to rapid urban population growth, commercial and industrial activity, and increased waste generation to the point that both manmade and natural systems are overloaded and the capacities to manage these systems are overwhelmed?			
▪ degradation of land and ecosystems (e.g. loss of wetlands and wild lands, coastal zones, watersheds and forests)?			
▪ dislocation or involuntary resettlement of people?			
▪ disproportionate impacts on the poor, women and children, Indigenous Peoples or other vulnerable group?			
▪ degradation of cultural property, and loss of cultural heritage and tourism revenues?			
▪ Occupation of low-lying lands, floodplains and steep hillsides by squatters and low-income groups, and their exposure to increased health hazards and risks due to polluting industries?			
▪ water resource problems (e.g. depletion/degradation of available water supply, deterioration for surface and ground water quality, and pollution of receiving waters?			.
▪ air pollution due to urban emissions?			
▪ risks and vulnerabilities related to occupational health and safety due to physical, chemical and biological hazards during project construction and operation?			
▪ road blocking and temporary flooding due to land excavation during rainy season?			
▪ noise and dust from construction activities?			

Screening Questions	Yes	No	Remarks
▪ traffic disturbances due to construction material transport and wastes?			
▪ temporary silt runoff due to construction?			
▪ hazards to public health due to ambient, household and occupational pollution, thermal inversion, and smog formation?			
▪ water depletion and/or degradation?			.
▪ overpaying of ground water, leading to land subsidence, lowered ground water table, and salinization?			
▪ contamination of surface and ground waters due to improper waste disposal?			
▪ pollution of receiving waters resulting in amenity losses, fisheries and marine resource depletion, and health problems?			
▪ large population influx during project construction and operation that causes increased burden on social infrastructure and services (such as water supply and sanitation systems)?			
▪ social conflicts if workers from other regions or countries are hired?			
▪ risks to community health and safety due to the transport, storage, and use and/or disposal of materials such as explosives, fuel and other chemicals during operation and construction?			
▪ community safety risks due to both accidental and natural hazards, especially where the structural elements or components of the project are accessible to members of the affected community or where their failure could result in injury to the community throughout project construction, operation and decommissioning?			.

A Checklist for Preliminary Climate Risk Screening
Country/Project Title:
Sector:
Subsector:
Division/Department:

Screening Questions		**Score**	**Remarks**[10]
Location and Design of project	Is siting and/or routing of the project (or its components) likely to be affected by climate conditions including extreme weather related events such as floods, droughts, storms, landslides?		
	Would the project design (e.g. the clearance for bridges) need to consider any hydro-meteorological parameters (e.g., sea-level, peak river flow, reliable water level, peak wind speed etc)?		
Materials and Maintenance	Would weather, current and likely future climate conditions (e.g. prevailing humidity level, temperature contrast between hot summer days and cold winter days, exposure to wind and humidity hydro-meteorological parameters likely affect the selection of project inputs over the life of project outputs (e.g. construction material)?		
	Would weather, current and likely future climate conditions, and related extreme events likely affect the maintenance (scheduling and cost) of project output(s) ?		
Performance of project outputs	Would weather/climate conditions, and related extreme events likely affect the performance (e.g. annual power production) of project output(s) (e.g. hydro-power generation facilities) throughout their design life time?		

Options for answers and corresponding score are provided below:

Response	Score
Not Likely	
Likely	
Very Likely	

Responses when added that provide a score of 0 will be considered low risk project. If adding all responses will result to a score of 1-4 and that no score of 2 was given to any single response, the project will be assigned a medium risk category. A total score of 5 or more (which include providing a score of 1 in all responses) or a 2 in any single response, will be categorized as high risk project.
Result of Initial Screening (Low, Medium, High):_____**Medium**_____

Other Comments:_____
_____

Prepared by: _____

[10] If possible, provide details on the sensitivity of project components to climate conditions, such as how climate parameters are considered in design standards for infrastructure components, how changes in key climate parameters and sea level might affect the siting/routing of project, the selection of construction material and/or scheduling, performances and/or the maintenance cost/scheduling of project outputs.

ENVIRONMENT CATEGORIZATION

Date:

A. Instructions

(i) The project team completes and submits the form to the Environment and Safeguards Division (RSES) for endorsement by RSES Director, and for approval by the Chief Compliance Officer (CCO). OM F1/OP on *Safeguard Review Procedures* (paras. 4-7) provides the requirements on environment categorization.

(ii) The classification of a project is a continuing process. If there is a change in the project components or/and site that may result in category change, the Sector Division submits a new form and requests for recategorization, and endorsement by RSES Director and by the CCO. The old form is attached for reference.

(iii) In addition, the project team may propose in the comments section that the project is highly complex and sensitive (HCS), for approval by the CCO. HCS projects are a subset of category A projects that ADB deems to be highly risky or contentious or involve serious and multidimensional and generally interrelated potential social and/or environmental impacts.

B. Project Data

Country/Project No./Project Title : _____

: _____

Department/ Division : _____

Processing Stage : _____

Modality

[ ] Project Loan [ ] Program Loan [ ] Financial Intermediary [ ] General Corporate Finance

[ ] Sector Loan [ ] MFF [ ] Emergency Assistance [ ] Grant

[ ] Other financing modalities:

C. Environment Category (please tick one category based on the set of criteria in OMF1 (paras. 6-7))

[ ] New [ ] Recategorization — Previous Category [ ]

☐ Category A	☐ Category B	☐ Category C	☐ Category FI

D. Basis for Categorization/ Recategorization (please. attach supporting documents):

[ ] REA Checklist

[ ] Project and/or Site Description

[ ] Other: Pictures

E. Comments

Project Team Comments	RSES Comments

F. Approval

Proposed by: **Endorsed by**:

Project Team Leader, {Department/Division} Director, RSES

Date: Date:

Endorsed by:	**Approved by**:	☐ Highly Complex and Sensitive Project
Director, {Division} Date:	Chief Compliance Officer Date:	

APPENDIX IV: Environmental and social Management Plan (ESMP) for Urban Regeneration Project, UDA under AIIB Financing

	Environmental impacts	Mitigation measure(s)	Monitoring sources	Responsible party(ies)
1. PLANNING PHASE				
Wetlands In Sri Lanka wetlands are a very common habitat even in the urban context. Wetlands and riparian are extremely sensitive ecosystems. They provide important environmental services such as water storage, bird and animal habitat, flood control, and filtering toxins and nutrients from runoff.	Damage to ecosystems and biodiversity loss. Sedimentation of streams and surface water Contamination of water supplies with pollutants Clogging up of drainage system due to solid waste disposal. This will contribute to flooding risk	(a) Carry out preliminary screening of habitat and determine: • need for a biodiversity assessment. If deemed necessary should be carried out. • Function of flood control. Carry out flood risk assessment if deemed necessary. (b) If environmental function is found to be of high value, consider an alternative location. (c) If no alternative is available: • Set back any infrastructure as far as possible from the most sensitive area of the wetland, • Minimize the amount of wetland destroyed and facilitate the wetland function through infrastructure design alternatives. • Re-vegetate as soon as possible and maintain natural environment to the extent possible. (d) Obtain clearances from relevant authorities – SLLRDC, CEA.	Recommendations from Of biodiversity and flood risk assessments. Evaluation of designs and plans Observation and reporting	UDA Sri Lanka Land Reclamation and Development Corporation
Coastal zone A lot of Sri Lanka's urban settlements re found along the coastal belt and illegal encroachments have already led to many environmental issues**.**	Degradation of coastal habitats by aggravating erosion and pollution. Blocking of natural and man-made drainage outputs to the sea. Pollution of waterways entering into the sea. Potential risk of natural disasters.	(a) Ensure location is within the stipulated guidelines and outside of the buffer zone provided by CCD. (b) Clearance obtained from CCD (c) Buildings should not obscure the scenic beauty of the area.	Clearances obtained Review of design plans	

	Environmental impacts	Mitigation measure(s)	Monitoring sources	Responsible party(ies)
Hilly landscape with sloppy terrain	Erosion due to clearing of vegetation and construction activities. Sedimentation of streams and surface water Contamination of ground and surface water supplies	(a) Design facility appropriately and apply construction practices that minimize risks, e.g., use sand stacks or hay to control erosion during construction (b) Pay particular attention to potential erosion and redirection of water flows during design and construction. (c) Re-vegetate as soon as possible	Evaluation of designs and plans Observation and reporting	Divisional Engineer/TO Contractor
Plantations (rubber, coconut)	Loss of large tree cover May lead to loss of livelihoods	Clearances will have to be obtained from the relevant authorities such as the LA, Coconut Cultivation Board, etc.	Clearances obtained	
Flood prone sites	Can lead to repeated destruction of lives and belongings. Can lead to disease outbursts such as dengue, influenza, cholera, etc. Cause environmental damage from accidental release of toxic. Contaminate drinking water	(a) Carry out flood risk assessment if developing a new site. Consider alternative location. (b) Design alternatives to accommodate flooding has to be adopted. Raise building level if possible (not affecting surrounding). (c) Maintain design features such as drainage structures (d) Avoid constructing sanitation or other facilities that will use and store harmful materials at flood-prone areas (e) Choose dry sanitation options or closed disposal systems, instead of wet ones such as septic tanks or detention ponds	Evaluation of designs and plans Observation and review of reports	Divisional Engineer/TO Contractor
Cutting of trees for clearing land as well as for materials for reconstruction	Loss of trees and vegetation may lead to: • Increased soil erosion, landslides, etc. • Loss of home garden	(a) Practice minimal removal of trees. (b) Greening with native species will be practiced around all buildings to compensate for any cutting of trees. (c) Minimize use of wood for construction.	Trees planted Progress reports	

	Environmental impacts	Mitigation measure(s)	Monitoring sources	Responsible party(ies)
	systems or forested areas leading of loss of habitat for certain fauna.	Innovations shall be integrated in the design plan. (d) Clearance should be obtained from the LA/Timber Corporation for the cutting down of important species.		
Disaster Management	Extreme climate (e.g. cyclone, storm surge), natural disasters (e.g. earthquake), and fire may cause damage to lives and properties	(a) Adoption of appropriate adaptation and disaster risk reduction strategy, emergency preparedness and recovery. (b) Training/orientation programs for apartment tenants on emergency evacuation should be planned and executed. (c) Fire safety management and mock drill (d) Ensure emergency equipment and facilities like fire extinguisher/water hose, first aid boxes, whistles, torchlights, etc. are readily available.	Disaster Management Plan for the School	
Relocation and consultations	Relocation of persons may lead to • Loss of livelihoods • Psychological distress • Conflicts with other residents • Other social issues and crime associated with stairways and elevators	(a) Resettlement Plan being developed (b) Consultations should be carried out with the parties to be re-located, residents in the areas they are being re-located to and other relevant stakeholders. These should be continued after the relocation as well. (c) Alternative livelihoods will have to be identified if there are losses to (d) livelihoods. A study should be carried out to determine attractive livelihood. (e) Awareness and capacity building should be carried out on living styles in		

	Environmental impacts	Mitigation measure(s)	Monitoring sources	Responsible party(ies)
		apartments. Help the community through the transition from roadside slums to apartment dwelling (f) CCTV cameras fixed, especially on stairways and elevators and monitored,		
2. DESIGN PHASE				
Integration of energy efficiency and energy conservation in design of project components.	Unsustainable, energy inefficient, and un-economical unviable building will negatively impact the environment resource as requirement is high. In the absence of water conservation and energy efficiency of the building structure, it may lead to resource constrains and increase the running cost.	The detailed designs for the project should ensure environmental sustainability principles, including energy efficiency, resource recycling, waste minimization, etc.: - Usage of recyclable materials like wood substitutes. - Use water efficient fittings for the apartments. - Installation of sustainable energy efficiency certified equipment. - Usage of energy efficient lighting fixtures (LED) - Provision of photovoltaic cells on roofs for solar power or wind energy atleast to cover the common lighting and energy requirement of the common areas.	Review of detailed design.	

	Environmental impacts	Mitigation measure(s)	Monitoring sources	Responsible party(ies)
Solid and liquid waste	Lack of properly designed disposal mechanisms for solid and liquid waste may lead to contamination of surface and ground water resources. Irregular open dumping is an environmental and health risk	(a) Design a waste water treatment plant taking into account recommendations from CEA, connect to central sewer line. (b) In event that wastewater is being released after treatment, they have to meet SLSI standards and NEA standards. (c) In event that any sewage is being released to the environment, they will have to meet IFC-WB EHS which override NEA standards. (d) Incorporate solid waste storage area in the plan. This should be enough space to accommodate 2-3 days in event collection is disrupted. Source separation should be practices and the community should be provided with training and incentives on proposer solid waste disposal. (e) Explore private partnerships for recyclable waste to minimize burden on LA.	Review waste disposal plan. Review waste water treatment plant.	
Sustainability and safety	Lack of sufficient planning to assure long-term sustainability and quality of the buildings may lead to subsidence or other infrastructure defects/disasters. Design of the apartment not meeting the requirement of the occupants may lead to disruption of the overall apartment complex.	(a) Design has to include provisions for effective maintenance and protection of the apartment buildings in the long-term. (b) Implement Standards Codes for design (such as UDA and ICTAD), appropriate wind load factor and soil stability and net allowable carrying capacity and skin friction should be considered. Soil testing should be carried out. (c) Each apartment should have personal open spaces (such as balcony). (d) Adequate number of stairways should be incorporated including emergency evacuation.	Review of structural design against soil reposts etc.	

	Environmental impacts	Mitigation measure(s)	Monitoring sources	Responsible party(ies)
		(e) Adequate number of elevators should be installed.		

	Environmental impacts	Mitigation measure(s)	Monitoring sources	Responsible party(ies)
3. DEMOLITION PHASE				
Safety measures to be adopted.	Unless safety measures are adopted during demolition, it may lead to health issues and accidents.	(a) Once occupants have moved out, provide a few days for them to come back for anything they have left behind. (b) Former occupants shall not remove any infrastructure components unless with prior permission from the responsible party. (c) Area to be demolished shall be completely cordoned off with some form of fencing. No entry sign boards will be put up. (d) All power and water supplies shall be turned off prior to demolition. (e) Workers involved in demolition will wear safety gear such as hard hats, eye protection, gloves, etc. (f) All workers involved in the demolition activities shall be covered under the labor law and insured.	Spot checks	Contractor Environment Officer
Demolition of existing structures	Spoil material generated would obscure the landscape may be a health risk to the surrounding community	(a) Deposal of solid waste according to the guidelines of the local authority. (b) Make arrangements with the local authority for disposal of waste. (c) In event that there is garbage mixing with demolition debris, garbage waste will have to be separated and disposed of separately. (d) Demarcate an area for waste collection until deposal within the construction premises and practice waste	Spot check and site observations on a regular basis.	Contractor Environment Officer

	Environmental impacts	Mitigation measure(s)	Monitoring sources	Responsible party(ies)
		minimization practices such as recycling and composting. (e) Noise levels to be maintained according to IFC-WB EHS which override NEA standards.		
Safe handling of asbestos	Health and safety hazards with loose asbestos fibers for the workers.	(a) Follow the rules outlined in the NEA. (Guidelines are also provided as part of the ESMPF) (b) Asbestos should not be burnet under any circumstances. (c) Asbestos should be separated from other spoil material. It should be discarded to an appropriate location in consultation with the LA. (d) Transportation of the asbestos sheets should be carried out under covered conditions. (e) No asbestos should be recycled or sold. (f) All asbestos handlers should be attired with safety accessories including masks, gloves, eye protection etc.		Contractor
4. CONSTRUCTION PHASE				
Construction of New Apartment Complex				Co
Extraction of resources	Extraction of natural resources such as sand, metal, etc can case changes in the topography and can lead to environmental degradation.	Ensure ICTAD Guidelines are followed. All sand and aggregate should be brought in from places with permits. Wherever possible, use of sea sand should be	Contractor agreement and policy	Contractor

	Environmental impacts	Mitigation measure(s)	Monitoring sources	Responsible party(ies)
		adopted.		
Land Preparation	Cut and fill activities may cause blockages of water ways / Sedimentation. Unless, fill material is brought from a approved place, it may lead to environmental degradation. If land is polluted, unless cleaned and sanitized, it may lead to health issues and vector issues affecting other existing community and future communities.	(a) If there are waterways, during filling silt traps should be laces and care should be taken near the canal system. (b) In some instances, canal embankments will have to be raised. This will have to be carried out with the relevant authority such as SLLRDC, LA. (c) Fill material should only be brought in through permit holders. ICTAD guidelines to be followed. (d) Cleansing of the land should be carried out using acceptable methodologies under the NEA. Canal upgrading and cleansing will also have to be carried out.	Observations	Contractor/ Environment Officer.
Solid waste	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 This can lead to pollution of waterways and adjoining lands. Will lead to attraction of disease bearing vectors such as rats and mosquitoes.	(a) Make arrangements with the LA on disposal of solid waste generated during construction. (b) Practice cleanliness and good housekeeping onsite. (c) Demarcated waste storage area in operation. (d) Under no circumstances should the solid waste be burned on site.	Solid waste storage is demarcated All construction solid waste removed at end of construction	Contractor Environment officer (M)

	Environmental impacts	Mitigation measure(s)	Monitoring sources	Responsible party(ies)
Worker welfare and sanitation	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	(a) Adequate potable water to be provided onsite for workers. (b) Worker welfare facilities to be included in the design and construction plan (c) Provision of temporary toilet with washing facility for the construction workers (d) All effluent should either be connected to the central sewer system or contained in sealed pits and disposed of in consultation with the LA.	Check for such facilities on construction site Review water requirement and sourcing plan prepared by contractor.	Contractor Environment officer (M)
Air quality	Dust generation during construction activities may impact workers and community	(a) Wet down and spray water in construction as required (b) Take steps to avoid dust emissions during loading and unloading of construction material (c) The air quality monitoring will be conducted as per the plan. IFC-WB EHS standards on air quality will be applicable	Observations—controlled dust emissions and the spraying of water Check whether the construction material is stored properly to avoid dust emission	Contractor Environment officer (M)
Transportation of material	Transportation of construction materials may block the access roads and may lead to accessibility problems	(a) Construction materials and machinery should not be placed in a manner that blocks any roads, paths, or local accesses. (b) Unloading of construction materials should be carried in a manner and time so as to avoid blockage of roads/paths/access. (c) All construction material should be transported under covered conditions	Observation and field check	Contractor Environment officer (M)
Noise	Construction noise can disturb	Conduct work during daytime and if	Noise at boundary	

	Environmental impacts	Mitigation measure(s)	Monitoring sources	Responsible party(ies)
	surroundings	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 IFC-WB EHS which override NEA standards.	should not exceed 55 decibels (A) or as specified under the NEA	Contractor Environment officer (M)
Worker Safety	Lack of occupational health safety measures can lead to Injury and health risks to the workers and immediate surrounding. • Noise generated from cement pre-casting machines concrete, pilling may pose an occupational health issue • Activities such as loading and unloading shuttering and metal poles and handling of heavy objects may result in accidental injury or crushing • Lack of safety attire and infrastructure safety measures may lead to accidents and injury.	(a) Contactor to comply with Labor Organization (ILO) convention No. 62, ILO Convention 138 and 182 on Child Labor and Factory Ordinance, etc to the extent that are applicable to workers contract. (b) Develop and implement comprehensive site-specific health and safety plan on Occupational Health and Safety (c) First aid treatment will be made available for all injuries likely to be sustained during work. (d) A management strategy and applying practices to eliminate, or minimize, fatalities injuries, and illnesses for workers performing activities and tasks associated with the project. (e) Provide medical insurance coverage and indemnity for workers. (f) The contractor will conform to all anti dengue instructions given to him by the PHI and the PIU. (g) Workers employed on mixing cement, lime mortars, concrete, etc., will be provided with protective footwear and protective goggles. (h) Workers engaged in welding works will be provided with welder's protective eye shields.	Check for existence of first aid measures in the premises Check whether the workers are using the safety gear that is provided Review emergency plan	Contractor Environment officer (M)

	Environmental impacts	Mitigation measure(s)	Monitoring sources	Responsible party(ies)
		(i) The use of any toxic chemical will be strictly in accordance with the manufacturer's instructions. A register of all toxic chemicals delivered to the site will be kept and maintained up to date by the contractor. (j) Use of licensed and trained vehicle operators, workers should adopt necessary safety measures as stated in the contract including using of hard hats, boots, gloves and appropriate clothing. (k) First aid provisions available on site and personnel trained on use. (l) Provide suitable communication and information on safety (m) The construction site will be properly barricaded by appropriate material of adequate height. (n) Site will be well lit to minimize accident risks.		

	Environmental impacts	Mitigation measure(s)	Monitoring sources	Responsible party(ies)
b) Development of water infrastructure	Unless there is adequate potable water, waters may experience dehydration and other health issues. Unless water supply is established for construction it may lead to water scarcities. Groundwater sources in urban areas are typically considered unsuitable for construction.	(a) Contractor to prepare a water sourcing and usage plan. (b) In event, well water is being used, NWRB should be consulted and continued water quality monitoring carried out (c) Adequate potable water made available at the site. Tanks should be set up. (d) Water in the well should be periodically monitored for quality and quantity (e) 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 (f) A suitable sump and overhead tank should be constructed taking into account the daily requirement of water to ensure uninterrupted water supply through the NWSDB.	Review Contractors water plan. Dug wells should maintain at least 2 meters of water depth to maintain drinking water quality Periodic water quality testing (also indicated under construction) Observations	Water Resources Board/ National Water Supply and Drainage Board Contractor
Unprotected wells	Unprotected wells can lead to safety and health issues (Very unlikely that wells will be maintained)	Dug well(s) within premises should have a protective wall and appropriate covering to prevent external material from entering the well and from anyone of anything falling in.	Well protected water sources in place and maintained	Contractor
5. OPERATION AND MANAGEMENT PHASE				

	Environmental impacts	Mitigation measure(s)	Monitoring sources	Responsible party(ies)
Domestic solid waste disposal	Lack of management of domestic waste water may cause health risks and obscure the landscape Though solid waste collection will be on a daily basis, in event that is a disruption to the service it will lead to build up. These can lead to an increase in vector population and health risks	(a) Waste is disposed by the Local Authority (b) 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 atleast 3 days. (c) Notices will be put up on garbage disposal. No littering signs, in or around the premises. No spitting signs to be put up. (d) Educational programs on general cleanliness and littering to be carried out continuously with and incentive.	Agreement with LA for daily collection. Cleanliness and good housekeeping practices on site Review solid waste management plan in place and in operation during site visits	
Domestic liquid waste disposal	Lack of disposal of the domestic waste water in a suitable manner will lead to pollution of the surrounding environment.	(a) Wastewater and sewerage should be directed to a central sewerage system. (b) In the absence of such a system, a wastewater and a sewage treatment plant ill have to be established with sufficient capacity for the entire apartment complex (c) Any effluent released shall conform to , (d) IFC-WB EHS or NEA/SLIS standards (whichever is more stringent). (e) Necessary clearances from CEA should be in place.	Review liquid waste management plan.	Public Health Inspector from the local authority
Maintenance of apartments and sanitary facilities	Unless individual apartments are maintained including sanitary facilities, it may lead to health risks.	(a) Quarterly random checks be carried out with a penalty/incentive system. For the 1 st year. Thereafter annual random checks.	Observation and site reports to check the proper maintenance of pipes in sanitary facilities	

	Environmental impacts	Mitigation measure(s)	Monitoring sources	Responsible party(ies)
		(b) Ensure proper maintenance of the sanitary facilities. Train residents in plumbing, etc. as a livelihood option. (c) Provide a suitable sump and overhead tank, taking into account the daily requirement of water to ensure uninterrupted water supply for the sanitary facilities		
Maintenance of shop s	Lack of maintenance of the shop areas in the ground floor may lead to vector infestations and lead to health issues.	(a) Provide guidelines on cleanliness and maintenance. (b) Carry out spot checks. (c) In event that there are food shops, PHI checks and adoption of food safety regulations should be adopted.	Spot checks	
Social issues	Unless existing and new social issues are identified, with the new environment these may get aggravated leading to an unhealthy environment.	(a) Need to evaluate the community issues. (b) Identify alternative livelihood s (c) Provide counseling services or direct to required avenues by involving necessary authorities. (d) Implement social uplift programs for the community.	Review analysis	

Appendix V: Environmental and Social Exclusion List

The Bank will not knowingly finance Projects involving the following:

(i) Forced labor or harmful or exploitative forms of child labor;

(ii) The production of, or trade in, any product or activity deemed illegal under national laws or regulations of the country in which the Project is located, or international conventions and agreements, or subject to international phase out or bans, such as:

- Production of, or trade in, products containing polychlorinated biphenyl (PCBs).
- Production of, or trade in, pharmaceuticals, pesticides/herbicides and other hazardous substances subject to international phase-outs or bans (Rotterdam Convention, Stockholm Convention)
- Production of, or trade in, ozone depleting substances subject to international phase out (Montreal Protocol).

(iii) Trade in wildlife or production of, or trade in, wildlife products regulated under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).vi

(iv) Trans-boundary movements of waste prohibited under international law (Basel Convention).

(v) Production of, or trade in, weapons and munitions, including paramilitary materials.

(vi) Production of, or trade in, alcoholic beverages, excluding beer and wine.

(vii) Production of, or trade in, tobacco

(viii) Gambling, casinos and equivalent enterprises.

(ix) Production of, trade in, or use of un-bonded asbestos fibers

APPENDIX 6: CODE OF CONDUCT (ESHS)
(To be included in the bidding document)

The Bidder shall submit its Code of Conduct that will apply to its employees and sub-contractors, to ensure compliance with its Environmental, Social, Health and Safety (ESHS) obligations under the contract. Include the risks to be addressed by the Code, e.g. risks associated with: labor influx, spread of communicable diseases, sexual harassment, gender based violence, sexual exploitation and abuse, illicit behavior and crime, and maintaining a safe environment etc.]

In addition, the Bidder shall detail how this Code of Conduct will be implemented. This will include: how it will be introduced into conditions of employment/engagement, what training will be provided, how it will be monitored and how the Contractor proposes to deal with any breaches. The Contractor shall be required to implement the agreed Code of Conduct.

Management Strategies and Implementation Plans (MSIP) to manage the (ESHS) risks
The Bidder shall submit Management Strategies and Implementation Plans (MSIP) to manage the following key Environmental, Social, Health and Safety (ESHS) risks.
[Note: insert name of plan and specific risk/s];

- [e.g. Traffic Management Plan to ensure safety of local communities from construction traffic];
- [e.g. Water Resource Protection Plan to prevent contamination of drinking water];
- [e.g. Boundary Marking and Protection Strategy for mobilization and construction to prevent offsite adverse impacts];
- [e.g. Strategy for obtaining Consents/Permits prior to the start of relevant works such as opening a quarry or borrow pit];
- [e.g. Gender based violence and sexual exploitation and abuse (GBV/SEA) prevention and response action plan].

The Contractor shall be required to submit for approval, and subsequently implement, the Contractor's Environment and Social Management Plan (C-ESMP), in accordance with the Particular Conditions of Contract Sub-Clause 16.2, that includes the agreed Management Strategies and Implementation Plans described here.

Note: The extent and scope of these requirements should reflect the significant ESHS risks or requirements as advised by Environmental/Social specialist/s. The key risks to be addressed by the Bidder should be identified by Environmental/Social specialist/s, for example, from the Environmental and Social Impact Assessment (ESIA), Environmental and Social Management Plan (ESMP), Resettlement Action Plan (RAP), and/or Consent Conditions (regulatory authority conditions attached to any permits or approvals for the project), up to a maximum of four. The risks may arise during mobilization or construction phases, and may include construction traffic impacts on the community, pollution of drinking water, depositing on private land and impacts on rare species etc. The management strategies and/or implementation plans to address these could include, as appropriate: mobilization strategy, strategy for obtaining consents/permits, traffic management plan, water resource protection plan, bio-diversity protection plan and a strategy for marking and respecting work site boundaries etc.