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Annexes

- Resettlement Policy Framework
 Indigenous People Planning Framework
 Cultural Heritage Protection Framework
- 4. Labor and Working Conditions Procedure

LIST OF ABBE	REVIATIONS
AEA	Agro-Ecosystems Analysis
CDB	Commune Database (of Ministry of Planning)
CEF	Civic Engagement Framework
CHC	Complaints Handling Committee
CHPF	Cultural Heritage Protection Framework
СНМ	Cultural Heritage Management
CHMP	Cultural Heritage Management Plan
CLMP	Community Labor Management Procedure
CLUP	Community Land Use Planning
CPR	Common Property Resources
CWCC	Commune Women and Children's Committee
DWG	District Working Group
EA	Executing Agency
E&S	Environmental and Social
ELC	Economic Land Concession
ESA	Environmental and Social Assessment
ESCP	Environmental and Social Commitment Plan
ESF	Environmental and Social Framework
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESP	Environmental and Social Profile
ESRS	Environmental and Social Review Summary
ESS	Environmental and Social Standards
ESHSS	Environment, Social Health and Safety Specification
GCF	Green Climate Fund
GDCG	General Department of Cadastre and Geography (of MLMUPC)
GDH	General Department of Housing (or MLMUPC)
GDR	General Department of Resettlement (of MEF)
GIS	Geographic Information System
GRM	Grievance Redress Mechanism
GIZ	Society for International Cooperation (German NGO)
GSSLC	General Secretariat for Social Land Concessions
IA	Implementing Agency
IC	Indigenous Community
ICLT	Indigenous Community Land Title
IDA	International Development Association
IP	Indigenous People
IPP	Indigenous People Plan
IPCC	Indigenous People Community Committee
IPPF	Indigenous People Planning Framework
JSDF	Japan Social Development Fund
KfW-IPLR	Economic Infrastructure Program to Sustain Land Reform Implementation
LASED	Land Allocation for Social and Economic Development
LWCP	Labor and Working Conditions Procedure
M&E	Monitoring and Evaluation
MAFF	Ministry of Agriculture, Forestry and Fisheries
MEF	Ministry of Economy and Finance
MLMUPC	Ministry of Land Management, Urban Planning and Construction
MoE	Ministry of Environment
MoI	Ministry of Interior
MoWRAM	Ministry of Water Resources and Meteorology
MRD	Ministry of Rural Development
·	

NCSLC	National Committee for Social Land Concessions
OHCHR	Office of the High Commissioner for Human Rights
OHSP	Occupational Health and Safety Plan
OP	Operational Policy (of World Bank)
PAWG	Provincial Accountability Working Group
PGRM	Project Grievance Redress Mechanism
PIM	Project Implementation Manual
PLUAC	Provincial Land Use Allocation Committee
PPCLFL	Procedure to Prevent Child Labor and Forced Labour
PT	Project Team
PPT	Provincial Project Team
PWGRM	Project Workers' Grievance Redress Mechanism
RF	Revolving Fund
RGC	Royal Government of Cambodia
RP	Resettlement Plan
RPF	Resettlement Policy Framework
SEP	Stakeholder Engagement Plan
SLC	Social Land Concession
SNA	Sub-National Administration
SOP	Standard Operating Procedures (for Externally Financed Projects)
TLRs	Target Land Recipients

EXECUTIVE SUMMARY

1. Land Allocation for Social and Economic Development – III (LASED III) will continue the support for the Royal Government of Cambodia's (RGC) Commune Social Land Concession (SLC) program provided by LASED and LASED II and will also support RGC's Indigenous Community Land Titling (ICLT) program, in both cases through land titling and associated infrastructure and livelihoods activities. The executing agency for LASED III will be Ministry of Land Management, Urban Planning and Construction (MLMUPC) while implementing agencies include Ministry of Agriculture, Forests and Fisheries (MAFF) and Provincial project teams.

2. This Environmental and Social Management Framework (ESMF) describes the procedures and institutional requirements that the LASED III project will follow during implementation to ensure alignment with the World Bank's Environmental and Social Standards (ESS) as well as with Cambodian legal requirements for environmental and social (E&S) risk management, which includes, *inter alia*, the Land Law (2001) and subsidiary legislation including the frameworks for SLC and ICLT, the Labor Law (1997); the Environmental Protection and Natural Resources Law (1996); The Forest Law (2002), the Protected Areas Law (2008) and the Law on Protection of National Cultural Heritage (1996). It has been determined that all of World Bank's ESS1 – ESS10 are applicable to LASED III with the exception of ESS9 (Financial Intermediaries). A gap analysis of Cambodian legislation against the ESS is presented in the ESMF with measures to close the gaps.

3. LASED III implementing agencies (IA) have experience of implementing LASED and LASED-II within the World Bank's Environmental and Social Safeguards framework. However, staff are not familiar with the increased scope of the ESS nor with new E&S risk management procedures that will be needed. There have also been changes to the Cambodian legal framework, notably for land acquisition and resettlement. IA staff are not experienced in managing risks affecting indigenous people (IP) communities. The requirements for compliance with ESS2 on Labor and Working Conditions are largely consistent with the Labor Law but go well beyond common practice, particularly in the construction industry, and capacity building will be needed to ensure these can be adequately implemented

4. The ESMF builds upon lessons learned from implementation of LASED and LASED II. Notably, the SLC land identification, mapping, titling and allocation process has been largely successful in avoiding adverse impacts on existing land users, but based on experience it must be expected that this process will generate claims and complaints which need to be managed in a transparent manner; the LASED II Complaints Handling Mechanism was found not fully adequate; infrastructure sub-projects have avoided the need for land acquisition, but cases may arise where this will be needed; SLC land titling and demarcation has not been fully successful in ensuring security of tenure for land recipients; implementation of proper sanitation and solid waste management at SLC sites has continued to be one of the main challenges which may potentially have substantial and long lasting environmental and community health impacts. The spatial-mapping based approach to safeguards adopted by LASED II risks overlooking potential risks to, or arising from, features outside the boundaries of the SLC, or risks that are not spatially determined. Matters which were not addressed systematically in LASED II but must be addressed for ESS compliance include labor and working conditions of project workers, safety issues including road safety on project roads, and protection of IP rights.

5. LASED III will support activities at 14 existing SLC and approximately 12 new SLC which are to be identified, as well as approximately 30 IP communities that have received ICLT and 15 IP communities that have applied for but not yet received ICLT. LASED III is a national project and new SLC and ICLT can in principle be in any Province of Cambodia, but it is likely that all ICLT supported and most or all new SLC will be in the six northeastern provinces. These provinces are characterized by low population densities, with IP making up 14% overall but 60% in Ratanakiri and 46% in Mondulkiri, the eastern upland Provinces. The population is young (median age 22) and is growing faster than average for Cambodia, partly due to in-migration from other Provinces. Poverty rates are somewhat higher than average for the country, while access to public services and most socio-economic

indicators are below national averages. Agriculture is the dominant economic and livelihood activity, with only 7% of adults in formal employment. Out-migration for work is important (about 11% of adults) but less so in IP communities.

6. Child malnutrition remains a key health concern. Amongst infectious diseases, tuberculosis has the highest mortality rate, but malaria and dengue are significant. Death and injury from explosive remnants of war (ERW) have fallen rapidly but road traffic accidents have increased and are now a major concern. Local authorities' efforts to reduce gender-based violence are constrained by capacity and social norms.

7. Land tenure rights are defined in law but often unclear in practice due to lack of systematic cadastral surveying and land titling. Much land in the target provinces is held under "soft" land titles or has been obtained by encroachment on state land, including protected areas, and on land which is regarded by IP communities as part of their traditional land (and so eligible for ICLT). Land disputes are common, with parties commonly including local communities, encroachers from outside the community and holders of Economic Land Concessions (ELC), many of which seem to have been issued without clear surveying or demarcation, or systematic resolution of overlapping claims. Lack of clear zoning of protected areas is also an issue, particularly for ICLT. The SLC and ICLT processes include identification and evaluation of competing claims to the land, with protected areas including biodiversity hotspots, economic land concessions, and legally owned private land excluded, and land under private occupation but nor formally owned also excluded in many cases.

8. Northeastern Cambodia contains forests with high diversity value and about 50% of the total area falls within protected zones (forests, wildlife sanctuaries etc.). This biodiversity is under stress from deforestation and conversion of land for agriculture as well as from illegal activities such as extraction of high-value timber, hunting, including for endangered species (e.g. pangolin) and charcoal production. Communities in forest areas rely on forest products for an important part of their livelihood but – under economic pressure – may engage in illegal and damaging activities. Prospective ICLT sites and some existing SLC are located close to areas of high biodiversity value.

9. Climate change is projected to cause longer and dryer dry seasons with more intense wet seasons, increased temperatures and increased frequency and intensity of extreme events. Water resources depend on rainfall and on cross-border inflows of the Mekong and its tributaries; these are under pressure from climate change and from hydroelectric dam construction; the latter sometimes also has local adverse impacts on downstream communities which potentially could include SLC or ICLT. and climate change. Local communities depend on streams and on groundwater. There is a known risk of harmful levels of arsenic in groundwater in some areas. There is a known risk of harmful levels of arsenic in groundwater in sources in the target provinces may include run-off of agricultural chemicals from large commercial plantations and also chemical pollutants from mining operations these sources could exist upstream of SLC or ICLT. As the project will involve relocation of communities to SLC sites, these hazards result in potential project-related community health and safety risks.

10. E&S risks identified, and for which risk management measures are proposed in this ESMF, include (1) risks to direct project workers, most importantly associated with travel to and work at remote sites; (2) employment conditions and occupational health and safety risks to contracted workers, especially construction workers; (3) unsustainable use of water resources, particularly for irrigation; (4) pollution arising from inappropriate use of agriculture chemicals, from hazardous and non-hazardous wastes and from construction works; (5) safety risks of dams, including project dams and upstream dams; (6) ERW; (7) infectious and water-borne diseases; (8) health impacts of potentially polluted surface water supplies; (8) road traffic accidents; (9) possible negative impacts on child nutrition, reduced access to health services, support for victims of GBV etc., associated with settlement on SLC; (10) hazards to the public from construction works; (11) adverse impacts on land users, including legal landowners, informal occupiers who may not be protected by Cambodian law, and land users for CPR purposes etc.; (12) possible adverse impacts on biodiversity hotspots in the vicinity of SLC; (13) adverse

impacts on land rights, livelihoods or cultural heritage of IPs; (14) potential for damage to tangible or intangible cultural heritage.

11. E&S risk management in LASED III will be at three levels: project, location (SLC or ICLT) and sub-project, with emphasis on the latter two where most project activities will be implemented. In some cases (e.g. where a number of SLC are adjacent) a regional environmental and social impact assessment may also be needed. Project-level risk management instruments are this ESMF; Labor Management Procedures (LMP); Resettlement Policy Framework (RPF); Indigenous People Planning Framework (IPPF); Cultural Heritage Protection Framework (CHPF) and Stakeholder Engagement Plan (SEP) which includes the project Grievance Redress Mechanism (GRM). The project will also prepare and adopt an Operational Health and Safety Plan for direct project workers and standardized Environment, Social, Health and Safety Specifications (ESHSS)for inclusion in contract documentation – the ESHSS will include working conditions protections for contracted workers as well as other E&S measures.

12. E&S screening and risk assessment will be carried out at each location and will identify specific features in or adjacent to the project locations, relevant to the risks identified in the ESMF (as well as any other location-specific risk factors). Based on the screening, a location-specific Environmental and Social Management Plan will be prepared, together with SEP (for new SLC and all ICLT), Resettlement Plan (RP), Indigenous People Plan (IPP) and Cultural Heritage Management Plan (CHMP) where relevant. The principle of Free, Prior and Informed Consent (FPIC) will be applied to activities with potential adverse impacts on IP.

13. All proposed infrastructure and livelihoods sub-projects will be subject to E&S risk screening. All infrastructure sub-projects, and livelihoods sub-projects where relevant, will have a simple, matrix-format ESMP. The ESMP will include standard provisions per sub-project type as well as specific provisions identified as needed through screening. The sub-project ESMP together with the EHSSS (covering management of contracted workers, site health and safety, pollution control, community safety during construction, ERW incidents and chance cultural finds) will be included in contract documentation for all works contracts. All dams will be subject to dam safety checks. Site access roads will have road safety design checks and plans.

14. LASED III will disclose key project information to stakeholders and affected parties in a timely and accessible manner and will engage in stakeholder consultation throughout the project in line with the project SEP, the location SEPs and the existing standard requirements of the SLC and ICLT processes. Engagement with IP will be culturally appropriate and conducted in the IP local language to the extent possible; the project will recruit community facilitators from within the IP communities to assist. The project will establish a Grievance Redress Mechanism which is described in the SEP. Grievances arising from project activities internal to IP will be addressed through traditional resolution processes in the first instance, and IP access to the GRM will be supported, including the costs of a community member to act as advocate for the complainant. Stakeholder engagement during project preparation is described in the SEP.

15. Implementation of E&S risk management will be a responsibility of all implementing agencies and project partners under the overall coordination of MLMUPC which will employ one environmental specialist, one social specialist and one IP specialist adviser, as well as E&S risk management advisers at Provincial level. All IA will nominate one Environment and one Social Focal Point. In the case that involuntary land acquisition is needed, the RP will be prepared and implemented by the General Department of Resettlement of Ministry of Economy and Finance. The Project will monitor and report on implementation of E&S risk management and on any significant E&S related incidents. An E&S Audit will be conducted before mid-term review.

16. LASED III will implement an E&S risk management capacity building plan which is presented in this ESMF. Trainees will include (1) E&S risk management staff of the project; (2) all project direct

workers, to basic familiarity level plus training on specific tasks within their responsibility; (3) staff of partner organizations; and (4) supervisory staff of project contractors.

17. Costs of implementing the E&S risk management measures will include specific costs and costs within general project budget lines. Identified costs presented in a budget in this ESMF amount to \$1,078,000 of which approximately \$500,000 is the salaries of the advisers.

18. This ESMF, which includes the LWCP, RPF, IPPF, and CHPF was disclosed together with the ESCP and SEP to stakeholders on April 11, 2020. Disclosure was undertaken through the websites of MLMUPC (<u>http://www.mlmupc.gov.kh</u>), MAFF (<u>http://www.maff.gov.kh</u>) and the World Bank.

19. In view of government measures to avoid the spread of Covid-19, the normal extent of face-toface consultations will not be possible so virtual consultations will be used where appropriate. As agreed with World Bank, the consultation process will follow a 3-way approach including online, phone calls / emails and commune office. Stakeholders to be consulted through this process include stakeholders in Kratie, Mondulkiri and Ratanakiri at Province, Commune and IP community level as well as stakeholders in Phnom Penh.

20. Stakeholder feedback was addressed in the current ESMF and other E&S instruments.

INTRODUCTION

1

1.1 Social Land Concession and Indigenous Community Land Titling Processes

21. The proposed LASED III project will continue the support to the Royal Government of Cambodia's (RGC) commune-level Social Land Concession (SLC) process, following on from LASED and LADED-II, and will also extend support to indigenous people (IP) communities that have applied for or obtained an Indigenous Community Land Title.

22. SLC are identified and implemented through a well-established 10 step process which has been supported by LASED and LASED II. This process is described in Table 1A below.

	Table 1A: Summary of 10-Step Commune SLC Process						
STEP	DESCRIPTION	RESULTS					
1	Initiate and Screen SLC	Commune Council propose SLC (preparation of sketch map and land use p Environmental and Social Risk Screening Authorization to Proceed	orofile)				
2	Plan Technical Studies	Work-plan for SLC process					
3	Awareness Raising by Commune Council	Local Residents Understand About SLC Method of selecting land recipients agreed Identification of poor households and illegal land occupants					
4	State Land Meeting	Updated sketch map with individual and collective landFinal SLC mapping by General Department of Cadastre and Geography (GDCG) – this is basis for cut-off dateIdentify access route and determine if land acquisition will be needed for construction / improvement of access roadAssess impacts on users of common property resources (CPR), e.g. grazing, firewood, NTFP etc. on the proposed SLC land. Ensure either 	Steps 3, 4 and 5 can proceed at the same time				
5	Participatory Land Use Planning & Mapping	Agro-Ecosystems Analysis Infrastructure Needs Assessment Consult, prepare, disclose site-specific ESMP, SEP and other E&S risk management instruments as needed If Indigenous Communities (IC) are affected, verify Free, Prior and Informed Consent Social Land Concession Report	Ste				
6	Review of SLC Report	Allocation for Rural Infrastructure and Services					
7	Land Recipient Selection	Priority Application List					

		Reserve Application List
8	Full SLC Plan	Plots Allocated
		Full SLC Plan Approved
9	Site Preparation	Boundaries Marked of SLC Plots
		Rural Water Supplies
		Land Clearing
		Access Tracks
		Official Transfer of Land
10	Settling in and Rural Development	Settling In Assistance
		Rural Infrastructure and Services
		Sustainable Community

23. The ICLT process is implemented through three phases which result successively in: Phase 1: recognition of the community as an eligible indigenous community by Ministry of Rural Development (MRD); Phase 2: Official registration of the community as a legal entity by Ministry of Interior (MoI); and Phase 3: issue of an ICLT by Ministry of Land Management, Urban Planning and Construction (MLMUPC). As the process has developed in practice, an intermediate "Phase 2.5" has emerged, in which the IP community prepares and submits its application to MLMUPC. LASED III will support IP communities that have submitted applications to MLMUPC, i.e. have reached the beginning of Phase 3, or later. The project will support IP communities to complete the ICLT process and also with infrastructure and agriculture livelihoods support. IP communities that have already received ICLT (completed Phase 3) will be eligible for infrastructure and livelihoods support. The ICLT process is illustrated in Table 1B.

	Table 1B: Indigenous Community Land Titling Process							
Phase 1	Phase 2	Phase 2.5	Phase 3					
MoRD: IP Community Identification Process	MoI: Official Registration of IP Community as "Legal Entity"	IP Community: Launching CLT Application to MLMUPC	MLMUPC: Measuring, Public Display, Reclassification and Issuing CLT to IP Community					
Step 1: Publicize awareness among provincial authorities (relevant departments) and authorities at the district, commune and village levels and IC.	Step 1: The IPC to draft community by-laws as well as forming Community Representative Committee	Step 1: Collect data and produce preliminary maps by defining boundaries of community land type participated by all land owners (This is where the FPIC emphasis is.)	Step 1: Measurement and data collection of land boundaries by type of use, determination of boundaries and identification of state land (This is where the FPIC emphasis is)					
Step 2: Indigenous communities show their willingness to initiate identification process of the indigenous communities	Step 2: Reviewing community members' commitment and purposes	Step 2: The IPC establish its internal rules Facilitated by NGO (drafted by MoI)	Step 2: Public display of land evaluation documents + complaint					
Step 3: Raising awareness about the	Step 3: The IPC to organize Community Congress in order to	Step 3: The IPC to apply for a CLT to MLMUPC	Step 3: Reporting on the result of display of land evaluation documents					

Table 1B: Indigenous Community Land Titling Process						
Phase 1	Phase 2	Phase 2.5	Phase 3			
MoRD: IP Community Identification Process	MoI: Official Registration of IP Community as "Legal Entity"	IP Community: Launching CLT Application to MLMUPC	MLMUPC: Measuring, Public Display, Reclassification and Issuing CLT to IP Community			
process among the target communities	formally adopt the "community by-laws" and "Community's Committee"					
Step 4: The IPC to elect a Community Commission Representative and self- identify as "indigenous".	Step 4: The IPC to submit the legal entity registration application to the MoI		Step 4: Meeting with the PSLC to decide on the report on the result of the public display of the land evaluation, and requesting the MLMUPC to issue land titles to the IP community.			
Step 5: MRD issues Identity Certificates to the indigenous communities	Step 5: The MoI to register the IPC as a "Legal Entity"		Step 5: MLMUPC issues a letter to the MoE and the MAFF asking for an examination and approval of the land concerned			
		·	Step 6:The MLMUPC issues aletter to the CoM requesting the landreclassification to be registered as acollective land in accordance withthe decision of the MoE and theMAFF.Step 7: Issue collective land titles toindigenous communities.			

1.2 Existing Commune SLC Sites and ICLT

24. Existing commune SLC sites (i.e. those that have received support under LASED and LASED II projects, will be eligible for further infrastructure and livelihoods support from LASED III. There are 14 SLC in this category, as listed in Table 2A.

	Table 2A: Existing Commune Social Land Concessions						
Province	District	Commune	SLC Name	Households	Total Size (ha)		
		Sambok	Sambok SLC	554	3,294.36		
V	Chet Borey	Changkrang	Changkrang SLC	331	612.21		
Kratie		Dar	Dar SLC	402	572.37		
		Tmei	Tmei SLC	432	923.9		
	Prek Prasab	Chambak	Chambak SLC	400	1,163.20		
Tbong Khmom	Memot	ChoamKravien	Choam Kravien SLC	250	863.65		
		Tipo 1	Tipo 1 SLC	479	1,508.00		
Kampong Thom	Santuk	Tipo 2	Tipo 2 SLC	300	1,335.44		
			Sombok Kriel SLC	196	854.3		
Kampong Chhnang	Samaki Meanchey	Kraing Lavea	Ksachsor SLC	258	975.6		
	wieanchey	Peam	Peam SLC	233	468.78		

		Chhean Leung	Chhean Leung SLC	206	428.99
Kampong Speu	O Ral	Raksmey Samaki	Prey Thom SLC	400	1,120.00
Kampong thom	Prasat Balaing	Dong	Dong SLC (new site)	572	1,992.79

25. There are currently 150 IP communities that have received recognition from MRD (Phase 1). Of these, 141 have been registered as legal entities by MoI (Phase 2). Thirty IP communities have received ICLT from MLMUPC (Phase 3). Almost all actual and candidate ICLT are located in the northeast provinces of Ratanakiri, Mondulkiri, Stung Treng and Kratie. The 30 completed ICLT are listed in Table 2B.

Table 2B: Existing ICLT (Titles Issued)				
Province	Village	Number of Titles	Total Area (hectare)	Households
Ratanakiri	Laern Kraen	17	723.50	84
	La-Inn	64	1501.89	242
	Laern Chong	16	675.90	96
	Krala	21	1765.98	205
	Phum Pir	23	854.86	165
	Ta Ngach	9	624.16	70
	Kong Koy	6	463.52	43
	Kancherng	9	1512.10	106
	Kres	15	748.29	73
	Laer	24	768.7	108
	Kachanh	27	789.31	151
	Kalong	20	628.10	65
	Katieng	30	656.25	115
	Tun	23	2421.11	102
	Tumpuon Roeung Toch	15	2119.35	60
	Pyang	17	1593.03	64
	Sieng Say	24	827.29	57
Mondulkiri	Orana	59	648.05	80
	Ochra	27	526.12	27
	Gati	22	482.69	45
	Srae Ktum	61	1084.52	93
	Srae Lavy	12	383.84	31
	Andong Kraleung	37	1424.26	81
	Putrom	60	1606.18	116
Kratie	Ponchea	35	597.31	132
	Okok	21	402.03	37
	Pa Khlae	35	1577.81	237
	Rovieng	43	2207.84	223
Stung Treng	Katot	21	685.04	58
	Rompoat	26	1306.47	67
Total	-	819	31605.53	3033

1.3 Project Objective

26. Project Development Objective (PDO). The PDO is to provide access to land tenure security, agricultural and social services, and selected infrastructure to small farmers and communities in the project areas. There are three PDO level indicators and will be measured through the following indicators: (i) tenure security provided to beneficiary farmers and community groups. Achievements would be measured by the number of registered land titles and by the size of related area covered (ha) and by measuring the perception of tenure security. Data would be disaggregated by gender, individual, and communal land rights; (ii) Infrastructure and service provision in the project areas. Achievements would be measured by the access to agriculture services, clean water, connecting roads, schools and health posts; (iii) Sustainable, agriculture-based livelihood development for individuals and groups in the project communities. Achievements would be measured by improvements in the poverty status of

beneficiaries. Citizen engagement is measured through the satisfaction of beneficiaries with the land titling process and the provision of agriculture services.

1.4 Project Components

The proposed LASED III project comprises the following five components: (a) Selection and Development Planning of Social Land Concessions (SLC) and Indigenous Communal Land Titling (ICLT); (b) Community Infrastructure Development; (c) Agriculture and Livelihood Development; (d) Project Management, Coordination and M&E; and (e) Contingent Emergency Response.

27. LASED III will follow a two-pronged approach, (i) consolidating through complementary activities the current SLC program under LASED II and expanding it into new SLC sites and (ii) implementing an adapted approach into communities of indigenous people in new project provinces. The project would build on the successful and well-established procedures under LASED and LASED II for implementing SLC activities, but also adapt them to indigenous peoples' communities.

28. Component 1: Selection and Development Planning of SLC and ICLT will support LASED III would support applications for SLC, ICLT, and development support to ICs, on a first come, first served basis. For new SLCs, first, communes would have to express a request; then, once the availability of the land is determined by the project as compliant with the needs of the communities, a comprehensive environmental and social assessment and land use planning are carried out before the sites are endorsed for the project. For ICLT and development assistance to ICs, the ICs themselves would have to come forward and ask for assistance. For ICLT, the Project would provide support throughout the different steps necessary to complete the titling process¹. This includes ICs whose land registration applications have already been successfully received by provincial land departments but that the land registration has not yet started, and also for those who have legal recognition from MOI but have not yet created and gathered all necessary documents to be able to file land registration applications. For ICs who as of the start of the project have already completed the ICLT process, development assistance would be provided, namely through infrastructure and service support. Planning activities in ICs would be supported by experienced local and international technical assistance, employed by the Project.

29. Land Use Plans are a critical tool for the identification of, and formulation of development plans for SLC and ICLT, informing sustainable management strategies of natural resources at the local level including the identification of most appropriate use of land resources and rehabilitation of degraded lands. Specifically, land use plans would seek to maintain natural water resources, tree covers, pay heed to natural drainage canals or basins to utilize land in a manner that minimizes risk from climate hazards such as droughts or flooding. For the identification, and formulation of development plans for SLC and ICLT three main activities are financed under this component, including: first, participatory preparation of SLC and ICLT plans for the new sites; second, the identification, prioritization and planning for rural climate resilient infrastructure investments such as irrigation schemes, roads, schools, teacher houses, community centers, heath care facilities, fresh water supply. The planning process also helps to collect relevant project baseline data that support decision-making for climate-smart community development planning; and, third, the processing of individual SLC land titles for eligible land recipients and of communal land titles in IP communities.

30. Technical support for planning of project's activities would be provided for all project sites, independently of their status in the titling process. This will review the bio-physical, socioeconomic and cultural endowments of the communities and their environment, and assess the sites' carrying capacities and the implications for agriculture-based livelihoods of land recipients. In addition, the integration of site planning into the Commune Development Plans (CDP)/Commune Investment Plans (CIP) will facilitate long-term sustainability. For this reason, preparation of Commune Development

 $^{^1}$ Annex 2 describes the ICLT processes and the guiding tasked for the development support for already-titled indigenous communities

Plans for all districts that host SLCs has been requested by the government and will be carried out under the proposed LASED III project. CLUPs would be prepared using mapping and GPS tools, with active participation from community members. A detailed outline of planning activities and environmental and social risk management processes and instruments that would be expected for different project sites would be included in the Project Implementation Manual (PIM). The PIM would also present more detailed requirements for CLUP preparation.

31. Component 2: Community Infrastructure Development: Following the selection of the prioritized and viable infrastructure investments at new project sites under Component 1, this component will finance implementation of the investments. These include the provision of productive/economic and social community infrastructure investments such as rural roads, side drain, culverts, drifts, water supply and sanitation facilities, small-scale irrigation systems, school buildings, teachers' houses, health posts and community centers, among others. Based on the experiences in existing SLC areas and responding to the significant infrastructure gaps at the proposed new project sites in rural areas, appropriate transport connectivity would be provided through site access roads, residential and agriculture access roads and tracks, both within and across the SLC sites. It is expected that the project's largest investments would be for transport connectivity whose benefits would extend beyond the direct project beneficiaries, covering entire communes and wider areas. The second largest investment item concerns clean water supply and sanitation at residential areas, and climate change resilient and sustainable small-scale irrigation schemes. To address sustainability concerns, climate change adaptation measures will be considered in design and construction and the scope of the road and other community infrastructures will be calibrated with the amounts of maintenance funds planned by the relevant local governments. The project will follow RGC/MRD policies and guidelines for rural infrastructure provision.

32. The infrastructure to be constructed under this project would emphasize resiliency i.e. to both built to be resilient to climate change and enable resiliency of communities. Transport infrastructure will be built to withstand climate hazards, such as extreme heat and drought, or flooding and to support the resilience of communities of road side communities through smart designs that will divert rainwater runoff from newly constructed roads for productive agricultural uses e.g. through water spreaders from culverts to supplemental irrigation. Social infrastructure such as school buildings, community centers, health posts will be designed to also withstand climate hazards, to be energy efficient and powered by renewable energy. Climate resilience of roads requires consideration and application of a set of technological measures. Climate change adaptation measures such as raising the embankment to at least 0.5m above the maximum flood level, adjusting side slopes to 1:3, constructing side drain and cross drainage structures and adjusting the technical requirement for compaction will be considered in the engineering design and construction. With these considerations, more lands will be required for infrastructures compared to previous projects. For instance, road width up to 30m would be used for site access roads and 24m for residential and agricultural roads, provided this would not involve any resettlement activities. As earth and laterite roads are vulnerable to climate change conditions, paving the road surface is also essential for climate resilience. However, due to budget limitations, only small portions of project roads will be paved. Similar to the existing project, the detailed technical designs and construction supervision would be carried out by project individual engineers, supported by technical staff from relevant provincial line departments. With this arrangement, the project engineers will also provide on-the-job training to provincial staff on design and construction supervision of infrastructure. With respect to rural roads, contractors would be required to utilize local labor force and materials as much as possible, to develop local maintenance capacity and employment opportunities.

33. *Component 3: Agriculture and Livelihood Development:* This component would support the settlement process of beneficiary households, the building of socio-economic capital (producer groups/cooperatives) and the development of climate-change resilient and market demand driven agricultural production systems. These activities would include support for: (i) settling-in assistance² to

 $^{^2}$ Basic household supplies, some shelter materials, food for work, and small materials and equipment related agriculture farming (to be details in the PIM)

newly-installed land recipients and land preparation assistance for a first cover crop and/or planting of seedlings for tree crops such as cashew to provide the basis for land recipients to establish a new residency and start using their new agriculture land; (ii) implementation of a comprehensive agricultural services strategy (see next paragraph) with an emphasis on climate-smart agriculture techniques, and taking into account the differing knowledge, skills and interests of land recipients. The land recipients range from those who need to master basic agricultural husbandry practices to those that are more sophisticated, ready to engage in lucrative market niches nationally or for exports, as well as the need for gender-specific approaches. This activity will therefore include the provision of training in key climate smart techniques and the provision and use of climate information services to inform communities' climate risk decision making. The strategy would also exploit synergies with the ongoing World Bank-supported nutrition project (paragraph 25) as well as promote nutrition-sensitive agriculture production; (iii) establishment and/or strengthening of farmers organizations for production and marketing activities and other community interest groups which will form the bedrock of knowledge exchange and peer earning on climate smart agriculture practice, such as better fertilizer use practices, manure management and integrated water management and entry point for climate information; and (iv) provision of a Community Fund for Development (CFD) to scale up successful local initiatives. The CFD will operate as a revolving fund (RF) and give preference to local initiatives that maximize triple wins benefits of enhanced productivity and incomes for farmers, mitigation and adaptation. Implementation of this component would be supported by strong national and international technical assistance, in close collaboration with MAFF, other implementation agencies (IAs) and provincial departments.

MAFF has formulated a comprehensive agricultural services strategy for LASED III including 34. extension and support to agricultural cooperatives. Hitherto, extension delivery under LASED II tried to use the "Farmers' Field School - FFS" approach but implementation has been poor, owing to unfamiliarity with the key features of the FFS approach, weak technical capacity, and inadequate Following a comprehensive diagnosis of the current extension services, MAFF has funding. reformulated the delivery strategy. It features: (i) a pluralistic service provider approach, involving technical staff from MAFF, private sector agents e.g. medium to large scale agro-industries and consultants, and NGOs; (ii) leveraging modern ICT to disseminate new climate smart technologies or improved husbandry practices; (ii) clarification of the basic operating procedures of the FFS e.g. formulation and implementation process of farmer-managed demonstration plots, interactions between extensionists and farmers, etc., while taking into account the specific sociocultural and biophysical environments of new project sites, in particular in IP areas, etc.; and (iii) establishment of partnerships with agricultural research institutions to test climate smart technological innovations (e.g. climate resilient crops and crop varieties) for diffusion to farmers. A detailed plan of actions has been prepared spelling out key activities to be undertaken before, during, and after the agricultural season. The second component of the strategy i.e. support to the development of agricultural cooperatives, has also been laid out. Assuming its effective implementation, it bodes well for relevant technical and managerial support to farmers' cooperatives. The PIM would highlight key elements of the new agricultural services strategy.

35. <u>The component would explicitly tackle vulnerabilities from climate hazards and the proximity</u> of natural habitats. Since some new project sites would include areas in provinces with important natural habitats, the project would incorporate in its agriculture and livelihood development plans activities that protect private, communal and public lands. Where applicable, community forestry activities would be supported alongside private agriculture activities. At the same time, the project would provide specific short and long-term responses to climate change challenges to strengthen the resilience of production systems. Climate-smart agricultural practices - adoption of more resilient crops, agroforestry, and sustainable land management would be emphasized and taught in extension services. Small-scale irrigation will help improve both productivity and climate resilience of beneficiaries. It would also facilitate a shift towards more diversified and higher value crops, thereby opening new markets and income opportunities for producers. 36. The implementation of the RF would support the identification and implementation of local economic initiatives, benefitting organized groups (mainly agriculture cooperatives) and individual farmers. Implementation of the RF, i.e. the management of identified community and private initiatives would be facilitated by a specialized firm(s) and/or NGO.

37. *Component 4: Project Management, Coordination and M&E (approx. US\$10 million).* This will include capacity for safeguards screening, risk management planning and monitoring implementation.

38. *Component 5: Contingent Emergency Response (US\$0 million). This* is included in order to allow reallocation of project funds to respond to emergencies (e.g. flood disaster) which might occur during implementation of the project.

1.5 Targeting Including Selection of SLC and ICLT

39. *Geographical Targeting.* In principle, the project can operate nation-wide, excluding Phnom Penh, depending on relevant demands and opportunities for developments of SLC and ICLT. However, current (and likely final) agreement with authorities limit the project's coverage to the 14 provinces³ that would host about 71 sites and IP communities.

40. Beneficiary targeting. The approach to the delivery of LASED III relating to Social Land Concessions (SLCs) and Indigenous Community Land Titling (ICLT) is "demand-driven" i.e. the allocation of both SLCs and ICLTs is commune-based or ICs-driven, rather than pre-determined by the project. This ensures that the project responds to the needs of land recipients and capacities of communes / communities and IPCs, and beneficiaries to have more ownership of project supported activities. Within this framework, the project would support: (i) about 15 ICs to carry out their respective ICLT processes; (ii) about 30 ICs, that have completed their titling processes, with development activities; (iii) about 12 SLC new sites in both currently covered and new provinces for land allocation and development activities; and (iv) the current 14 SLC sites currently covered by LASED II with limited, discrete and complementary activities such as small-scale irrigation and agriculture access track across SLC sites. However, it is not likely that all the estimated 57 new sites and communities would be identified and fully delineated, and all potentially required reclassification and/or reallocation completed before the start of the project. The PIM will include necessary guidance to ensure that during project implementation, all sites and communities, for which the project beneficiaries are selected would be in accordance with the Land law and with ESF requirements. Direct LASED III beneficiaries would approximate 15,000 rural households. Benefits from improved infrastructure availability and usage would accrue to a broader population, beyond the targeted households in the project areas.

41. Direct project beneficiaries would include (i) targeted households in new SLC communities located both in provinces currently under LASED II and new provinces; (ii) targeted communities and/or households in new IP provinces; and (iii) households in the current LASED II SLC communities. It is expected that approximately 12 new viable SLC sites would be identified for inclusion in LASED III, totaling an estimated additional 5,000 SLC beneficiary households. The SLC communities currently under LASED II that would be eligible for support under LASED III include those sites where complementary infrastructure such as small-scale irrigation and road infrastructure across SLC was foreseen but not provided, as well as assistance and service provision for remaining households, notably at the Dong commune site, not likely to complete their land titling process after LASED II closing.

42. ICLT Eligibility. Indigenous Communities that have received legal recognition as communities from Ministry of Interior (MoI) in Phase 2 of the ICLT process, or that have reached a later stage of the

³ Administratively, Cambodia consists of Phnom Penh Capital and 25 Provinces, which are sub-divided into urban Municipalities and rural Districts. Districts are sub-divided into Communes administered by a directly elected Commune Council which is recognized as the lowest level of formal sub-national administration. Village chiefs and assistants report to the Commune Council

process, will be eligible to apply for project assistance. Therefore, candidates for ICLT support will include ICs that have not yet submitted land registration applications (Phase 2.5 of the process), ICs that have submitted applications but have not yet received community land titles, and ICs that already received titles. It is expected that up to 45 IC/ICLT communities could be eligible for different levels of project support, of which 30 are likely to be the communities that received titles already.

1.6 Project Implementation Responsibilities

43. **Ministry of Land Use Management, Urban Planning and Construction** (MLMUPC) would lead overall implementation planning and coordination, in close collaboration with the **implementing agencies** (IA). It would be tasked to manage implementation of: (i) infrastructure activities such as rural roads, small-scale irrigation schemes, and school and health infrastructure; (ii) ICLT-related activities – MLMUPC would mobilize, as needed, relevant capacities and resources from national and provincial ministries / departments to deal with technical and legal aspects related to the ICLT interventions; (iii) procurement activities for infrastructure investments exceeding commune and community thresholds - Responsibility for monitoring contractors' performance and for certifying requests for payment would be formally delegated by MLMUPC to those specialized in the subject matter; and, (iv) an efficient and effective M&E system at all project levels.

44. Dedicated safeguards staff at national and sub-national levels, together with communication expert(s) will ensure that project implementation procedures are well understood and duly followed. The safeguards team will ensure that processes as described in the ESF and the associated frameworks, plans, and procedures are appropriately implemented and documented. The project communication team will ensure that internal and external information sharing and awareness raising reach beneficiaries and other stakeholders through appropriate communication means which are described in the SEP and will be further elaborated in the LASED-III PIM. MLMUPC will seek capacity building and assistance from external service providers (NGOs, consultants) as required.

45. The Ministry of Agriculture, Forestry and Fishery (MAFF) would be the IA tasked for implementing agriculture-related livelihood activities. Responsibilities of MAFF will include (i) to coordinate and ensure implementation of all agriculture-based livelihood activities; (ii) planning and implementation of the RF; and (iii) procurement of goods and services necessary for the implementation of related activities. It would also be provided with the necessary financial resources to contract experienced international and national consultants, NGOs or other service providers to help provide adequate agricultural service deliveries and RF-related activities.

46. The EA and the IA would coordinate implementation of commune and community level activities, where relevant. They will oversee all commune and community levels procurement activities. With the increased number of communes and communities involved in the project, their enhanced capacities in planning and implementation management would be crucial for project sustainability. Hence, the EA's and the IA's role, as facilitator and capacity building provider to strengthen management and administrative functions of commune and communities, will be important for project success. Where needed, the EA and the IA will support the Provincial Administrations in their coordination roles. The project will provide adequate funding assistance to Provincial Administration and Communes, commensurate to the expanded number of community and commune sub-projects under LASED III. At the same time, arrangements will be made whereby Provincial Administration prepares an exit strategy, ensuring that project activities are transferred and incorporated into regular sub-national government work plans and budgets by project end.

47. Project Management Team (PMT) / Project Coordination Office (PCO). The Project Management Team (PMT), will be responsible for the overall coordination of project implementation and external communication, including the agreed reporting to World Bank. The PCO / PMT will be led by a project director from the MLMUPC with senior officials assigned from the MAFF as members of the team. The PCO / PMT will also include members from the main technical units involved in project implementation, including senior staff responsible for FM, procurement, M&E, and

communication. Consultants and contract staff could, where and when needed, fill capacity gaps in the team. The PCO / PMT will be physically located in the MLMUPC. However, as the project is implemented through the existing government (MLMUPC, MAFF) structure, including the line departments of the EA and the IA, the PCO / PMT staffing will be limited in number but with efficient and effective personnel. It is expected that the Project Director, as head of the PMT, will ensure transparent communication and participatory decision-making with respect for diverse views and gender equality.

48. Project Team(s). Project Teams will be established to support the planning and implementation of the project components. The project teams at MLMUPC and MAFF will include technical staff to address practical and specialized issues arising during planning and implementation. These will be teams from specific government units at the national and provincial levels. The project will in practice include support by, and cooperation with different project teams from different ministries, depending on the type of public infrastructure and services that are included. Membership will include technical staff, FM staff, procurement staff and internal auditors involved in direct planning and implementation and in subnational capacity building. They will provide field visit reports on the progress and achievements to the PCO / PMT.

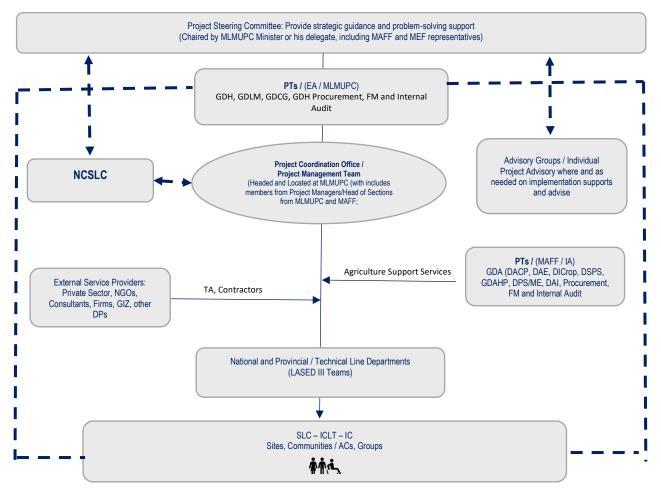


Figure 1: LASED III Project Implementation Arrangements

49. *Supporting / Cooperating Ministries.* The formal implementation structure includes only two ministries as executing/implementing agencies, with MLMUPC assuming the role of EA. In addition, the project will continue to draw on the technical expertise and on the advice from cooperating and supporting other ministries, e.g. Ministry of Rural Development (MRD), Ministry of Education, Youth and Sport (MoEYS), Ministry of Health (MOH), Ministry of Environment (MoE), and Ministry of Interior (MoI), Ministry of Women's Affairs (MoWA), Ministry of Water Resources and Meteorology (MoWRAM) and the National Committee for Sub-National Democratic Development Secretariat

(NCDDS). The EA will need to ensure that in particular the project-financed infrastructure provisions comply with national standards and is included the respective ministries' and departments' planning. In addition, other ministries, as represented in the NSLCC, would provide training and capacity building at project communities as necessary for a smooth implementation.

50. **Provincial Technical Departments.** Responsibility for field level implementation lies primarily with the relevant technical departments at provincial level. Provincial Teams will be formed to take charge of project implementation. They will be supported, where necessary, by qualified line ministry staff, other service providers for the project, and NGOs. Necessary activities for all relevant provincial departments and Communes/Communities will be included in the work plan of MLMUPC and MAFF, respectively.

51. **External Service Providers** (NGOs, consultants, firms, and other DPs). The project realizes the need to supplement and strengthen RGC capacities by providing backup support for technical and managerial activities that require target group and/or location specific expertise. Employment of NGOs and/or consultants/firm(s) to bridge capacity gaps and ensure accelerated quality implementation is considered critical for project success.

1.7 ESMF Objective and Methodology

52. This document is the Environmental and Social Management Framework (ESMF) for the proposed Land Allocation for Social and Economic Development Project III (LASED III) describes the procedures, institutional responsibilities and resources available to assess future project activities that have yet to be identified, in order to ensure consistency with the World Bank's Environmental and Social Framework (ESF) including the relevant Environmental and Social Standards (ESS) for financing by the World Bank (WB or Bank). The ESMF also meets the requirement of Royal Government of Cambodia's (RGC) Standard Operating Procedures for Externally Assisted Projects (SOP) that an Environmental and Social Impact Assessment should be conducted.

53. ESMF processes are mandatory for all sites identified in the course of project implementation. These processes are designed to:

- (a) Ensure (through processes which are described in detail in the SEP) involvement of and consultation with intended beneficiary communities to ensure that proposed project activities address their needs (including needs of different groups within the community, e.g. gender differentiated needs);
- (b) Prevent and/or mitigate any environmental and social impact that may be resulting from the proposed activities,
- (c) Ensure the long-term environmental sustainability of benefits from proposed activities by securing the natural resource base on which they depend, and
- (d) Facilitate, in a pro-active manner, activities that can be expected to lead to increased efficiency in the use and improved management of natural resources resulting in the stabilization and/or improvements in local environmental quality and human well-being as well.

54. The ESF defines an ESMF as "an instrument that examines the risks and impacts when a project consists of a program and / or series of sub-projects, and the risks and impacts cannot be determined until the program and/or sub-project details have been identified." Because the LASED III sites will be determined during the first year of project implementation, and infrastructure and other sub-projects will be identified and planned based on needs assessment at the identified sites, it is not possible to fully assess all potential social and environmental risks at the project design stage. The ESF requires that for projects of this type, the ESMF should set out the "principles, rules, guidelines and procedures to assess the environmental and social risks and impacts. It contains measures and plans to reduce, mitigate and/or offset adverse risks and impacts, provisions for estimating and budgeting the costs of such measures, and information on the agency or agencies responsible for addressing project risks and impacts,

including on its capacity to manage environmental and social risks and impacts. It includes adequate information on the area in which subprojects are expected to be sited, including any potential environmental and social vulnerabilities of the area; and on the potential impacts that may occur and mitigation."

55. Therefore, the ESMF presents an analysis of anticipated risks and impacts based on the scope of foreseen project activities, expected conditions at project sites and experience of the previous LASED and LASED II projects, together with principles, rules, guidelines and procedures to assess specific environmental and social risks and impacts and develop risk management measures at each site. It is anticipated that environmental and social risks in LASED III for SLC will be broadly similar to those in LASED II, however new risks particularly in relation to the ICLT or new SLC sites, have been carefully considered. The scope of the risk assessment includes the new requirements and emphases of the ESF which were not part of the safeguards framework for LASED II.

56. The remainder of Section 1 of the ESMF consists of a description of the national legal and regulatory framework and a gap analysis of this framework in relation to ESF requirements. This is followed by an analysis of the institutional arrangements and capacities of the project implementing agencies for environmental and social risk management. Section 2 briefly describes relevant lessons learned from implementation of LASED and LASED II.

57. Section 3 presents a summary environmental and social profile of the target areas, highlighting features that may give rise to environmental and social risks, based on available data on the likely target provinces, visits to existing SLC sites and ICLT locations and discussion with land recipients on those sites, discussions with LASED implementing agencies and other stakeholders, and on the considerable body of experience and lessons learned from implementation of LASED / LASED II. The full Environmental and Social Profile (ESP) has been prepared as a separate document. Section 4 builds upon the ESP to develop an analysis of potential environmental and social risks with potential severity of impact and likelihood of occurrence, and relevant risk mitigation measures, in relation to each relevant ESS.

58. Section 5 presents the risk management framework, including:

- (a) Description and summary of the risk management instruments, which are presented as Annexes to this ESMF;
- (b) Risk avoidance, mitigation and management measures which will form the Environmental and Social Commitment Plan (ESCP) for the project;
- (c) Project procedures for screening actual and potential SLC sites and ICLT locations for environmental and social risks, and preparation of site-level risk management plans;
- (d) Project procedures for screening infrastructure and other sub-projects for environmental and social risks, preparation of risk management plans, and implementation of the risk management plans as part of the subproject implementation process;
- (e) Arrangements for monitoring and evaluation of the implementation of the ESMF.

59. Section 6 describes arrangements for stakeholder consultation (including participatory planning) and information disclosure. Section 7 describes arrangements for implementation of the ESMF including roles and responsibilities, capacity building plan and budget. Section 8 describes the project grievance redress mechanism (GRM). Section 9 describes arrangements for public disclosure and consultation on the ESMF and other ES instruments.

1.8 Regulatory and Institutional Framework

1.8.1 National Legal and Regulatory Framework Requirements

60. This section briefly summarizes relevant national laws and regulations relating to management of environmental and social risks in the areas of (1) land ownership and management; (2) rights of indigenous peoples; (3) environmental protection; (4) protection of cultural heritage; (5) labor law and protection of employees' rights including occupational health and safety; and (6) other relevant legislation and regulation.

61. **Land ownership and management:** The overall framework for land ownership in Cambodia is defined by the Land Law of 2001. Key clauses and subsidiary documents to the Land Law include:

- (a) Articles 18 and 19 of the Land Law, dealing with illegal transfers of land; articles 29-47 of the Land Law on acquisition of ownership;
- (b) Circular No. 02 of February 2007 on illegal occupation of state land;
- (c) Sub-Decree No. 19 on Social Land Concessions;
- (d) The Law on Expropriation (2010) which "aims to define an expropriation in the Kingdom of Cambodia by defining the principles, mechanisms, and procedures of expropriation, and defining fair and just compensation for any construction, rehabilitation, and public physical infrastructure expansion project for the public and national interests and development of Cambodia";
- (e) Standard Operating Procedures for Externally Financed Projects in Cambodia (2018); available from the website of Ministry of Economy and Finance (MEF; https://www.mef.gov.kh/documents/D-
 - Investment/Document23072007/Manual%20on%20Standard%20Operating%20Procedur es.pdf
- (f) Commune/Sangkat Fund Project Implementation Manual (see below).

62. **Indigenous Peoples' Rights:** The legal and regulatory framework for indigenous people's rights consists of:

- (a) Land Law (2001) Articles 23-28, which clearly articulates the land rights of indigenous peoples;
- (b) Forest Law (2002) states the rights of IP communities recognized by the Land Law to use forest resources;
- (c) MRD, National Policy on the Development of Indigenous Peoples (NPDIP) in 2009
- (d) Sub-decree 83 in 2009 on procedures of registration of land of indigenous communities
- (e) MOI and MLMUPC, Inter-ministerial circular on interim protective measures protecting land of indigenous peoples (2011).
- (f) Royal Government of Cambodia (RGC) "Directive 01" to carry out its land titling campaign to be implemented by youth volunteers with support from relevant authorities
- (g) Instruction #15 issued on 04 July 2012, and instructions #17 issued on 13 July 2012 for further implementation of land title registration for indigenous people and communities.
- (h) Manual on Indigenous Communities Identification, Legal Entity Registration and Communal Land Registration Process in Cambodia (December 2018) published by MRD, MoI and MLMUPC with support from UN-OHCHR.

63. **Environmental Protection:** Overall management of the environment is under the responsible of the Ministry of Environment (MoE), which was created in 1993. The MoE is responsible for implementation of the Law on Environmental Protection and Natural Resources Management. At the provincial and city levels, there are corresponding provincial/city environment departments. These local departments have the responsibility of enforcing the environmental legislation coming under the competence of the MoE.

64. The **Environmental Protection and Natural Resources Management Law** was enacted by the National Assembly and launched by the Preah Reach Kram/NS-RKM-1296/36. It was enacted on November 18, 1996. This law has the following objectives:

- (a) To protect and promote environment quality and public health through prevention, reduction and control of pollution,
- (b) To assess the environmental impacts of all proposed projects prior to the issuance of a decision by the Royal Government,
- (c) To ensure the rational and sustainable conservation, development, management and use of the natural resources of the Kingdom of Cambodia,
- (d) To encourage and provide possibilities for the public to participate in the protection of environment and the management of the natural resources, and
- (e) To suppress any acts that cause harm to the environment.

65. Under the Law, an initial environmental impact assessment (IEIA) or full environmental impact assessment (EIA), depending on type and activity and the site of the project (Sub-Decree on IEIA/EIA process (article 1 and 2 of Sub-Decree of IEIA/EIA process), must be conducted for every private or public project, to be reviewed by the MoE before submission to the Government for a final decision.

66. The **Protected Areas Law (2008)** established eight categories of protected area which are: national parks, wildlife sanctuaries, protected landscapes, multi-purpose use management areas, biosphere reserves, natural heritage sites, marine parks and RAMSAR sites (protected wetlands). Protected areas are divided into four management zones: core zone, conservation zone, sustainable use zone and community zone. There are around 50 protected areas under this law though full zoning has not been carried out for all. In 2017, RGC announced the creation of biodiversity conservation corridors connecting existing protected areas, including corridors in Keo Seima and Snuol Districts of Kratie Province; and in Prey Lang Forest which covers parts of Kratie, Kampong Thom, Preah Vihear and Stung Treng Provinces.

67. The **Sub-Decree No. 72 ANRK.BK on Environmental Impact Assessment Process dated August (1999)** with supporting guidelines developed in 2005, 2009 and 2017, provides guidance for IEIA and EIA under the Law. The objectives of this Sub-Decree are:

- (a) To determine an Environmental Impact Assessment (EIA) upon every private and public project or activity, and it shall be reviewed by the Ministry of Environment (MoE), prior to the submission for a decision from the Royal Government;
- (b) (b) To determine the type and size of the proposed project(s) and activities, including existing and ongoing activities in both private and public prior to undertaking the process of EIA;
- (c) (c) To Encourage public participation in the implementation of EIA process and take into account of their conceptual input and suggestion for re-consideration prior to the implementation of any project.

68. **Sub-decree No 36 ANRK.BK on Solid Waste Management dated 27 April 1999:** The purpose of this sub-decree is to regulate solid waste management in a proper technical manner and safe way in order to ensure the protection of human health and the conservation of biodiversity. This sub-decree applies to all activities related to disposal, storage, collection, transport, recycling, dumping of garbage and hazardous waste.

69. **Sub-decree N0 42 ANRK.BK on Air Pollution Control and Noise Disturbance** dated July 10, 2000. This sub-decree has a purpose to protect the environment quality and public health from air pollutants and noise pollution through monitoring, curb and mitigation activities. This sub-decree applies to all movable sources and immovable sources of air and noise pollution.

70. **Protection of Cultural Heritage**: The Constitution of the Kingdom of Cambodia states that "The State shall preserve and promote national culture. The State shall preserve ancient monuments and artifacts and restore historic sites (Article 69). Any offense affecting cultural or artistic heritage shall carry a severe punishment (Article 70). The perimeter of the national heritage sites as well as heritage that has been classified as world heritage, shall be considered neutral zones where there shall be no military activity ". The Law on the Protection of National Cultural Heritage (1996) defines provisions for the "protection of national cultural heritage and cultural property", including the "natural world", against "illegal destruction, modification, alteration, excavation, alienation, exportation or importation". The Law includes provisions for protecting physical cultural heritage brought to light by construction works. Overall responsibility is with the Ministry of Culture and Fine Arts, with its Provincial Departments and (limited) District Offices. However, in the Angkor Park area and extensive areas of Siem Reap Province with Angkorean remains, the Apsara Authority has direct responsibility. Article 15 of the Land Law of 2001 stipulates that Archeological, cultural and historical patrimonies are state public properties. Other legal instruments relevant to protection of cultural heritage include:

- (a) Law on Land Management, Urban Planning and Construction (1994);
- (b) Prakas of MLMUPC on Roles, Duties and Structures of its Provincial Departments (1999) includes a duty to protect cultural heritage;
- (c) Prakas of the Council of Ministers (1999) forbids private ownership of cultural heritage sites;
- (d) Forest Law (2002 recognizes and protects forest areas of special cultural significance to IP communities;
- (e) Sub-Decree 118 on State Land Management (2005) categorizes "Archaeological, cultural and historic patrimonies" as inalienable public state assets; this is further reinforced by Decision 52 on criteria for classifying state lands (2006).

71. Provisions for protection of cultural heritage in the LASED project are contained in the Cultural Heritage Protection Framework (December 2007) which includes specific measures for protection of archaeological and indigenous cultural heritage, but requires to be reviewed and brought into full compliance with the ESF.

72. **Labor and Employment Laws**: The framework of law and regulation on labor and employment in Cambodia includes:

- (a) Labor law of 1997; which includes provisions on non-discrimination; prohibition of forced labor including debt bondage; regulation of working conditions; restrictions on employment of minors (under 18 years old); maternity leave; special provisions for employment of agricultural workers; health and safety; trade union rights etc.;
- (b) International Labor Organization (ILO) conventions No. 138, Minimum Age; and No. 182, Worst Forms of Child Labor, have been ratified by RGC;
- (c) Ministry of Social Affairs, Veterans and Youth Rehabilitation (MoSAVY) Prakas (proclamation) No. 106 on the Prohibition of Children Working in Hazardous Places (28 April 2004).

73. Grievance Procedures: Sub-Decree on the Establishment of the Ombudsmen's Office (2017) creates a mechanism for receiving and handling complaints relating to sub-national administrations (SNA), replacing an earlier system known as Accountability Working Groups which formed part of the LASED Complaints Handling Mechanism. The SOP Guideline on Land Acquisition and Involuntary Resettlement (2018) provides for a grievance mechanism to be overseen by a Provincial Grievance Redress Committee to be overseen by MEF.

74. **Other Relevant Legislation and Regulation:** The Commune Councils use a document known as the Commune/Sangkat Fund Project Implementation Manual (C/S Fund PIM) as the framework for implementation of small-scale infrastructure projects including those financed by LASED. The C/S Fund PIM includes simple guidelines for land acquisition planning, environmental risk management, and protection of indigenous peoples' rights. These guidelines were developed originally in the period 2003-2006 and were accepted as compliant with the requirements of World Bank operational policies at the time. However, these documents require review to establish whether they are still compliant with

current ESF requirements. It is noted that NCDD-S has recently adopted an Environmental and Social Safeguards Policy (Assessment and Management of Environmental and Social Risks and Impacts) to comply with requirements of Green Climate Fund (GCF) and plans to review and update the C/S Fund PIM to align with this policy. GCF requirements are similar in most respects to those of World Bank ESF.

1.8.2 World Bank Policy: Applicable Environmental and Social Standards

75. Of the 10 ESS defined in the World Bank's ESF, ESS9: Financial Intermediaries, is not relevant to LASED III. The remaining nine ESS are considered to be relevant to the project, meaning that risks associated with these ESS must be assessed, and, where risks are identified, a framework for risk mitigation and management must be developed. The 9 relevant ESS are:

- (a) ESS1: Assessment and Management of Environmental and Social Risks and Impacts;
- (b) ESS2: Labor and Working Conditions;
- (c) ESS3: Resource Efficiency and Pollution Prevention and Management;
- (d) ESS4: Community Health and Safety;
- (e) ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement;
- (f) ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources;
- (g) ESS7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities;
- (h) ESS8: Cultural Heritage; and
- (i) ESS10: Stakeholder Engagement and Information Disclosure

76. As discussed above, given that the SLC sites, ICLT locations and infrastructure, agriculture support and other types of sub-project on those sites will be identified by a demand-led process during project implementation, not all potential risks can be identified by Project appraisal. The following instruments have been prepared, consulted and disclosed by the Borrower by appraisal to demonstrate compliance and guide implementation of the nine ESSs:

- (a) Environmental and Social Management Framework (ESMF);
- (b) An Environmental and Social Profile of northeast Cambodia and example SLC and ICLT communities;
- (c) Labor and Working Conditions Procedures (LWCP);
- (d) Resettlement Policy Framework (RPF);
- (e) Indigenous Peoples' Planning Framework (IPPF);
- (f) Cultural Heritage Protection Framework (CHPF);
- (g) Stakeholder Engagement Plan (SEP);
- (h) Environmental and Social Commitment Plan (ESCP).

1.8.3 Institutional Arrangements and Capacities

77. As described above, responsibilities for implementation of LASED III will be divided between two main agencies at national level (MLUPC and MAFF). Also, implementation arrangements will be significantly decentralized, with different technical departments represented on the Provincial team. There will be a mixed working group at District level and Commune Councils have important implementing responsibilities.

78. Roles and responsibilities for E&S risk management in LASED III are described in detail in Section 7. There are a wide range of project activities, from identification, survey and planning of SLC and (in LASED III, ICLT), to design and implementation of infrastructure and livelihoods support subprojects, that may give rise to environmental and social risks. Therefore, it is important to ensure that all agencies with LASED implementing responsibilities have (1) a general awareness of the principles and scope of ESS provisions of the ESF; (2) detailed knowledge of ESS provisions for which they are directly responsible; and (3) adequate human resources capacity to implement environmental and social risk management activities to an acceptable standard, including adequate documentation and reporting. It requires more capacity build up through training, awareness, and organizing an appropriate mechanism of environmental and social risk management and monitoring. In addition, the project will include specific provisions for monitoring implementation of ESS provisions and for responding to ESS-related grievances and complaints.

79. In general terms, the Provincial project teams will bear most responsibility for day-to-day implementation of risk management procedures. The Commune Councils will need to understand the purpose of E&S risk management and be able to participate with the provincial project team in implementation. MLMUPC as EA will have overall responsibility to manage, support and backstop risk management, and to undertake key national level functions including monitoring and reporting. MAFF as implementing agency will be responsible to ensure compliance with E&S risk management commitments in their areas of project activity.

80. The LASED III implementing agencies are also implementing agencies for LASED II (although there will be some differences of detail in allocation of responsibilities). As a result of this experience, all implementing agencies have some prior experience of the concepts and practices of the safeguards framework for LASED II. Each national implementing agency has appointed staff as focal points for E&S risk management (the term "safeguards focal points" is still in general use in this context) for LASED III. These staff members have had basic training in the concepts of the ESF and ESS, but most have no specialist professional expertise and only limited experience or training in these issues. Provincial Project Teams will also nominate focal points for environment and for social risk respectively.

81. In LASED III, E&S risk management advisers / social and environmental specialists will be deployed as follows:

(a) MLMUPC: One social risk management specialist, one environmental risk management specialist and one with adviser with expert knowledge of IP issues. These advisers will be centrally based and will travel regularly to support the work of the Provincial project teams.

82. LASED II employs safeguards advisers at Provincial level but the post is combined with GIS responsibilities – as the GIS part of the job requires specialist technical skills it is likely to dominate recruitment considerations at least. This combination of roles will be discontinued in LASED III and specialists with appropriate skills and experience will be recruited for the adviser positions.

83. MLMUPC has overall responsibility for regulating land management and registration which is a key aspect of E&S risk management under LASED III. Proper implementation of the detailed procedures for land survey and planning will ensure the capacity to identify project land acquisition and resettlement needs. Registration of ICLT also follows a detailed process designed to protect the rights of indigenous peoples as well as other land users in the ICLT area. Experience with LASED II (for SLC) and with ICLT indicates that MLMUPC staff are knowledgeable and competent in implementing the procedures prescribed by the regulatory framework. MLMUPC staff are likely to require additional training in E&S risk management requirements of LASED III that exceed the provisions of the regulatory framework.

84. MAFF supports agriculture development in LASED II primarily through the Provincial Departments of Agriculture, Forests and Fisheries (PDAFF). MAFF promotes adoption of the Cambodia Good Agriculture Practices (CAMGAP) standards, MAFF intends to introduce CAMGAP-consistent practices in LASED III and has promoted reduced or zero chemical use on SLC sites, depending on site suitability and existence of a market for organic or "safe food" produce. MAFF has 10 staff engaged in LASED II and plans to increase this to 20 in LASED III, supported by experts on Value Chain and Rural Development. Trainings in LASED II included safe use of chemicals. Nutrition

has not been a focus of LASED II agriculture activities. CAMGAP standards include worker safety and child labor provisions⁴ but these have not been included in farmer trainings to date. LASED II agriculture trainings do not address climate change as a specific issue but many activities (seed selection, mulching, seasonal calendars) are relevant to climate smart agriculture.

85. At Provincial level, the Provincial Land Use Allocation Committee (PLUAC) is formally responsible to coordinate the Social Land Concession process defined by Sub-Decree #19 which includes land use planning, identification and resolution of conflicting land claims, identification and protection of environmental hotspots and physical cultural heritage and protection of indigenous community rights. The Provincial Administration is responsible for overseeing sub-project implementation including small-scale infrastructure and livelihoods activities which will require E&S risk management. In practice, the two institutions (as shown on the organigramme (Figure 1 above) work together as an integrated "LASED team" at Province level as well as working through the District Working Group.

2 LESSONS LEARNED FROM ESS IMPLEMENTATION IN LASED AND LASED II

2.1 Environmental and Social Safeguards Frameworks

86. There will be a high degree of continuity of project activities, methodology, institutional arrangements and staffing between LASED II and LASED III, though there will be important differences, notably the inclusion of ICLT support activities in LASED III.

87. Project staff and implementing agencies, including sub-national administrations and NGO implementing partners, have become familiar with the safeguard framework applicable to management of E&S risks in LASED II. Importantly, project staff and other stakeholders are overwhelmingly likely to see and understand the ESF/ESS provisions in terms of changes from the baseline of the safeguard framework rather than as an entirely new innovation.

88. Appendix 2 presents a detailed analysis of the correspondence between safeguards as implemented in LASED II and the E&S risk management requirements of ESF/ESS, as well as the experience of implementation of the safeguards, weaknesses in the framework and challenges encountered. Appendix 2 is likely to be highly relevant for development of capacity building on E&S risk management for LASED III project staff. Key lessons learned from safeguards implementation in LASED II are extracted from Appendix 2 and summarized in this section.

2.2 Evidence of Environmental Impacts of Project

89. There is no evidence that infrastructure sub-projects supported by LASED and LASED II have resulted in severe, long-lasting or widespread adverse environmental impacts. Low level and / or temporary impacts are likely to have occurred (e.g. noise and dust pollution during construction, localized disruption of drainage, minor erosion around the outlets of culverts, etc.).

90. SLC land recipients rely on fuelwood for cooking. In the early stages of SLC development, this need is likely to be supplied largely from the process of clearing of agriculture land. Later, the SLC residents may find it necessary to go further afield to find sources of fuelwood. At some existing SLC sites, residents undertake charcoal production for sale, requiring substantial supplies of wood. Without adequate regulation, there is a risk that these demands could be met by non-sustainable cutting of wood from protected forest areas outside the SLC. There is also a risk that settlement of SLC communities close to protected areas could result in increased illegal hunting or other prohibited or environmentally damaging activities in protected areas, though this has not been verified.

⁴ The labor law of Cambodia 970313. This law was adopted on January 10, 1997 by the National Assembly of the Kingdom of Cambodia during the 7th session of its first legislature, and promulgated on March 13, 1997

91. There are some weaknesses in environmental and community health management on the SLC sites. SLC residential areas are large and densely populated compared to the villages of origin of the land recipients and in effect resemble small urban areas. Sanitation and waste management practices that are customary in the home villages are likely to prove problematic in the new setting. LASED II distributed toilet construction materials to all residential and recipients but it is clear that many of these were not used for their intended purpose, while the practice of open defecation has continued. LASED III will strengthen in this area based on best practice in rural sanitation, learning from the experience of UNICEF and other agencies, especially world bank initiatives as well.

92. Solid waste management is also poor at SLC residential areas. Sites for waste disposal have been reserved but no collection system is in place. LASED III should attempt to address this issue effectively.

93. Through extension trainings the project promotes the use of MAFF's Cambodian Good Agriculture Practice (CamGAP) policy with minimal use of agriculture chemicals. CamGAP does not prohibit farmers 'free decision to maximize their products through any inputs and resources use, but seeks to provide the farmers with the knowledge of linkage between chemical inputs and degradation of soils as well as the linkage of chemical fertilizers with the increase of greenhouse gas in atmosphere which cause the climate change. In line with findings elsewhere⁵ of weaknesses in the delivery of extension in LASED II, observations of casually discarded containers of hazardous chemicals and discussions with farmers at the SLC sites demonstrate that the CamGAP training has not, as yet, resulted in adequate awareness of safe handling, use and disposal practices.

2.3 Evidence of Social Impacts of Project

94. The SLC land identification procedures implemented with support from LASED II appear to have been largely successful in avoiding adverse impacts on existing land users (notwithstanding that the process has generated a volume of individual complaints as described below). Land with preexisting claims, including informal claims not supported by land titles, has been systematically mapped and excluded from the SLC through a transparent and consultative process. In some cases, existing land users have agreed to give up their existing claims in exchange for allocations of SLC land.

95. The project has also avoided adverse impacts on land users from land acquisition for infrastructure sub-projects. This has mainly been achieved through land use planning which allocates vacant land for infrastructure needs. However there has been at least one case where a road line (at an SLC site in Kampong Chhnang, with infrastructure investment from the IPLR project) was constructed at a different position from that envisaged in the land use plan, necessitating negotiation and smoothly implemented land swap arrangements to compensate a small number of land users.

96. It is not clear that potential impacts on people using land for common property resource (CPR) purposes such as grazing or collection of non-timber forest products, have been taken into consideration.

97. The project has been successful in ensuring security of tenure for SLC land recipients: however, only substantial small area that there is still facing with encroachment from illegal person the SLC boundaries and also some a couple of cases of boundary disputes between the land recipients themselves due to technical errors or unintendedly of land surveyors.

98. Key areas of concern within the ESF / ESS framework for LASED III, which did not apply or were not specifically addressed within LASED II, include:

- (a) Labor and working conditions, particularly of contracted workers in infrastructure subprojects;
- (b) Road safety issues on SLC (and ICLT, in LSAED III) access roads;

⁵ See LASED-III PAD para 37

(c) Indigenous peoples' rights, primarily at ICLT locations but it is also possible that LASED III SLC could be located in areas with significant IP communities.

2.4 Complaints Handling in LASED II

99. The LASED II **Complaints Handling Mechanism** (CHM) has not proven adequate to handling and responding to a large volume of complaints, such as arose when the CHM was publicized at the Dong SLC site. It must be recognized that a land identification and allocation process such as the SLC process, no matter how well implemented, will inevitably generate complaints and needs a robust grievance redress mechanism with sufficient capacity.

2.5 Gap Analysis

100. The purpose of this section is to summaries the key requirements of each ESS identified as relevant above, and the extent to which these requirements are matched by provisions in the national legislative framework. For reasons of space and brevity, only the most important points are summarized here. More details are provided in the specific E&S risk management instruments, e.g. a fuller gap analysis of labor and working conditions regulations is presented in the LWCP.

101. Table 3 summarizes the key requirements defined for each of ESS1-ESS8 and ESS10, and equivalent provisions in the national legislative and regulatory framework. The right-hand column identifies key gaps.

Table 3: Gap Analysis of Legislative and Regulatory Framework vs. ESS Requirements			
Key Requirements	Relevant Provisions of Legislative Framework	Key Gaps	How / where addressed in E&S instruments
ESS1: Assessment and Management of Environmental a	nd Social Risks and Impacts		
 (a) Conduct an environmental and social assessment of the proposed project, including stakeholder engagement; (b) Undertake stakeholder engagement and disclose appropriate information in accordance with ESS10; (c) Develop an ESCP, and implement all measures and actions set out in the legal agreement including the ESCP; and (d) Conduct monitoring and reporting on the environmental and social performance of the project against the ESSs. 	Sub-decree No. 74 ANK. BK on Standard Operating Procedures for Externally Assisted Projects (SOP, 2012) requires and Environmental Impact Assessment (including social aspects) and preparation of an Environmental management Plan / Environmental Management Framework. SOP refers to a General Guideline of Ministry of Environment, but this is believed to be still under preparation.	SOP does not set standards for stakeholder engagement or disclosure in project design or implementation.	ESMF LWCP RPF IPPF CHPF SEP Location-specific ESMP and SEP to be prepared for all SLC and ICLT. Additional instruments (IPPP, RP) to be prepared for each site as needed.
ESS2: Labor and Working Conditions (see also: LWCP) ESS2 sets minimum standards to be observed in the following areas: • Terms and Conditions of Employment • Non-Discrimination and Equal Opportunity • Rights to Organize • Prevention / restriction of child labor • Prevention of forced labor • Grievance Mechanism • Identification of potential hazards • Provision of preventive and protective measures • Training of workers and maintenance of training records • Documentation and reporting of occupational accidents, disease and incidents • Emergency Preparedness • Remedies for adverse impacts	 Labor Law (1997) has corresponding provisions that largely or fully match the ESS2 requirements in the following areas: Terms and Conditions of Employment Non-Discrimination and Equal Opportunity Rights to Organize Prevention / restriction of child labor Prevention of forced labor Employer's liability (remedies for adverse impacts) is stated in general terms. 	No specific requirement for employers to operate a grievance mechanism Workplace safety is a general obligation of the employer, but details not spelled out. Safety training of workers not mentioned Documentation and reporting of incidents not clearly required. Emergency preparedness not an explicit obligation	 LWCP includes: Procedure to Prevent Child Labor and Forced Labor (PPCLFL); Project Workers' Grievance Mechanism; LWCP sets out requirements for additional measures to comply with ESS2, which will include: Direct Project Workers' Occupational Health and Safety Strategy Terms and Conditions of Employment for Direct Project Workers; Environmental, Social, Health and Safety Specification (ESHSS) for contracts; Community Labor Management Procedure; Provisions in location and sub-

			• Site-specific Occupational Health and Safety Plans (works)
ESS3: Resource Efficiency and Pollution Prevention and M	lanagement		•
Consider ambient conditions and apply technically and financially feasible measures in accordance with the mitigation hierarchy, proportionate to the risks and impacts associated with the project and consistent with GIIP, in the first instance the EHSGs. Resource Efficiency comprises: • Energy Use • Water Use • Raw Material Use Pollution Prevention and Management comprises: • Management of Air Pollution • Management of Hazardous and Non-Hazardous Wastes • Management of Chemicals and Hazardous Materials • Management of Pesticides			ESMF
ESS4: Community Health and Safety		I	1
 Evaluate risks and impacts on the health and safety of the affected communities and propose mitigation measures in the following areas: Infrastructure and Equipment Design and Safety Safety of Services Traffic and Road Safety Ecosystem Services Community Exposure to Health Issues Management and safety of hazardous materials Emergency Preparedness and Response Also has provisions for safe management of security 	 The Article 21 of Sub-decree 19 on SLC indicate the composition of National Social Land Concession Committee including membership that would be related to community health and safety such as MRD, MoWA but lack of specific roles and responsibilities related to Community Health and Safety. Strategy 4 on Health, Safety and Welfare of the Community of the Guideline for Managing Environmental and Social Risks in Projects in the Framework of the National Program for SNDD dated April 2019. 	 No specific roles and responsibilities of MRD and MoWA related to community health and safety. Lack of membership of MoH in the composition of NSLC committee 	 Site screening for each SLC and ICLT Identification of risks based on findings of screening Include relevant measures in location specific ESMP Verification of adequate potable water supplies at all sites Project measures to address risks of gender-based violence at all sites.
personnel Annex 1 details safety of dams provisions	 The Constitution of Cambodia (1993) guarantees that there shall be no physical abuse of any individual (Article 38). The Village Commune Safety Policy (2010) identifies rape, gender-based violence and anti-trafficking as priority areas for commune, 	No specific chapter in the Commune/ Sangkat PIM related to community health safety and welfare	

ESS5: Land Acquisition, Restrictions on Land Use and Inv	 municipal, district and provincial councils to address. The 2nd National Action Plan to Prevent Violence Against Women (NAPVAW II) 2014-2018 promotes prevention interventions response, access to quality services, and multi-sectorial coordination and cooperation to reduce violence against women. 		
 General: management of land acquisition and involuntary resettlement according to the mitigation hierarchy (avoid, reduce or minimize, mitigate, compensate). Specific: Identify all affected persons and evaluate eligibility for compensation Avoid forced evictions Provide timely compensation at replacement cost Assist displaced persons to restore or improve their living conditions Protect poor and vulnerable affected persons Conceive and execute resettlement activities as sustainable development programs Ensure resettlement planned and implemented with appropriate disclosure of information, meaningful consultation and informed participation of those affected 	Sub Decree 22 on Standard Operating Procedures for Land Acquisition and Resettlement (SOP- LAR) sets out a comprehensive framework for preparation and implementation of Resettlement Plans	SOP-LAR does not emphasize avoidance of resettlement as the preferred option Rights of land users without formal title, covered by ESS5, may not be fully covered by SOP-LAR provisions Not clear that compensation will be at full replacement cost ("market value" is stipulated in SOP-LAR) SOP-LAR provides for livelihood restoration activities and additional protections for poor households, but these may fall short of ESS5 requirements Provisions for disclosure, consultation and informed participation may fall short of ESS5 requirements	 Avoid and / or minimize need for land acquisition through participatory land use planning in identification of SLC and ICLT land Explore options for voluntary land contributions (compliant with ESS5) and / or inclusion of existing land users as SLC land recipients or ICLT community members. Explore options for compensation of CPR users on land including alternative access, compensatory benefits from project or compensation of equal value to loss. Where necessary, prepare and implement Resettlement Plan in line with the RPF.
ESS6: Biodiversity Conservation and Sustainable Manager	nent of Living Natural Resources.		
Consider direct, indirect and cumulative impacts on habitats and biodiversity (in ESA) and avoid or minimize adverse impacts. Where significant risks and adverse impacts have been identified, develop and implement a Biodiversity Management Plan	The 2001 The Declaration on Land Policy Focuses on three sub-sectors. The Environmental Protection and Natural Resources Management Law was enacted by the National Assembly and launched by the Preah Reach Kram/NS-RKM-1296/36.	Law on environment protection identify 4 zoning for Protected Areas management, however, it does not include cultural and heritage zone. The Law also set only criteria for zoning identification, not introduce procedure and guideline. In	ESMF

	The Sub-Decree No. 72 ANRK.BK on Environmental Impact Assessment Process dated August (1999) with supporting guidelines developed in 2005, 2009 and 2017, provides guidance for IEIA and EIA under the Law.	addition, there is no guideline/mechanism for implementing National PA Strategic Management Plan. The law not covers any part of Community PA outside PA boundary.	
ESS7: Indigenous Peoples/Sub-Saharan African Historical	y Underserved Traditional Local Communities (See	also: IPPF)	
 Ensure that Indigenous People (IP) present in or attached to the project area are fully consulted and can participate in project design and determination of implementation arrangements. Assess then nature and degree of expected impacts on IP Prepare a consultation strategy Develop a timebound plan of measures and actions Avoid adverse impacts wherever possible Identify mitigation and development benefits including compensation as appropriate Where (a) adverse impacts on land and natural resources of IP; (b) relocation of IP; or (c) impacts on cultural heritage of IP will occur, ensure Free, Prior and Informed Consent (FPIC). 	Land Law 2001 gives recognition to the right of indigenous peoples to their traditional lands, culture, and traditions. Article 25 and 26 of Land Law states the provision of right over indigenous land in the form of collective ownership. • Sub-Decree No. 83 on the Procedures of Registration of Lands of Indigenous Communities (2009)'s Article 6 defines the five types of land for communal land titling (1) residential land, (2) spiritual forest land, (3) burial forest land, (4) actual farming land and (5) the land reserved for shifting cultivation.	Sub-decree should be amended and include other actual types of land the communities have used. Internal rule should be written right after the preliminary map is made. Preliminary map, as usually supported by NGOs, should be made clearly that it needs to be done by cadastral officer as an expert in close consultation with ICs. There is no need to ask for approval from MAFF and MoE on the request for land reclassification since the respective provincial departments are the members of provincial state land committee.	 Gap 1: Verification whether Phase 1 and 2 did comply with ESS7 requirements for Meaningful Consultation in terms of the outputs of these two Phases, namely a gender and socially inclusive Community Representative Committee, and community by-laws that also address the interests of women and the poor. If not, address shortcomings through a process requiring FPIC. Gap 2: For Phase 2.5 and 3, develop a plan for Meaningful Consultations including FPIC, that ensures and documents: Social, gender and generational inclusiveness regarding both consultations, representation in decision making bodies, and access to benefits. Avoidance of adverse impacts related to the demarcation of the ICLT area and associated infrastructure, and if unavoidable develop mitigation and compensation arrangements. Avoidance of any adverse impacts on cultural heritage protection Framework.

			Gap 3: Undertake a Social Assessment (ESS7 Appendix A) to inform the planning of Meaningful Consultations and the IPP. Gap 4: Indigenous Peoples Plan for the site level activities through Phase 2.5 and 3 as well as regarding subsequent infrastructure construction and livelihood activities.
			Gap 5: Grievance Redress Mechanism that is accessible for both members of the beneficiary IP community and members of neighboring communities that may be affected by the sub-project activities.
			Gap 6: the Lao and Cham ethnic groups will be covered by IPPF for SLC sites and potential adverse impacts on non-ICLT community members for ICLT sites.
			Gap 7: address the reconciliation between MAFF and MoE laws and regulations regarding Protected Area land through the provincial state land committee.
ESS8: Cultural Heritage (See also: CHPF)			
 Consider direct, indirect and cumulative risks to cultural heritage. Avoid impacts where possible or identify and implement measures in accordance with the mitigation hierarchy. Includes: Stakeholder consultation and identification of cultural heritage; Determine and list legally protected cultural heritage areas 	The 1996 Law on the Protection of National Cultural Heritage defines provisions for the "protection of national cultural heritage and cultural property", including the "natural world", against "illegal destruction, modification, alteration, excavation, alienation, exportation or importation".	The legal framework deals mainly with tangible cultural heritage, and is less concerned with intangible cultural heritage; The legal framework does not include ESS8 requirements for stakeholder consultation.	CHPF

 Provisions for specific types of cultural heritage including non-moveable and moveable types; Restrictions on commercial use of cultural heritage 	• Declaration (Sechkday Prakas) of the Council of Ministers No. 06, dated 27 September 1999, on Measure to eliminate anarchy in land encroachment, forbidden private rights over cultural heritage places.		
ESS10: Stakeholder Engagement and Information Disclosu	rre (See also: SEP)		
 Engage with stakeholders throughout project cycle, with meaningful consultation; timely disclosure of relevant, understandable and accessible information; consult in a culturally appropriate manner, involving: Stakeholder identification and analysis; Stakeholder engagement planning; Disclosure of information Consultation with stakeholders; Addressing and responding to grievances Reporting to stakeholders Establish a project Grievance Redress Mechanism Maintain, and disclose as a part of the ESA, a record of stakeholder engagement. 	Sub-Decree No. 19 on Social Land Concessions mandates a structured process for identification, mapping and land use planning of SLC, and selection of land recipients, with full disclosure of information and participation of stakeholders and land recipients in each key step. Process for preparation of ICLT is driven by community demand and also includes strong provisions for disclosure, consultation and participation	SOP (Sub-Decree 74) does not include mandatory provisions for stakeholder engagement or information disclosure in project preparation SOP (Sub-Decree 74) discusses complaints handling but does not specifically mandate a project GRM	Principles and requirements for stakeholder engagement, information disclosure and grievance redress mechanism in SEP Location specific SEP to be prepared for each SLC and ICLT

3 ENVIRONMENTAL AND SOCIAL PROFILE OF KEY TARGET PROVINCES

102. LASED III is national in scope and will include activities in the Provinces with existing SLC sites (Kampong Chhnang, Kampong Speu, Kampong Thom, Kratie, Tbong Khmom and Kratie) as well as support to existing and new ICLT locations which expected to be mainly in Kratie, Ratanakiri, Mondulkiri, Stung Treng and Preah Vihear. It is expected that new SLC sites and ICLT locations will be located mainly or exclusively in the northeastern Provinces of Cambodia; that is: Kampong Thom, Kratie, Mondulkiri, Preah Vihear, Ratanakiri and Stung Treng, which are the Provinces with areas of low population density and available land, as well as the home of the majority of Cambodia's IP communities.

103. An Environmental and Social Profile (ESP) has been prepared as a separate document, based on secondary data and on observations from site visits. The following section of the ESMP constitutes a summary of the salient points of the ESP which are used as a basis for the risk analysis presented in Section 4. The ESP focuses on the six northeastern Provinces (see previous paragraph). In the main, conditions in other Provinces, and particularly in low-population density areas where SLC and ICLT are likely to be located, are within the range of conditions to be found in northeast Cambodia. As site-level E&S risk screening and risk assessment will be carried out for all new sites, this approach is considered adequate to provide an accurate overview of environmental and social conditions, and potential risks, in LASED III target areas.

104. The six Provinces which are the subject of the ESP are indicated on the map, Figure 2.



Figure 2: Provinces of Cambodia

105. **Administrative Structure:** the six Provinces are sub-divided into 6 urban Municipalities which are the Provincial capitals, and 37 Districts which have similar administrative structures and functions to the Municipalities. These upper level local governments are further sub-divided into 284 Communes (in Districts) and Sangkats (in Municipalities), each of which is administered by a directly elected Council, chaired by the Commune / Sangkat Chief and assisted by Commune / Sangkat Clerk. The Communes / Sangkats are further sub-divided into 1,720 villages, which are not regarded as a formal level of local government but have appointed village chiefs reporting to the Council.

106. **Demography:** the six provinces have a total population of about 1.75 million people, or about 11% of the population of Cambodia based on 2019 Census results. Of those, about 60% live in the Provinces of Kampong Thom and Kratie. Total land area is about 75,000 square kilometers, giving an average population density of about 23 people per square kilometer. About 21% of the population resides in Communes / Sangkats with more than 200 persons per square kilometer.

107. There are approximately 102 women per 100 men. The population is young, with a median age of 22, with about 8% of the population aged over 60.

108. Population growth between the 2008 and 2019 Censuses is about 1.8% per annum, which is significantly higher than the Cambodia overall growth of 1.2%. There is considerable variation with Preah Vihear registering 3.6% annual growth while Kampong Thom and Kratie are close to or below the national average. These differences probably result from migration from the more densely populated southern and central provinces.

109. Indigenous minorities make up about 14% of the population of the target provinces, primarily in Ratanakiri (60%) and Mondulkiri (46%). This compares with only around 1% of the Cambodian population. No data are available for members of non-indigenous minority groups (Chinese, Vietnamese and Cham) who make up about 8% of the population of Cambodia but are not concentrated in the target provinces.

110. **Poverty:** Poverty headcounts for the target provinces have been obtained from the Ministry of Planning's ID-Poor database. It should be noted that although total poverty headcount by this method tends to be similar to the poverty level estimated by the periodic Cambodia Socio-Economic Surveys, the methodology is different, and the set of households identified as poor by each method is not necessarily identical. About 17% of households in the target provinces are identified as poor, with only modest variation between provinces. Communes with IP majorities have somewhat higher poverty rates (19%). Poverty appears to be somewhat lower in communes with low population density.

111. **Education:** Overall literacy reported is fairly high (85%) in the 18-45 age range, with much lower rates in Mondulkiri and Ratanakiri and amongst IP communities. About 81% of primary age children (7-11) and 65% of age range 12-17 are reported as enrolled in school. Enrollment rates are somewhat lower in Mondulkiri and Ratanakiri and in communes with high IP populations, but the difference is smaller than for literacy.

112. **Livelihoods, Employment and Labor:** The majority of the population (about 64% of adults) engages in agriculture, though in many cases this will be combined with other forms of livelihood such as migratory labor, day-labor, small business etc. Only 7% of adults are in formal employment. Women are less likely to have an economic occupation (84% vs 99%), are slightly more likely to be in private sector employment and slightly less likely to be in public employment. About 12% of adult men and about 10% of adult women are said to have migrated away for work, either within Cambodia or internationally. Out-migration rates appear to be much lower in communes with large IP populations.

113. In consequence of the low levels of formal employment, the concepts and practices of employees' rights and labor and working conditions protections, though established in Cambodian law, are likely to be unfamiliar to the majority of the population of the target provinces.

114. **Health, Safety and Well-Being:** Detailed formal health statistics are not readily available the ESP makes use of data from the Commune Database (CDB) which is compiled by village chiefs and mainly record causes of death. Notable trends in these data include a steep decline in HIV-related deaths and an increase in deaths from road traffic accidents.

115. Neonatal mortality is calculated from CDB data as approximately 7 deaths per 1000 live births, with higher rates in Ratanakiri and amongst IP communities (caution must apply to the accuracy of the data). Maternal mortality is calculated as 3 deaths per 1,000 live births. Tuberculosis is the most significant cause of death from infectious disease (4.3 deaths per 10,000 population) with malaria 1.5 / 10,000) and dengue (1.5 / 10,000) also significant.

116. Childhood malnutrition figures are not available for the target provinces, but this is known to be a problem nationally, with about 22% of children stunted and 7% wasted, based on UNICEF figures.

117. The target provinces have a significant remaining problem of explosive remnants of war (ERW) from the conflicts of the 1970s and 1980s, mainly in the form of unexploded cluster bomblets and other munitions which have a somewhat random distribution pattern and may be present in any location that has not been disturbed since the conflict. However, rates of ERW incidents and casualties have fallen markedly, with CDB data recording only five explosions and one death from ERW during 2018 in the target provinces.

118. CDB includes data on people in the following vulnerable categories, calculated as percentage of the total population: homeless 0.03%, orphans 0.34%, children whose guardians are sick 0.26%; disabled 0.03%, elderly people living alone 0.1%.

119. Gender-based violence is a recognized problem in rural Cambodia. UNICEF (2015 survey) reports that 21% of Cambodian women experienced physical or sexual violence, with 8% in the previous 12 months.

120. **Conflict and Security:** the target provinces enjoy good security and low levels of violent conflict. Confrontations do occur and are often linked to disputes over resources, including land rights but also suppression of illegal activities such as logging and hunting. Law enforcement capacity is low and private interests, both legal (agriculture, licensed mining operations) and illegal (logging) are often protected by armed private security who may be military personnel.

121. **Basic Services:** rural areas are served by primary schools and health centers as well as by the Commune administrative offices. There is also a police post in each Commune. Due to low population density, distances to access these services can be significant, with distance from village to primary school (calculated from CDB data) averaging 2km overall but almost 6km in Communes with population density below 20 per square kilometer. Average distance to a health center is almost 9km. IP communities have access to primary school similar to average, but worse access to secondary schools, health centers, Commune offices and District offices. Density of the paved road network (bitumen, concrete or gravel) is low at 0.12km of road per square kilometer.

122. CDB data indicate that 41% of households have year-round access to water within 150m of the house, but this figure falls to 27% in communes with a majority IP population and 26% in low population density communes. Supplies (from a variety of sources including tube wells, shallow wells and surface water) are not necessarily of potable water quality.

123. Sixty-nine percent (69%) of households in Kampong Thom have latrines, but only 33% in Ratanakiri and only 23% of households in majority IP communes. Public latrines are not used in rural Cambodia, so the alternative is open defecation. It is observed at existing SLC that although latrine materials were provided to each household, many of these materials were not used for the intended purpose. This is an important area for improvement in LASED III, through application of best practice in rural sanitation campaigns.

124. The electricity grid is expanding rapidly and is planned to reach all villages in 2020, though this may leave a substantial number of households without a connection. Reliability of supply is also a problem. CDB data for 2018 indicates that 43% of households in the target provinces had electricity, but only 21%-22% in IP-majority and remote Communes. It is possible that households settling on SLC have become used to electricity supplies at their previous location but will not have electricity at the SLC.

125. Telephone connectivity is generally good, and most adults possess a telephone. Smartphone use (and so, internet connectivity) is becoming more common in rural areas but is constrained by lack of electricity for charging, amongst other factors.

126. Land, Landlessness and Encroachment: The Land Law of 2001 classifies all land in Cambodia as either (inalienable) State Public Land, (alienable) State Private Land, and private land. However, there is no comprehensive cadastral survey so there can be uncertainties about which category land belongs in. No private land claims dating from before the conflict period of the 1970's is recognized. Most private holdings of traditional agricultural land (i.e. excluding land recently converted from forest or wetland) can be traced to a land distribution carried out in 1989, which granted rural households use rights over the land though not, at the time, formal ownership. Only a minority of this agriculture land is held under formal titles, with the majority covered by informal titles issued by local authorities ("soft titles") which are accepted as collateral for loans and can be traded. Owners of land that was part of the 1989 distribution generally consider their tenure as secure. From 1989 to the present, considerable areas of former forest land, particularly in the LASED III target provinces, have been converted for agriculture use under a variety of arrangements including (a) economic land concessions issued by national or provincial government; (b) social land concessions; (3) land settled or otherwise obtained without a legal transfer, but in most cases with at least passive recognition by the local authorities. The Land Law also grants indigenous minorities the rights to communal ownership of their traditional lands. Boundaries are not clearly demarcated, and this situation has led to overlapping claims and occupation or use of land without a clear legal basis. The land titling campaign under "Directive No. 1" of the Prime Minister (2012) was an attempt to address the growing number of land disputes by surveying and registering land in informal possession but has not fully solved the problem.

127. The 1989 land distribution appears to have been conducted equitably with regard to the households present at the time and resulted in a fairly equal distribution of land. This has changed so that there are an increasing number of landless or land-poor (insufficient land to produce rice for household consumption) households., with contributing factors including (a) the return of refugee families during the 1990s, who generally were not able to obtain adequate agriculture land; (b) land sales, including sales forced by debt or family crises; (c) population increase and formation of new households. Direct expropriation appears to have played only a minor role.

128. About 21% of households in the target Provinces hold formal ("hard") land titles. About 14% are reported as farm households with no rice land and a further 13% as farm households with less than 1 hectare of rice land (roughly, the size of plot at which the household can produce a significant surplus for sale, assuming one crop per year).

129. According to CDB data, around 6% of land in the target provinces is residential land, about 11% is rice land and a further 12% is used for short term and long-term non-rice crops. The remaining 70% is mainly forest land, though only a minority of this remains as undisturbed natural forest. Based on a list included in the Cambodia Statistical Yearbook 2011, there are 13 protected areas in or partially in the target provinces, totaling 39,452 squares kilometers or around 50% of the total land area. The effectiveness of protection varies, as does the legal level of protection (some activities are permitted in buffer zones), and it is known that protected areas have been encroached by agricultural and other commercial interests.

130. **Climate:** Northeast Cambodia has a tropical monsoon climate with a wet season from May to October. Upland areas of Mondulkiri and Ratanakiri have more rainfall and cooler night-time temperatures compared to the country as a whole.

131. **Water Resources** in the target provinces depend on rainfall and on rive inflows from Laos and Vietnam; these inflows represent about 75% of renewable fresh water for Cambodia as a whole. In the current dry season (2019-20) water levels in the Mekong river system have fallen to record lows, attributed to drought conditions but also perhaps impacted by dam developments on the upper Mekong and its tributaries. Local communities do not generally face an absolute shortage of water but may traditionally rely on rivers and streams for all purposes including drinking: these sources are particularly vulnerable to depletion by over-extraction and to upstream contamination. Groundwater can be accessed using tube wells in most areas and by shallow wells in some areas. Water from deep aquifers may have harmful levels of arsenic, particularly in areas close to the Mekong. Rainwater harvesting is commonly used but needs high capacity and careful management to provide a year-round supply.

132. Construction of **hydroelectric dams** has had adverse impacts on some downstream communities, including cross-border impacts from dams located in Vietnam. Adverse impacts (in addition to resettlement from the reservoir areas) can include impacts on water availability and quality, wildlife and fish stocks and from sudden releases of water from the dams.

133. **Biological Environment:** Northeast Cambodia includes areas of international importance for biodiversity and endangered species and these areas are under pressure from timber extraction and development as well as the impacts of climate change. Many IP communities and some SLC are located close to areas of high biodiversity value (see ESP Annex 2). Communities in forest areas, particularly those that lack productive agriculture land or are remote from agriculture markets, often rely on forest products for a significant part of their livelihoods. In addition to legal activities such as collection of non-timber forest products, economic stress results in significant activity in illegal logging, and wildlife trade including in endangered species (e.g. pangolins). Charcoal production is widespread including on some existing SLC and can be a cause of significant environmental damage.

134. **Projected Climate Change Impacts:** Climate change is projected to result in significant impacts on the Mekong River system, longer and dryer dry seasons with more intense wet seasons, increased temperatures and increased frequency and intensity of extreme events. Local climate change adaptation planning tends to focus on floods and droughts, but effects of increased temperature may be at least equally important in the long term and may include reduced crop yields, increased pests and animal diseases and increased transmission of some human diseases. Fire risk could become an issue with higher temperatures. Farmers perceive that the climate has become less predictable and this is a problem in itself, for example farmers delay planting to be sure of adequate rain early in the crop cycle but then run a higher risk of flood damage later. Projections indicate that northeast Cambodia will suffer greater climate change impacts than average for the country.

135. **Deforestation:** Northeast Cambodia has suffered a rapid loss of natural forest cover in recent decades. Large-scale commercial timber extraction has been prohibited for about 15 years but it is clear that significant logging continues, either illegally or under cover of arrangements such clearing of ELC land.

136. **Mining:** Northeast Cambodia has reserves of gold and other minerals and there is increasing activity to survey and exploit these reserves, including concessions obtained by international mining companies, less well-documented but still substantial scale operations controlled by Cambodian interests, and (often illegal or semi-legal) artisanal mining. Mining development has led to conflicts with neighboring communities over land and to alleged cases of water pollution.

137. **Pollution sources:** There are reports of pollution of rivers and streams by chemicals used in mining, including cyanide, and also from run-off of agriculture chemicals used by large commercial plantations. The details of these cases are not fully clear, but this must be regarded as a potential risk to

downstream communities. There is little industrial development in the target provinces though some large agri-processing plants are present. Solid waste management is rudimentary in larger towns and non-existent elsewhere, leading to localized pollution of land and water bodies.

4 ENVIRONMENTAL AND SOCIAL RISKS AND IMPACTS OF THE PROJECT

4.1 Approach

138. This chapter of the ESMF identifies environmental and social (E&S) risks that could potentially arise during implementation of LASED III. On the precautionary principle, the chapter includes risks for which the likelihood of risk events occurring is low, based on the experience of LASED and LASED II, but is non-negligible, and for which the potential impact of a risk event occurring is high. The risk analysis follows on from the previous chapters on lessons learned from LASED / LASED II and on environmental and social profiles of the priority target provinces; and is also informed by a study of literature sources⁶.

139. The risk analysis is structured in relation to Environmental and Social Standards, which have both environmental and social aspects. Therefore, the risk analysis is not specifically separated into environmental and social sections.

140. A risk management framework is detailed (in Chapter 5), detailing procedures to be adopted to identify and manage E&S risks at project, site and sub-project levels. Risk mitigation measures, consistent with the proportionality principle and the mitigation hierarchy, are presented in Table 11 at the end of the Chapter.

4.2 Potential Environmental and Social Risks

141. The LASED III identifies⁷ that potential major and environmental impacts and risks LASED III would result from (a) Land Use Planning process, which impact on biodiversity as proposed new project sites might include or be adjacent to areas with important natural habitats, which can be made an exclusion criterion in the screening process; (b) Small-scale community infrastructures and their construction-related impacts/risks such as noise, dust, sedimentation, erosion, waste disposal, management of storm water, community and workers health and safety; and (c) agricultural and livelihood development, which can impact on the health and safety of project-affected communities during the project life cycle, particularly in regard to the proper / safe use and handling of pesticides and chemical fertilizers. The LASED III will not finance pesticides and chemical fertilizers; however, transformation of land ownership may potentially introduce new farmers to pesticide. Environmental impacts could arise from the possible use of large amounts of polybags for community plants/seedlings/nurseries.

142. The LASED III also identified that potential adverse social impacts and risks of the project could arise from the range and scale of project activities including sensitive areas such as indigenous communities (IC). It was noted that "restrictions on access to land and natural and cultural resources resulting from these activities may impact on nature-based livelihoods and tenure of vulnerable or marginal households and communities where decisions may not be managed in a participatory manner. These potential adverse social impacts of the project, and the associated mitigation measures, may also give rise to social conflict or harm to some sections of the affected communities.⁸"

143. Experience with LASED and LASED II provides a strong knowledge basis for assessment of E&S risks in LASED III, which will have a broadly similar scope except that the new project will have an additional focus on ICLT locations. The possibility must be considered that environmental, economic

⁶ Including UNOHCR: Assessing the Impact of Social Land Concessions on Rural Livelihoods in Cambodia

⁷ See also the World Bank Concept Environmental and Social Review Summary (ESRS)

⁸ Environmental and Social Review Summary

and social changes may have led to increased importance of some categories of risk. The ESF requires consideration of a broader range of risks than were specifically considered under the OP/BP safeguards policy framework within which LASED was designed.

144. In the following paragraphs, risks are identified in relation to the key activities of the project, broadly these are (1) land identification, mapping and state land titling for SLC sites; (2) the land recipient selection and land allocation process on SLC sites; (3) resettlement of SLC land recipients on the sites; (4) the ICLT land identification, mapping and titling process; (5) infrastructure sub-projects, with specific risks associated with (a) road sub-projects and (b) irrigation sub-projects; and (6) agriculture livelihoods support sub-projects. Nature and magnitude of potentially significant environmental impacts and measures based on project typologies and ESSs are summarized Appendix 7.

145. A simple, qualitative system is adopted to categories levels of impact of risks (see Tables 4 to 10), intentionally avoiding terms that could cause confusion with the terminology used by World Bank for a formal determination of the project risk rating. In this system, Level 1 denotes impacts that are undesirable and should be minimized. Level 2 severe, long-lasting impacts on individuals, households or communities or on the sustainability of the project benefits. Level 3 denotes impacts that could be large-scale (many individuals, households or communities affected), severe and long-lasting, and could threaten the viability of the project overall.

146. A similar system is adopted to categories the probability of an impact-causing event occurring. "May occur, avoidance measures needed" denotes impact-causing events that are not expected to occur during the project lifetime, but for which the probability of occurrence is sufficiently high that avoidance and / or mitigation measures are required. Provided that appropriate screening and risk avoidance measures are adopted, the residual probability of these events occurring and causing impacts will be acceptably small. "Likely to occur, mitigation measures needed" denotes events that are likely or expected to occur during the lifetime of the project, so impact mitigation measures are needed.

4.3 Identified Environmental and Social Risks

4.3.1 ESS1 – Assessment and Management of Environmental and Social Risks and Impacts

147. Because the details of LASED III project locations are not known at the time of preparing this ESMF, it is possible that (1) additional risks, not specifically identified here, could apply at some sites; or (2) appropriate mitigation measures at a particular site might differ from the general measures proposed here. Therefore, at the outset of activities at each SLC or ICLT, the project will conduct screening and risk assessment of the proposed site and will complete a location-specific Environmental and Social Management Plan (ESMP) in Appendix 4.

148. Considering the nature of the project where potential cumulative impacts of multiple activities in particular region (an urban area, a rural area, a watershed, a coastal zone, etc.), a regional ESIA may be needed based on the screening outcome. If the project prepares this regional ESIA, the outcomes of this assessment will be reflected into the location-specific ESMP. This regional ESIA should comprises:

- (d) An assessment of all significant E&S risks and impacts associated with the project land use planning, including among others (i) water supply requirements and the preservation of surface/groundwater quality and quantity, (ii) waste management collection and disposal – regional approach will be established, (iii) transport planning from the community health and safety point of view.
- (e) An evaluation of alternatives and recommend broad measures to strengthen E&S management.

149. Implementation of project activities, particularly the development of SLC which involve movement and settlement of significant populations, could have impacts on vulnerable and marginalized groups present in the project area, beyond the impacts foreseen here. Therefore, in preparation of the ESMP, the project will identify vulnerable and marginalized groups, ensure they are consulted, identify any potential adverse impacts and include mitigation measures in the ESMP.

150. It is also possible that the project, which will support changes to land tenure and land use of significant areas of land, could have adverse impacts on access by local communities to land and natural resources, that do not arise directly from land acquisition (for example, loss of access to areas for grazing, collection of non-timber forest products or fishing; impacts on water availability; access impacts of infrastructure construction). Potential adverse impacts in this category will be considered in an effective, transparent, timely and acceptable manner in preparation of the ESMP, adversely affected groups will be consulted, and appropriate mitigation measures will be adopted.

151. The project will be responsible to ensure the compliance with ESS requirements of contractors working for the project. This will be achieved through:

- (f) Assessing the environmental and social risks and impacts associated with contracts, particularly for infrastructure sub-projects;
- (g) Ascertaining that contractors engaged in connection with the project are legitimate and reliable enterprises, and have knowledge and skills to perform their project tasks in accordance with their contractual commitments;
- (h) All tender documents to include (1) a general Environmental, Social, Health and Safety Specification; and (2) the sub-project ESMP indicating specific obligations of the contractor in relation to the sub-project;
- (i) Monitoring contractor compliance with their contractual commitments; and
- (j) In the case of subcontracting, requiring contractors to have equivalent arrangements with their subcontractors.

152. Management of ESS risks in contracts will be achieved primarily through (1) standardized contractual obligations for labor and working conditions standards; and (2) sub-project environmental and social management plans in a simple matrix format detailing measures to be implemented by the contractor and facilitating monitoring by the supervising engineer.

153. Although many ESS requirements in relation to contractors are similar to provisions of Cambodian law, they significantly exceed common practice in the Cambodian construction industry particularly. Contractors, and particularly local contractors, may find it difficult to understand or comply with all provisions. Accordingly, the project will prepare awareness raising and training materials and will provide short training courses on ESS compliance for contractors. Contractors or their site supervisors will be required to attend these courses, or to otherwise demonstrate their familiarity with ESS requirements. Table 3 has presented a gap analysis between the ESS requirements and the Government legislation provisions which includes measures to address the gaps. The project has prepared a Labor and Working Conditions Procedure (LWCP) to address discrepancies to comply with ESS2 requirements.

4.3.2 ESS2 – Labor and Working Conditions

154. Risks related to labor and working conditions of project workers are analyzed in the LWCP which presents risk mitigation measures. Key findings and proposed risk management measures of the LWCP are summarized here.

155. The LWCP will apply to (1) direct project workers, meaning non-civil service advisers and support staff who sign individual contracts with project implementing agencies and partners; (2) contracted workers employed by third parties to perform work related to core functions of the project; (3) primary supply workers employed by suppliers who, on an ongoing basis, provide directly to the

project goods or materials essential for the core functions of the project. Importantly, workers of suppliers to construction contractors may be considered as falling within this category; and (4) community workers engaged in paid or unpaid community work tasks associated with the project. The LWCP includes a schedule of project workers with estimated numbers in each category.

156. **Occupational Health and Safety** risks identified in the LWCP include risks associated with travel to and work at remote work sites, including traffic accidents, security risks, disease risks, snakebite and insect stings and explosive remnants of war (ERW). These risks will be assessed in the location-specific ESMP.

157. Common labor management practice for management of manual workers and laborers, particularly in the construction industry, may result in exposure of workers to risks including (a) unclear or nonspecific terms and conditions of employment; (b) potential discrimination against women or members of other groups; (c) denial of workers' rights to organize; and (d) no access to a grievance redress mechanism. The ESHS specification will clearly state required standards in respect of each of these and compliance will be monitored as part of construction supervision.

158. Contracted manual workers and laborers, particularly in construction works, may be exposed to risks including workplace accidents, exposure to hazardous substances, risks associated with living conditions in site camps and risks of encountering ERW during construction works.

159. Community work tasks in the main will be non-hazardous but could include hazardous conditions on construction sites, location-specific risks such as snakebite and insect bites, and ERW.

160. Hiring practices, particularly by contractors and suppliers, could create risks of breaches of principles of **fair treatment and nondiscrimination** required by ESS2.

161. There is a risk that **child labor and / or forced labor** could occur, particularly as Cambodian labor law provisions do not fully meet the requirements of ESS2 in this respect. The highest level of risk is assessed as associated with supply chains for construction materials (bricks and tiles) and for agriculture inputs.

162. **Workers' rights to organize** are protected by Cambodian labor law but may not be respected in practice. The Labor Law does not require employers to institute a formal workers' grievance mechanism.

163. Project workers at some sites could be at risk from natural hazards such as flash flooding, windstorms and lightning strikes.

164. **Gender-based violence** (GBV) risks to project workers could include potential risks to women project workers travelling in remote locations and potential for GBV committed by contractors' workers, e.g. those temporarily resident in construction camps.

165. The LWCP includes the following instruments which will be implemented by the Project including by contractors:

- (a) Procedure to Prevent Child Labor and Forced Labour (PPCLFL) to ensure and verify compliance with ESS2 requirements;
- (b) A Project Workers' Grievance Mechanism (PWGM).

166. The PPCLFL prohibits the employment of children under the age of 15 as project workers in any category and under any circumstances. Children aged 15 to 17 will not be employed as direct project workers. Children aged 15-17 will not be employed as contracted workers in a manner that is likely to be hazardous or interfere with the child's education or be

harmful to the child's health or physical, mental, spiritual, moral or social development. Children aged 15-17 will (1) not work unsupervised at any time; (2) not be employed in any capacity in construction of buildings and structures, or any capacity that requires entering excavations more than shoulder-deep; and (3) not be employed in any capacity that requires handling of potentially hazardous construction materials, including cement. Children aged 15-17 who are enrolled in school are not to be employed during school hours. These provisions will be enforced through contract supervision.

167. Children aged 15-17 who are enrolled in school will not be permitted to work as project community workers tasks during school hours. Children aged 15-17 may not participate in community work tasks unsupervised.

168. The LWCP also outlines the following instruments which will be prepared during the project inception period and implemented by the project including by contractors:

- (a) Occupational Health and Safety Strategy (OHSS) for direct project workers;
- (b) ESS2 compliant Terms and Conditions for Employment of Direct Project Workers;
- (c) Environmental, Social, Health and Safety Specifications (ESHSS) which will include enforceable contract conditions for employment, management and occupational health and safety of contracted workers;
- (d) ESS2 compliant Community Labor Management Procedure.
- 169. The following measures will be prepared for each sub-project as required:
 - (a) Identification of location-specific risks and mitigation measures in the SLC, ICLT and subproject ESMP;
 - (b) Works contractors will be required to prepare a site-specific Occupational Health and Safety Plan (OHSP).

170. Key ESS2 risks associated with project activity areas, with assessed impact level and likelihood are summarized in Table 4. The relevant instrument for risk mitigation is indicated in the right-hand column.

Table 4: Summary of ESS2 Risks					
Risk	Activity Area	Impact level	Probability	Mitigation Instrument	
Health and safety risks to project workers travelling to remote sites	All areas	Level 2	May occur, avoidance measures needed	OHSS	
OHS risks to contracted workers	Infrastructure s-p	Level 2	Likely to occur, mitigation measures needed	ESHSS Site-specific OHSP	
Unfair treatment of contracted workers	Infrastructure s-p	Level 1	Likely to occur, mitigation measures needed	ESHSS	
Inadequate living conditions at construction camps	Infrastructure s-p	Level 1	Likely to occur, mitigation measures needed	ESHSS Site-specific OHSP	
Workers' rights to organize and access to grievance mechanisms not respected	Infrastructure s-p	Level 1	Likely to occur, mitigation measures needed	ESHSS PWGM	
Child labor / debt bondage, most likely in workforce of secondary suppliers (brick kilns, planting materials)	Infrastructure and agriculture s- p	Level 2	May occur, avoidance measures needed	CLFLP ESHSS	
Risks of emergency events / natural hazards at work wites	Infrastructure s-p	Level 2	May occur, avoidance measures needed	Site-specific OHSP to include emergency response plan	

Excessive or inappropriate use of child labor in farming or	Resettlement on SLC	Level 1	May occur, avoidance	Awareness raising (Provincial Project
community projects			measures needed	Team)

4.3.3 ESS-3: Resource Efficiency and Pollution Prevention and Management

171. LASED III will require the exploitation of groundwater and surface water resources for domestic water supplies and for agriculture. Irrigation water demand may prove to be large in relation to available resources at some locations. There is a risk of unsustainable exploitation of water resources, diverting supplies from existing (downstream) users, and leaving inadequate water for stream and wetland ecosystems.

172. LASED III is not expected to result in significant point sources of pollution or greenhouse gas emissions. Farmers typically use inefficient diesel engines to pump irrigation water, leading to minor air pollution and greenhouse gas emission: technologies based on solar electricity are an increasing viable alternative. LASED III will not procure agriculture chemicals and, through extension trainings, will advocate adoption of Good Agriculture Practice (GAP) standards that avoid or minimize chemical use, but some use of fertilizers and pesticides by beneficiary farmers must be expected, while large scale use is known to occur on commercial plantations in the project area. Poorly managed use of agriculture chemicals has the potential to pollute water supplies through contaminated run-off water reaching streams and water bodies (there is also a risk of large-scale chemical use by nearby commercial agriculture operations affecting the project sites, see also ESS4 below). Agriculture activities at the project sites may also result in significant quantities of non-biodegradable solid waste (polybags used for supply of bulk materials, fertilizer etc.; discarded plastic mulch, netting etc.).

173. Management of solid waste is clearly also a problem at SLC sites, also linked to relatively dense settlement patterns and to establishment of markets. Contamination of water bodies by solid wastes including plastics is one of the risks resulting from poor solid waste management. Burning waste (apparently the only common method of disposal) also creates health hazards from burning plastics.

174. Construction of infrastructure in LASED III sub-projects will result in a risk of works-related pollution and other negative environmental impacts. Pollution may arise from mis-handling or inappropriate disposal of oils, cement, plastic waste and other types of solid waste. Water sources could be contaminated by sewage or by poor drainage and management of storm water. Construction works may result in dust nuisance and, in extreme cases, health hazard to nearby communities. In addition, poor design of infrastructure or poor practice during construction may lead to damage to natural drainage channels, soil erosion, de-stabilization of natural slopes etc.

175. Key ESS3 risks associated with project activity areas, with assessed impact level, likelihood and outline mitigation strategy are summarized in Table 5.

	Table 5: Summary of ESS3 Risks						
Risk	Activity Area	Impact level	Probability	Mitigation strategy			
Depletion of groundwater or surface water sources by inefficient or unsustainable exploitation	Irrigation s-p Agriculture s-p	Level 2	May occur, avoidance measures needed	Water resources planning			
Air pollution from use of diesel pumps	Agriculture s-p	Level 1	May occur, avoidance measures needed	Awareness raising			
Water contamination from inappropriate use of agriculture chemicals	Agriculture s-p	Level 2	May occur, avoidance measures needed	CamGAP-compliant training on safe use and disposal of chemicals			

				Farmers have opportunities to adopt profitable chemical-free / organic farming systems
Environmental pollution from non-bio-degradable solid waste from agriculture activities	Agriculture s-p	Level 1	May occur, avoidance measures needed	Awareness raising and solid waste management measures
Air pollution (by burning), water pollution and land pollution resulting from inadequate solid waste management at SLC residential sites.	SLC	Level 1	Likely	Develop and implement effective solid waste management measures
Air, water, soil pollution from works activities	Infrastructure s-p	Level 1	Likely	Appropriate provisions in ESHS specification

4.3.4 ESS4 – Community Health and Safety

176. There is a wide range of potential health and safety risks that could affect project beneficiaries and other stakeholders at LASED III SLC and ICLT locations. Many of these risks are inherent to lifestyles, livelihoods and living conditions in rural Cambodia and the project will not necessarily increase the likelihood or severity of these risks in all cases. Nevertheless, some risks will be exacerbated by the process of moving to the SLC sites, while the careful design of the project and management of the community development aspects has the potential to reduce some health and safety risks to which the beneficiaries would previously have been exposed.

177. LASED III will support development of small-scale irrigation schemes including construction or rehabilitation of small dams whose failure is unlikely to create a major hazard to human life. Dams meeting the criteria defined in ESS4 Annex 1 triggering dam safety requirements will not be permitted (included in negative list). Nevertheless, LASED II was considered to trigger OP/BP 4.37 on Safety of Dams and LASED III should continue to screen for and manage this risk under the ESS4 framework. All infrastructure should be designed for climate resilience, taking into account the best available projections of climate change.

178. The project target provinces are also the locations of existing or proposed hydropower dam schemes, or contain downstream areas influenced by hydropower schemes located in Vietnam or Laos. The presence of an actual or potential hydropower scheme upstream of land allocated for an SLC site or ICLT location might create potential risks, including risks that would not have been identified by an environmental impact analysis for the hydropower scheme conducted before the SLC site was proposed. Risks could include exposure to rapid fluctuations in stream flows linked to operation of the dam, as well as any (presumably minor) risk of dam failure.

179. Re-location to an SLC site might potentially expose land recipients to risks from natural disaster, for example if the SLC is in a zone liable to flooding. Transition to a livelihood based on own-farm agriculture production entails a risk from crop failure, for example due to drought. Both these risks may potentially be exacerbated by climate change. Forest fires do not appear to be a major hazard in Cambodia at present but if climate change leads to drier conditions in natural forest areas, this could also become a risk. Lightning strikes are a known risk for Cambodian field workers, however effective risk reduction is still possible if the project can provide them with lightning rods⁹ to protect them from lightning strikes.

⁹ A lightning rod (US, AUS) or lightning conductor (UK) is a metal rod mounted on a structure and intended to protect the structure from a lightning strike. If lightning hits the structure, it will preferentially strike the rod and be conducted to ground through a wire, instead of passing through the structure, where it could start a fire or cause electrocution.

180. Explosive Remnants of War (ERW) resulting from the conflicts of the 1970s and 1980s continue to be a hazard in Cambodia, though the casualty rate has been greatly reduced by ongoing mine clearing and awareness raising efforts. Intentionally laid minefields are mainly known and marked and so do not create a major hazard, although mines are sometimes encountered in unexpected locations. However, in the northeast of Cambodia including the likely priority provinces of LASED III, the major hazard arises from unexploded aerial bombs and cluster munitions which are scattered unpredictably and are especially likely to be encountered when clearing new land for cultivation, as at an SLC site.

181. SLC and ICLT locations are located in remote areas including forests where there may be an increased risk of vector-borne diseases including malaria and dengue fever. ICLT community members are already resident in these areas but SLC land recipients may be moving from areas with lower risk and may have less resistance.

182. SLC residential land areas are generally larger and more densely populated than the villages the land recipients are moving from. Clean water supplies and sanitation are key to preventing waterborne diseases. Although LASED and LASED II have provided materials for construction of latrines to each household, many of these materials appear to be unused or used for alternative purposes, while households still lack latrines and practice open defecation, which the risk of disease transmission being greater than in low-density traditional settlements.

183. Pollution of surface water sources (and, possibly, groundwater) by run-off of agriculture chemicals from large commercial plantations is said to be a problem in some areas of Cambodia including the LASED III priority target provinces, although it is difficult to find clear evidence of this. Another potential source of water pollution is from mining operations, including illegal activities in some cases. In some areas of Cambodia natural arsenic in groundwater is a health hazard to users of water from deep boreholes. As the project will support relocation of communities to areas where water supplies could potentially be polluted from these sources, these hazards must be considered as creating community health and safety risks associated with the project. In all cases where the project will directly provide domestic water supply installations, or will result in people relocating (i.e. on SLC) to areas where they will use existing water supplies, the project will conduct testing to ensure that water supplies are of potable water quality.

184. The project will also conduct follow-up testing for bacterial contamination of water supply installations annually during the project period. Where contamination is identified, the water supplies will be disinfected, and the community will be trained to carry out this procedure.

185. In some areas of Cambodia, natural arsenic in groundwater is a health hazard to water users. Risk mitigation measures are needed to ensure that project beneficiaries, particularly land recipients moving to SLC sites, are not exposed to contaminated water supplies for any of these reasons. Deep aquifer groundwater supplies need to be tested for arsenic. In line with the national standards (MRD Protocols), the following measures will be applied: (i) new water supply sub-project conduct water testing including Arsenic and compare against National standards; (ii) communicate water quality testing results to the villagers and inform them whether the water is suitable for drinking; (iii) provide advice on basic treatment options in case parameter/s exceed standards limit; and (iv) in case Arsenic is higher than the standards limit, treatment to remove Arsenic is not recommended due to high installation costs, and high maintenance requirements as well as lack of capacity to operate and maintain the system. Alternative safe potable water supply will be provided before people are relocated to the site.

186. Cambodia has a high rate of road traffic accidents resulting from rapidly increasing vehicle ownership, vehicles in poor condition, lack of knowledge and / or observance of road traffic laws by road users and sometimes poorly designed road infrastructure. LASED III will support development of access roads to SLC and ICLT locations as well as intra site roads. This creates a risk of road accident casualties and the need for a risk reduction strategy.

187. Child malnutrition is a continuing problem in rural Cambodia and has complex causes including traditional diets and infant feeding practices as well as availability of nutritious foods to poorer households. Transition to an SLC is likely to have significant impacts on the diets of the land recipients, which may be positive for nutrition but could possibly have negative impacts in some circumstances. Establishment of SLC and community development activities at SLC and ICLT locations are an opportunity to address nutrition through awareness raising and supporting production of nutritious foods in home gardens.

188. In most areas, primary health care is delivered through the Commune Health Centre (HC) which is normally located in the most populous and accessible part of the Commune. SLC and ICLT locations are often remote from the HC and access may be difficult. LASED III has the option of constructing health posts on the project sites but it may be difficult to attract qualified health staff to work at these locations. Increased remoteness from health services will increase the potential impacts of health and safety hazards discussed above.

189. Also, within the scope of ESS4, facilities including health facilities as well as schools, water supplies and other services may be difficult for disabled or elderly people to access, unless specific measures are taken to ensure universal access.

190. Gender-based violence (GBV) is a recognized social problem in rural Cambodia. Prevention and harm reduction measures are generally based on intervention by the authorities or by the Commune Women and Children's Committees (CWCC). Re-location of households to SLC sites may make these interventions more difficult, as well as creating the possibility that a household known to be at risk of GBV, by re-locating, is removed from an existing framework of support. Accordingly, LASED III will support efforts to reduce GBV, including awareness campaigns, training of local authorities and support to victims through the CWCC at all SLC and ICLT.

191. LASED III will support significant works for land clearing and construction of infrastructure. If not properly managed, construction works may result in safety hazards to the general public, for example risks from children playing on construction sites or around construction machinery.

Table 6: Summary of ESS4 Risks					
Risk	Activity Area	Impact level	Probability	Mitigation strategy	
Flood damage from failure of project- supported dams	Irrigation s-p	Level 1	May occur, avoidance measures needed	Ensure safe design	
Flood damage from failure of larger dams upstream of project sites	Resettlement	Level 2/ Level 3	May occur, avoidance measures needed	Site screening Risk assessment Mitigation measures	
Exposure of project beneficiaries to climate risk (floods and droughts)	Resettlement	Level 2	May occur, avoidance measures needed	Site screening Risk assessment Mitigation measures	
Injuries resulting from ERW	All field activities	Level 2	May occur, avoidance measures needed	Site screening and risk assessment Where ERW are suspected, area to be cleared and certified safe by a competent agency before start of any activities	

192. Key ESS4 risks associated with project activity areas, with assessed impact level, likelihood and outline mitigation strategy are summarized in Table 6.

				Project to have a protocol, disseminated to beneficiaries and to contractors, for dealing with any ERW encountered unexpectedly
Infection by vector- borne diseases	Resettlement	Level 2	Likely to occur, mitigation measures needed	Site screening and risk assessment Awareness raising Health awareness training for beneficiaries including reducing risk from vector-borne diseases, WASH, nutrition
Infection from water- borne diseases	Resettlement	Level 2	May occur, avoidance measures needed	Site screening Risk Assessment All water sources tested for As, chemical pollutants and biological contamination Adequate potable water supplies to be ensured at all sites Awareness raising, WASH activities Effective best-practice sanitation campaigns at all sites
Health impacts of water supplies contaminated by upstream activities (mining, agriculture chemicals) or naturally occurring arsenic	Resettlement	Level 2 / Level 3	May occur, avoidance measures needed	Site screening, water supply testing, apply MRD protocols, ensure potable water supply at all sites
Injuries from road traffic accidents	Road infrastructure s-p Resettlement	Level 2	Likely to occur, mitigation measures needed	Road safety plan per s-p Awareness raising
Negative impacts on child nutrition	Resettlement	Level 2	May occur, avoidance measures needed	Nutrition training
Negative impacts of reduced access to health services in remote areas	Resettlement	Level 2	Likely to occur, mitigation measures needed	Provide health facilities where possible
Services and infrastructure supported by the project not accessible by elderly or disabled	Infrastructure and services s-p	Level 1	May occur, avoidance measures needed	Ensure universal access to all project services
Reduced access to support for victims of GBV	Resettlement	Level 1	Likely to occur, mitigation measures needed	Support (establish if necessary) CWCC to campaign on GBV and establish victim support network
Accidental injuries to public, including children, during construction works	Infrastructure s-p	Level 2	May occur, avoidance measures needed	Safe control of works measures in ESHS specification Safety plans integrated in ESHS specifications for construction works. Where there is no physical barrier to entry, a flag person should always be present to exclude the public and alert machine operators to risks

4.3.5 ESS5 - Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

193. Risks associated with land acquisition, restrictions on land use and involuntary resettlement are analyzed in detail, with appropriate risk mitigation measures, in the RPF. In particular, it is noted that RGC's Standard Operating Procedures for Land Acquisition and Resettlement (SOP-LAR) do not fully match the requirements of ESS1, ESS5 and ESS7.

194. The RPF presents lessons learned from LASED and LASED II, the legal framework for LAR, and a gap analysis of areas in which SOP-LAR does not ensure full compliance with ESS1, ESS5, and ESS7. The subsequent description in the RPF of measures to avoid or minimize LAR, and where this is not possible to prepare and implement LAR integrates the analysis of gaps between SOP-LAR and ESS1, ESS5, and ESS7 requirements. The LASED III Financing Agreement will refer to this RPF cleared by the World Bank and agreed with the RGC as the applicable instrument regarding land acquisition and resettlement for this project. If specific Social Land Concession (SLC) or Indigenous Community Land Titling (ICLT) sub-projects are found to require Resettlement Plans to address LAR impacts, these plans will be prepared in close consultation with stakeholders and the World Bank. Project activities that will cause physical and/or economic displacement will not commence until such specific plans have been finalized and approved by the World Bank.

195. The RPF describes project measures to avoid or minimize any need for land acquisition and involuntary resettlement. The SLC process is intended to identify vacant State land that can be allocated to land-poor households; thus, land that is in private ownership and / or use is excluded from the SLC site area. Similarly, the ICLT process identifies and excludes privately held land from the area to be included in the community collective title.

196. In principle, land acquisition and involuntary resettlement within the scope of ESS5 may result from LASED III project activities in the following situations:

- (a) Land that is in private ownership, occupation or use, whether legally owned or not, is classified as State Private Land and included in the area of an SLC or ICLT;
- (b) State Public Land that is used for common property resource (CPR) uses, such as non-timber forest product (NTFP) livelihood activities, is re-classified as State Private Land and included in the area of an SLC or ICLT. It is expected that most of those who used such a common property resource when it was State Public Land would continue to do so as SLC land recipients or ICLT community members. However, for some access might be restricted, for example those who do not want to join the SLC, or who do not meet the eligibility criteria, or in case of an ICLT are not members of the IP community.
- (c) Land in private ownership, occupation or use, whether legally owned or not, is needed for construction of infrastructure. In some cases, this could include land outside the boundaries of the SLC or ICLT, such as land needed for construction or widening of an access road or for construction of irrigation infrastructure.

197. As described in the RPF, proposed SLC and ICLT will be carefully screened to identify land that is in private ownership and / or use. In most cases, such land will be excluded from the SLC or ICLT area. Where it is identified that land is used for CPR purposes, the project will identify the CPR users and ensure that they can be compensated by (1) provision of access to equivalent, alternative resources; (2) by inclusion as SLC land recipients or ICLT community members; or (3) other compensation equivalent to the loss.

198. LASED III may also acquire minor amounts of land through agreements under which the existing land users become SLC land recipients or members of the ICLT community; or through voluntary land contribution agreements consistent with ESS5.

199. In cases where land acquisition and involuntary resettlement cannot be avoided (i.e. where the SLC or ICLT would not otherwise be viable) a Resettlement Plan (RP) will be prepared and implemented in compliance with the requirements of ESS5. This is discussed further in Section 5 below.

200. Key ESS5 risks associated with project activity areas, with assessed impact level, likelihood and outline mitigation strategy are summarized in Table 7.

Table 7: Summary of ESS5 Risks				
Risk	Activity Area	Impact level	Probability	Mitigation strategy
Existing land owners/users with rights recognized by Cambodian Land Law 2001 and / or by ESS5 (more extensive in some respects) lose land without due process (consultation, informed consent) and / or without adequate compensation to standards required by ESS5	SLC ICLT	Level 2	May occur, avoidance measures needed	Rigorous screening and evaluation of existing land claims
Other categories of land user who are not owners or direct occupiers (including people who use land for CPR) lose access and livelihoods as a result of conversion to SLC land	SLC ICLT	Level 1	May occur, avoidance measures needed	This type of claim to be recognized, restitution through (1) provision of alternative access to resources; (2) share in project benefits; or (3) other compensation equivalent to the loss
SLC land allocated in an unfair or non-transparent manner	SLC	Level 1	May occur, avoidance measures needed	Careful and transparent implementation of SLC process
IP communities lose ownership / access to lands they traditionally consider theirs and use for livelihoods or cultural purposes, but which are not included in the ICLT	ICLT	Level 2	May occur, avoidance measures needed	Process to go ahead only with FPIC of IP
ICLT process results in re- allocation of use rights within the communal land, with negative impacts on some users	ICLT	Level 1	May occur, avoidance measures needed	IP supported to fairly allocate land use rights through internal processes
Construction of infrastructure outside SLC or ICLT boundaries requires involuntary resettlement	Road s-p	Level 2	May occur, avoidance measures needed	Prepare and implement a resettlement plan under the framework of SOP-LAR procedures but ensuring full compliance with ESS5 requirements

4.3.6 ESS6 - Biodiversity Conservation and Sustainable Management of Living Natural Resources

201. SLC sites are identified on vacant and forest-degraded land in public ownership, of which commercially valuable timber was harvested. It is possible that land proposed for SLC may include remnant forest, wetlands and wildlife habitats, including those that are recognized as important to biodiversity and living natural resources but that have not been formally recognized. These areas are identified through hot spot mapping and delignated from the SLC as part of the State Land registration process, using procedures that have been established and proven successful under LASED and LASED II.

202. Land proposed for ICLT may also include environmental hotspots that are important for biodiversity and natural resource conservation. In general, these hotspots will also be excluded from the ICLT on the same basis as for SLC. However, cases may arise of areas that are considered as hotspots by the responsible Ministries (e.g. Ministry of Environment) but are considered by IP communities as an integral part of their heritage.

203. SLC may have impacts on "hotspots" and areas of biodiversity and natural resources outside, but adjacent to, the SLC sites (including the areas that are excluded from the SLC through the screening process). SLC development will result in larger numbers of people living close to these areas and will also result in improved road access via the SLC. This could lead to non-sustainable levels of legal activities such as timber cutting for own use, firewood collection and harvesting of non-timber forest products, and may also facilitate illegal activities (commercial timber harvesting, hunting etc). To mitigate this risk, A safe buffer zone should be established. The safe zone will protect areas between nearby forests and the SLC/ICLT locations:

- (a) This buffer zone should be established through community consultation and guided by forest experts (MAFF or MoE according to mandate, NGOs, etc.).
- (b) Based on community consultation, an agreement should be reached and incorporated into the five years Commune Development Plan (CDP) and the annual Commune Investment Plan (CIP), stating that the buffer zone is applicable to all public infrastructure including roads. The CDP and CIP should be the basis for legal commitment from the SLC/ICLT.
- 204. Key ESS6 risks to be assessed and managed at project site and / or sub-project level include:
 - (a) Risk of impacts on valuable natural resources (forests, wetlands, wildlife habitat) in areas identified for SLC/ICLT;
 - (b) Risk of impacts of increased population in areas adjacent to forests, wildlife habitat, wetlands etc. increasing exploitation to non-sustainable levels or leading to illegal exploitation (commercial timber harvesting, hunting etc.).

205. Key ESS6 risks associated with project activity areas, with assessed impact level, likelihood and outline mitigation strategy are summarized in Table 8.

Table 8: Summary of ESS6 Risks				
Risk	Activity Area	Impact level	Prob ability	Mitigation strategy
Damage to hotspots or sensitive locations through inclusion within SLC boundaries	SLC	Level 2	May occur, avoidance measures needed	Screening process (risk is low if process is followed correctly) Ensure adequate awareness and capacity of Commune and technical officials
Damage to hotspots that are outside or excluded from the SLC land, but that suffer increased exploitation as a result of easier access after the SLC is established	SLC	Level 2	May occur, avoidance measures needed	Establish buffer zone as part of the land use and allocation process Awareness raising

4.3.7 ESS7 - Indigenous Peoples

206. Risks associated with project impacts on indigenous peoples are described and analyzed in the IPPF together with appropriate risk mitigation measures.

207. LASED III will support the preparation and issue of community land titles to IP communities, allowing them to preserve their access to land for habitation, agriculture (including both settled agriculture and swidden cultivation), access to natural resources and culturally important sites. The project will also support social and economic development for the ICLT communities which may include infrastructure and livelihoods sub-projects.

208. The process by which an IP community applies for and obtains an ICLT is lengthy, involving multiple steps and three different Ministries, and may take several years to complete. This process has

been described in Section 1 above (see Table 1B) and in the IPPF. LASED III will engage with and support IP communities that have reached different stages of this process, but not before completion of Phase 2.5 (application submitted to MLMUPC), During Phase 2, the IP Community Committee (IPCC) is formed (Step 1), bylaws are adopted (Step 3) and internal rules are established (Phase 2.5 Step 2) – see Table 1A above. There is a risk that the composition of the IPCC and bylaws might not adequately ensure equitable representation, voice and treatment of disadvantaged groups within the IP community, which may include women, poorer households or other sub-groups. Therefore, on beginning engagement with each IP community, LASED III will conduct a due diligence check to verify (i) that the social representativeness and inclusiveness of the IPCC; and (ii) that the community by-laws accommodate the interests of the different social sub-sets of the IP community; and (iii) that same applies to the IP community internal rules. Depending on the findings, the project will determine whether the IP community needs to be engaged in a consultation/FPIC process to review and adjust the by-laws and IPCC to ensure voice and equitable access to project benefits.

209. The process of identifying, screening, mapping and land titling for ICLT lands clearly entails some level of risk, including negative impacts on existing land users (discussed under ESS5 above). IP communities report that in some cases land they have traditionally regarded as part of their community land, including land they have used for agriculture and natural resource livelihoods or for cultural purposes, has been excluded from the ICLT. This opens the possibility that formal mapping and definition of the boundaries of community land could lead to loss of access to areas outside the final mapped boundaries, albeit with improved tenure security of the land inside the boundaries.

210. The Protected Area Law (2008) defines four different protected area zones - community zone, sustainable use zone, conservation zone, and core zone – that differ in terms of land use and management attributes, and of which the two first would be allowed for sustainable use and residence by IPCs. However, so far MoE has only done zoning for one national protected area, and MoE officials are opposed to accept larger land areas in protected areas that would enable IPCs to continue agricultural land use and the exploitation of forest products as part of ICLTs due to incompatibility with MoE's conservation objectives. To clarify the situation and facilitate IP communities' access to land and resources, all zones need to be appropriately identified and mapped as stipulated in the Law on Protected Areas.

211. To reduce the risk that IP communities lose access to lands traditionally used for livelihoods or cultural purposes, if/when such land is excluded from the ICLT as Protected Areas, LASED III will support coordination between MoE and MAFF to resolve issues regarding allocation of parts of Protected Areas (community and sustainable use zones) as authorized in Protected Area Law (2008) for ICLT use by IP communities.

212. In site visits, it was noted that the ICLT process appears to embody prior assumptions about IP livelihoods, particularly the use of shifting cultivation, which may not apply, or may no longer be important, in practice. IP reported that this can lead to land use planning outcomes that are not optimal from the point of view of the community.

213. It cannot be assumed that all IP individuals and households will have identical views or interests, however the principle of Free, Prior, Informed Consent (FPIC) which underpins ESS7 must be considered as applying to different groups within the community as well as to the community as a whole.

IP communities report that issue of an ICLT does not necessarily result in cessation of encroachment on IP communal land. There are continuing cases of encroachment particularly where the ICLT borders privately farmed land. Authorities and institutions (apparently including the courts in some cases) may not fully understand or respect the validity of ICLT titles.

214. The IPPF describes the framework for obtaining the free, prior and informed consent (FPIC) of IPs as required by ESS7. The principle of FPIC is applicable in the event that the Project will (1) have

adverse impacts on land and natural resources subject to traditional ownership or under customary use or occupation; (2) cause relocation of IPs; or (3) have significant impacts on IP's cultural heritage.

215. In the ICLT process (see Table 1B above) FPIC must be obtained, verified and documented at the following steps (at a minimum): in Step 3 of Phase 2.5; Step 3 of phase 3; and if changes are made during Step 4 of phase 3, FPIC would need to be ascertained again.

216. FPIC will also be required in any case where development of an SLC may have adverse impacts on indigenous people living in the area. For this purpose, the applicable definition of IPs is that provided by ESS7, which may include minority groups that would not be considered as eligible for ICLT or otherwise recognized as having special status under Cambodian law (see IPPF).

	Table 9: Summary of ESS7 Risks					
Risk	Activity Area	Impact level	Likelihood	Mitigation strategy		
LASED III only gets involved in ICLT support at Phase 2.5 and Phase 1 and 2 involving formation of a Community Committee and adoption of Community By-Laws could be subject to elite capture.	ICLT	Level 2	May occur, avoidance measures needed	Due diligence checks to verify whether Phase 1 and 2 outcomes comply with ESS7 requirements for Meaningful Consultation in terms of the outputs of these two Phases, namely a gender and socially inclusive IPCC and Community By-Laws and Internal Rules that also address the interests of women and the poor. If not, revisit composition of IPCC and/or content of Community By-Laws and Internal Rules based on FPIC.		
Issuing of ICLT does not halt Non-indigenous in-migration and selling of land by IP	ICLT	Level 2	Likely to occur, mitigation measures needed	Awareness raising activities by project, clear demarcation of ICLT area, and prompt reporting to MLMUPC of encroachments and/or sale of ICLT land		
IP communities lose access to lands traditionally used for livelihoods or cultural purposes, if/when such land is excluded from the ICLT as Protected Areas	ICLT	Level 2	Likely to occur, mitigation measures needed (based on reports from IPs)	Project to support coordination between MoE and MoA to resolve issues regarding allocation of parts of Protected Areas (community and sustainable use zones) as authorized in Protected Area Law (2008) for ICLT use by IP communities. Project also to support accelerated zoning of all relevant Protected Areas to demarcate both community and sustainable use zones.		
MoE has not included any PA land in ICLTs when ICs wanted to register such land as communal land, as opposed to CPA with limited role and access. As a result, ICs have often rejected a CPA registration.	ICLT	Level 2	Likely to occur, mitigation measures needed	Advocate the setting up of a coordination mechanism of relevant ministries to discuss the potential inclusion of parts of Protected Areas (community and sustainable use zones) into ICLT land even if Protected Areas (PA) are not fully zoned.		
Land use planning results in restrictions on use of IP land that do not reflect the realities of present-day livelihoods systems	ICLT	Level 1	May occur, avoidance measures needed	Identify and mitigate land access risks by expert intermediaries to assist IP communities to identify issues, reach consensus and ensure their views are fully considered in ICLT planning.		
The benefits of ICLT may not be shared equitably amongst community members regarding occupation of the reserve land.	ICLT	Level 1	May occur, avoidance measures needed	Include appropriate rules in the Community By-Laws, and enforce these internal rules, or if such provisions are not included, follow customary practices that agree on principles of equity in the allocation of the reserve land amongst community members.		

Poor market access for IP	ICLT	Level 1	Likely to occur, mitigation measures needed	Provision of ICLT access roads providing link to the wider road network
Damage to indigenous knowledge, institutions or social organization if titling and livelihood activities are not prepared, designed and implemented appropriately and based on IPs own circumstances, needs and priorities.	ICLT Infrastructure s-p Livelihoods s-p	Level 1	May occur, avoidance measures needed	Meaningful consultation (ESS7 para 23) involving community led planning, with IPs assisted to evaluate potential risks, that result in FPIC (ESS7 para 24).
May occur, avoidance measures needed Exclusion of disadvantaged groups from consultation due to language difficulties or traditional authority structures	ICLT	Level 1	May occur, avoidance measures needed	Ensure local translation available. Separate focus groups for women, youth, disabled. Involve indigenous peoples' organizations.
Environmental, health and safety impacts of road projects	Road s-p	Level 2	May occur, avoidance measures needed	Road safety measures Environmental protection measures

217. Key ESS7 risks associated with project activity areas, with assessed impact level, likelihood and outline mitigation strategy are summarized in Table 9.

4.3.8 ESS8- Cultural Heritage

218. Risks to cultural heritage are identified and analyzed, and risk mitigation measures identified, in the CHPF.

219. **Tangible cultural heritage** that may be present in areas proposed for SLC or ICLT, or in areas for construction of access roads and other infrastructure, may include (1) archaeological remains, including temples, statuary and other artefacts from the Angkorean Empire period; recent and modern era religious buildings, graveyards (particularly of non-Khmer ethnic groups who practice burial rather than cremation), other culturally important buildings and locations, natural features with cultural importance; and locations of cultural importance to indigenous peoples which include "spirit forests" as well as burial grounds. Culturally important places include those that are formally recognized (e.g. known archaeological sites) and those that are not formally recognized but may be known and valued by the local community.

220. There is also the possibility of chance finds of archaeological remains, particularly during construction works. A Chance Finds procedure is provided in the CHPF.

221. Potential negative impacts of SLC and ICLT location development on **intangible cultural heritage** are more difficult to define and predict. However, as these developments result in accelerated social change as well as (in the case of SLC) relocation of people from their traditional communities, this clearly could lead to cultural loss. Risks of this nature are likely to be different at different sites and should be considered in screening, primarily through discussion with project affected people. Provincial officials may not be fully sensitive to the cultural concerns of IP communities and it may be necessary for this dialogue to be conducted through a skilled intermediary.

222. All sites will be screened for potentially vulnerable tangible or intangible cultural heritage, using procedures described in the CHPF and including use of existing maps, stakeholder consultations, land use planning and involvement of experts where needed. Where necessary, a location-specific Cultural Heritage Management Plan (CHMP) will be prepared once SLC and ICLT sites are identified. A template for the CHMP is provided in the Annex A of CHPF.

223. Key ESS8 risks associated with project activity areas, with assessed impact level, likelihood and outline mitigation strategy are summarized in Table 10.

	Table 10: Summary of ESS8 Risks					
Risk	Activity Area	Impact level	Probability	Mitigation strategy		
Damage to tangible cultural heritage including archaeological sites, natural features of cultural importance., other culturally important locations	Infrastructure s-p	Level 2	May occur, avoidance measures needed	Mapping of known cultural heritage. Identification of stakeholders Site screening and preparation of CHMP where needed. Expert advice where needed Chance finds procedure developed and integrated in ESHSS specification		
Tangible cultural heritage sites of IP communities are excluded from the ICLT, leading to loss of community access or control	ICLT	Level 2	May occur, avoidance measures needed	Support IP communities to advocate for their ownership of cultural sites (within limits provided by law) Where law requires heritage of importance to IP to be under mandated authority, facilitate arrangements for access and shared management		
Damage to intangible cultural heritage, especially of IP communities, and particularly where Provincial officials may not be fully aware of the cultural concerns of IP communities.	ICLT Livelihoods s-p	Level 1	May occur, avoidance measures needed	Identification of stakeholders Site screening and preparation of CHMP where needed. Expert advice where needed Ensure that the ICLT process is community-led to the greatest extent possible, and IP are facilitated to identify and evaluate risks		

224. Environmental and social risks and mitigation measures are consolidated in Table 11.

	Ta	able 11: Risks and Mitigation Measures
Risk Area	Potential Risks	Mitigation Measures
Assessment and Management of Environmental and Social Risks and Impacts (ESS1) and general	 Specific environmental and social risks not identified during site studies and planning Adverse impacts on vulnerable and marginalized groups Adverse impacts on access to land and resources (not arising directly from land acquisition) Non-compliance with ESS requirements by contractors Climate change impacts reduce viability or sustainability of project outputs 	 All new sites are screened (see the screening format in Appendix 3) at an early stage and a risk assessment conducted. Based on the findings, an Environmental and Social Management Plan (see the ESMP format in Appendix 5) will be prepared, used as a guide during site studies, and updated as appropriate. A regional ESIA may be needed subject to the screening outcome. ESMP will identify vulnerable and marginalized groups who will be consulted to identify potential adverse impacts. Appropriate mitigation measures will be included in the ESMP ESMP will identify users of land and resources who may be adversely affected, consult them and incorporate appropriate mitigation measures Simple sub-project ESMP (matrix format only) will be developed for infrastructure sub-projects and included in contract obligations A standard Environment, Social, Health and Safety Specification will be developed and integrated in contracts. Project will develop awareness raising and training to ensure contractors, especially local contractors, are able to comply. Climate change trends to be considered in infrastructure and livelihood sub-project design Project to employ trained and qualified E&S risk management advisers, who will guide E&S screening and planning, monitor implementation and report systematically.
Labor and Working Conditions (ESS2)	 Health and safety risks to project personnel travelling to remote sites OHS risks to contracted workers Unfair treatment of contracted workers Inadequate living conditions at construction camps Workers' rights to organize and access to grievance mechanisms not respected Child labor / debt bondage, most likely in workforce of secondary suppliers (brick kilns, planting materials) Excessive or inappropriate use of child labor in farming 	 Types of worker covered by ESS2 identified in site ESMP Proportionate to the OHS risk level and in line with the OHS risk assessment, an Occupational Health and Safety Strategy (OHSS) to be developed for direct project workers, covering risks of travel to remote areas (infection, road safety, security) Contractors and suppliers to be obliged to comply with labor laws and ESS2 requirements for employment conditions through Environmental, Social, Health and Safety Specification (ESHSS) Child Labor and Forced Labor Procedures (CLFLP) ensure and verify compliance with ESS2 requirements Community Labor Management Procedure to be adopted Safe working conditions on construction sites including adequate provision and use of personal protection equipment (in ESHSS and site-specific OHS plans) Community Labor Management Procedure to be adopted. Training and awareness raising of supervisory staff of contractors and suppliers Monitoring of compliance including sources of materials where relevant
Resource Efficiency and Pollution Prevention and Management (ESS6)	 Depletion of groundwater or surface water sources by inefficient or unsustainable exploitation Air pollution from use of irrigation diesel pumps Water contamination from inappropriate use of agriculture chemicals 	 Water resource assessment conducted at early stage. No irrigation development without confirming that proposed withdrawals are sustainable Water resource assessment, irrigation development plans, and solid waste final disposal (landfill) will be included in location-specific ESMP as relevant. If regional ESIA is needed, water resource assessment, irrigation development plans, and solid waste final disposal (landfill) will be included.

Table 11: Risks and Mitigation Measures				
Risk Area	Potential Risks Mitigation Measures			
	 Environmental pollution from non-bio-degradable solid waste from agriculture activities Air pollution (by burning), water pollution and land pollution resulting from inadequate solid waste management at SLC residential sites. Air, water, soil pollution from works activities 	 Encourage use of RET Farmers to receive training on use, storage, and disposal of agriculture chemicals and of solid waste as standard module in livelihood trainings Solid waste management plans, particularly on collection and disposal, prepared and implemented at all sites. Location specific ESMF will further give detail on the SW collection and disposal. Environmental and Social Management Plan measures integrated in ESHS Specification for works contracts as needed Sub-project level ES risk management instruments for construction works will be prepared by design team and included in contract documentation 		
Community Health and Safety (ESS3)	 Flood damage from failure of project-supported dams Flood damage from failure of larger dams upstream of project sites Exposure of project beneficiaries to climate risk (floods and droughts) Injuries resulting from ERW Infection by vector-borne diseases Infection from water-borne diseases Health impacts of water supplies contaminated by upstream activities (mining, agriculture chemicals) or naturally occurring arsenic Injuries from road traffic accidents Negative impacts of reduced access to health services in remote areas Services and infrastructure supported by the project not accessible by elderly or disabled Reduced access to support for victims of GBV Accidental injuries to public, including children, during construction works 	 Large dams (ESS4 definition) not permitted. All dam designs to be prepared properly by a qualified engineer Where there is an identified risk from climate disaster or impacts of large dams upstream, emergency preparedness and response management plans prepared; Where ERW are suspected, area to be cleared and certified safe by a competent agency before start of any activities Project to have a protocol, disseminated to beneficiaries and to contractors, for dealing with any ERW encountered unexpectedly Health awareness training for beneficiaries including reducing risk from vector-borne diseases, WASH, nutrition Effective best-practice sanitation campaigns at all sites All water sources tested for Arsenic and for chemical pollutants. Wells with non-potable water due to arsenic marked according to MRD protocols. Safe, potable water supplies to be available before people more to SLC. Repeat testing for biological contamination and disinfection where needed. Road designs subject to safety checks Road safety campaigns Provision of health posts / and or ambulance service All service facilities designed for equal access Support Women and Children's committees to campaign on GBV and establish victim support network. Raise awareness of local authorities. Safety plans integrated in ESHS specifications for construction works. Where there is no physical barrier to entry, a flag person should always be present to exclude the public and alert machine operators to risks 		
Land Acquisition, Restrictions on Land Use and Involuntary Resettlement (ESS5)	 Existing land owners/users with rights recognized by Cambodian Land Law 2001 and / or by ESS5 (more extensive in some respects) lose land without due process (consultation, informed consent) and / or without adequate compensation to standards required by ESS5 Other categories of land user who are not owners or direct occupiers (including people who use land for 	 Rigorous screening and evaluation of existing land claims which recognizes: All land holders with rights recognizable under Land Law 2001 to be regarded as legal owners, irrespective of whether they hold "hard" land titles. Land users whose occupation or use was established and unchallenged before cut-off date not to be considered as "illegal occupiers". All persons using the land including CPR before cut-off date are eligible for compensation. Compensation - if displaced - to include adequate housing with security of tenure. 		

Table 11: Risks and Mitigation Measures			
Risk Area	Potential Risks	Mitigation Measures	
	 CPR) lose access and livelihoods as a result of conversion to SLC land Compensation not at replacement cost. SLC land allocated in an unfair or non-transparent manner IP communities lose ownership / access to lands they traditionally consider theirs and use for livelihoods or cultural purposes, but which are not included in the ICLT ICLT process results in re-allocation of use rights within the communal land, with negative impacts on some users Construction of infrastructure outside SLC or ICLT boundaries requires land acquisition. 	 Compensation to include loss of crops and improvements to land. Claims of CPR land users to be recognized, restitution through (1) provision of alternative access to resources; (2) share in project benefits; or (3) other compensation equivalent to the loss Compensation to be based on full replacement cost as defined in Footnote 6 of ESS5. Careful and transparent implementation of SLC process assisted by the project (e.g. facilitating NGO). Process to go ahead only with FPIC of IP community assisted by the project (e.g. facilitating NGO). Project to support coordination between MoE and MoA to resolve issues regarding allocation of parts of Protected Areas as authorized in Protected Area Law (2008) for ICLT use by IP communities. IP supported to fairly allocate land use rights through internal processes. Process only to be concluded with FPIC of IP community assisted by the project (e.g. facilitating NGO). Prepare and implement a resettlement plan under the framework of the RPF. 	
Biodiversity Conservation and Sustainable Management of Living Natural Resources (ESS6)	 Damage to sensitive locations ("hotspots") through inclusion within SLC boundaries Damage to hotspots that are outside or excluded from the SLC land, but that suffer increased exploitation as a result of easier access after the SLC is established 	 Environmental hotspots including legally protected areas identified and excluded from site boundaries Buffer zones to be established between nearby forests / hotspots and SLC sites. Awareness raising to avoid negative environmental impacts outside the site boundary 	
Indigenous Peoples (ESS7)	 LASED III only gets involved in ICLT support at Phase 2.5 and Phase 1 and 2 involving formation of a Community Committee and adoption of Community By-Laws could be subject to elite capture. Issuing of ICLT does not halt Non-indigenous in- migration and selling of land by IP IP communities lose access to lands traditionally used for livelihoods or cultural purposes, if/when such land is excluded from the ICLT as Protected Areas MoE has not included any PA land in ICLTs when ICs wanted to register such land as communal land, as opposed to CPA with limited role and access. As a result, ICs have often rejected a CPA registration. Land use planning results in restrictions on use of IP land that do not reflect the realities of present-day livelihoods systems 	 Due diligence checks to verify whether Phase 1 and 2 outcomes comply with ESS7 requirements for Meaningful Consultation in terms of the outputs of these two Phases, namely a gender and socially inclusive IPCC and Community By-Laws and Internal Rules that also address the interests of women and the poor. If not, revisit composition of IPCC and/or content of Community By-Laws and Internal Rules based on FPIC. If not, revisit composition of Community Committee and/or content of Community By-Laws based on FPIC. Awareness raising activities by project, clear demarcation of ICLT area, and prompt reporting to MLMUPC of encroachments and/or sale of ICLT land Project to support coordination between MoE and MoA to resolve issues regarding allocation of parts of Protected Areas (community and sustainable use zones) as authorized in Protected Area Law (2008) for ICLT use by IP communities. Project also to support accelerated zoning of all relevant Protected Areas to demarcate both community and sustainable use zones. Advocate the setting up of a coordination mechanism of relevant ministries to discuss the potential inclusion of parts of Protected Areas (community and sustainable use zones) into ICLT land even if Protected Areas (PA) are not fully zoned. 	

	Table 11: Risks and Mitigation Measures			
Risk Area Potential Risks		Mitigation Measures		
	 The benefits of ICLT may not be shared equitably amongst community members regarding occupation of the reserve land. Poor market access for IP Damage to indigenous knowledge, institutions or social organization if titling and livelihood activities are not prepared, designed and implemented appropriately and based on IPs own circumstances, needs and priorities. Exclusion of disadvantaged groups from consultation due to language difficulties or traditional authority structures Environmental, health and safety impacts of road projects 	 Identify and mitigate land access risks by expert intermediaries to assist IP communities to identify issues, reach consensus and ensure their views are fully considered in ICLT planning. Include appropriate rules in the Community By-Laws, and enforce these internal rules, or if such provisions are not included, follow customary practices that agree on principles of equity in the allocation of the reserve land amongst community members. Provision of ICLT access roads providing link to the wider road network Meaningful consultation (ESS7 para 23) involving community led planning, with IPs assisted to evaluate potential risks, that result in FPIC (ESS7 para 24). Ensure local translation available. Separate focus groups for women, youth, disabled. Involve indigenous peoples' organizations. Road safety measures Environmental protection measures 		
Cultural Heritage (ESS8)	 Damage to tangible cultural heritage including archaeological sites, natural features of cultural importance., other culturally important locations Tangible cultural heritage sites of IP communities are excluded from the ICLT, leading to loss of community access or control Damage to intangible cultural heritage, especially of IP communities, and particularly where Provincial officials may not be fully aware of the cultural concerns of IP communities. 	 Provincial Project Team (PPT) maintains a copy of the national heritage inventory map. The office communicates once a year with the provincial culture department to update this inventory. The commune land use maps mention cultural, historical and indigenous heritage based on updated guidelines/best local practice from the SEILA program. Identification of stakeholders and consultation. The importance of cultural and indigenous heritage is explained and consulted during community meetings to identify cultural heritage and to understand if there any concerns about negative impacts the project could have on their cultural heritage. Tangible and intangible cultural heritage sites are carefully identified prior to detailed survey (land identification). A commune screening note is prepared for each SLC and ICLT site during Year 1. A site-specific CHMP will be developed for the tangible and intangible cultural heritage once the SLC and ICLT sites are identified (see Appendix A for the Template of Cultural Heritage Management Plan in CHPF). Provisions for specific types of cultural heritages that include archaeological sites and artefacts, historical structures, natural features with cultural significance, and movable cultural heritage. Local village and indigenous community representatives take part in the actual survey work to show location of any additional sites including tombs and forest or trees of spiritual significance (land identification). SLC sites located in provinces with a rich cultural heritage require an assessment by a qualified expert. In case of chance finds, the "Chance Finds Procedure" (Appendix B of CHPF) will be applied. Prepare measures for strengthening the capacity of national (EA, IAs and relevant ministries) and subnational authorities responsible for managing cultural heritage affected by the project. 		

5 **RISK MANAGEMENT FRAMEWORK**

5.1 LASED III Overview

225. LASED III will support applications for Social Land Concessions (SLC), Indigenous Communal Land Titling (ICLT), and development support to IP communities (IPCs or ICs), using a demand driven approach. The support focuses on: (a) about 12 SLC new sites in both currently covered and new provinces for land allocation and development activities, (b) the existing 14 SLC sites currently covered by LASED II with limited activities such as small-scale irrigation and agriculture access track roads, (c) about 15 ICs, amongst those that have already submitted their applications to the MLMUPC, to carry out their respective ICLT processes and development activities, and (d) about 30 ICs – that have completed their titling processes – with development activities. It is noted that 30 existing ICLT represents the number that had received the community title as of January 2020, however, this number may well have increased by the time of project inception.

Table 12: Numbers of SLC and ICLT to be Supported				
	SLC's su	SLC's support IP's supports (ICLTs and ICs)		
			Development support to ICs	Titling and Development Support ICLTs
	Existing	New	Already titled	Targeted
	14	12	30	15
Total	26			45
Grand total		71		

Source: LASED III PAD

226. The project will adopt proportionate procedures for environmental and social risks management, and adopt measures that are in accordance with the risk mitigation hierarchy:

- (a) Anticipate and avoid risks and impacts;
- (b) minimize or reduce risks and impacts to acceptable levels when avoidance is not possible;
- (c) mitigate once risks and impacts have been minimized or reduced; and
- (d) compensate for or offset them where technically and financially feasible, when significant residual impacts remain,

227. This Chapter aims to provide guidance on process / procedure and mechanism for ES risk management at three levels: *project, site (SLC and ICLT), and sub-project levels*.

5.2 Project-Level Risk Management

228. The key risk management measure at the project level will be to improve capacities of the implementing agencies in managing risks. LASED II implementing agencies (MLMUPC, MAFF and Provincial Project Teams) have gained experience in operationalizing some of the World Bank Safeguards Policies. However, LASED III will present additional challenges, including adjusting to new ESF requirements and additional requirements resulting from the inclusion of indigenous communities.

229. The transition to the ESF framework will require implementing agencies and project stakeholders at all levels, including local authorities, contractors and suppliers; civil society organisations engaged with the project beneficiary communities and the communities themselves, to develop a broad understanding of the ESF approach including the concept of proportionality and adaptive management of E&S risks. The transition will also require development of specific capacity in relation to each ESS, primarily, but not exclusively, for: ESS2 - labor and working conditions,

particularly for workers employed by project contractors and suppliers; ESS4 - identification and management of community health and safety risks; and ESS8 – through engagement with key stakeholders to identify, assess and manage risks to tangible and intangible cultural heritage. Cultural heritage, both tangible and intangible, is often central to lifeways of indigenous peoples. It is anticipated that the provisions for labour and working conditions risk management in line with ESS2 will be unfamiliar to construction contractors working for LASED III. Therefore, in addition to imposing compliance with these standards as a contract condition in the bidding documents, contractors' management and supervisory staff will be mandated to undertake short courses on employment law, labour rights and safe working practices. The inclusion of ICLT in LASED III also requires capacity enhancement in social analysis, engagement, participatory planning and communal titling.

230. In most cases, building capacity to implement E&S risk management for LASED III will require repeat trainings, either as refresher courses, for new or additional groups of trainees,. The project will invest in developing well-designed training modules with key content, visual materials, examples and exercises in Khmer language. Training and materials would also need to be adapted (e.g. national ES advisor) to the language and culture of various indigenous groups. Target trainees will include staff of the different LASED III implementing agencies, Province, District and Commune administrations, NGO partners, contractors and suppliers and members of project beneficiary communities. It is anticipated that all project staff will receive basic training in the concepts and framework for E&S risk management in LASED III. E&S risk management advisers and focal points will receive the most intense and comprehensive training.Section 7.2 will further describe the project's capacity building plan.

5.3 Site-Level Risk Management Process

231. Environmental and social risk management measures will build on the well-established SLC spatial planning procedure and on the three-phases procedure for ICs to obtain collective land titles (ICLT sites). The site-level risk management process a multi-step participatory land use planning (PLUP) that incorporates up-to-date satellite imagery, aerial photography, soil, water and vegetation survey, technical support and analysis as well as guidance notes and site-screening form (in Appendix 3). In LASED III, screening and risk management will take into consideration risks that may arise from or in association with features outside the boundaries of the SLC or ICLT, and risks that are not primarily spatial in nature.

5.3.1 Social Land Concessions (SLC) Site

232. *For the new 12 SLC sites,* LASED III will continue to use the Ten-Step Commune SLC process with additional measures to meet ESF requirements. The time needed from the first proposal for an SLC to the official transfer of land is at least one year. Table 13.A describes the process and procedures of mainstreaming the risk mitigation measures into the project design.

Table 13.A: Site-Level Risk Management for New SLCs: SLC Process and investments			
Ten-Steps Commune SLC Process	Site-Level Risk Management Measures		
	Existing Mechanism of LASEDs ('Safeguards' policies – LASED II PIM)	Additional Measures (ESF)	
Step 1. Initiate, Review, and Screen SLC Program	Screening at the provincial level: 1.1. A Provincial "Hot Spot" map is presented which indicates the potential SLC area, surrounding areas, upstream and downstream areas and implications for environmental 'safeguards'. 1.2. Maps, GIS, Satellite Imagery are provided to commune/DWG that identify these areas for exclusion within SLC and consideration of effects on areas outside of SLC	 Project will access relevant databases of biodiversity etc. (e.g. IBAT) Screening forms and guidance notes will include provisions to identify the need for regional/cumulative assessment. Initial risk assessment carried out to identify scope of technical studies. 	

Table 13.A:	Site-Level Risk Management for New SLCs: SI	C Process and investments
	 1.3. PLUAC Identify Overlap 1.4. Technical Assistance to support PLUAC 1.5. Preliminary evaluation team (DWG, LAU, TSU) visits to further screen the SLC request. Safeguards screening forms and Guidance notes are applied. 	
Step 2. Preparation for Technical Studies	Technical studies to be prepared including: 2.1. Agro-Ecosystem Analysis (AEA) 2.2. Forest Inventory Survey 2.3. Water Resources Survey 2.4. Soil Survey 2.5 Water quality testing	 Prepare the initial draft of the location- specific ESMP and SEP for each identified site. Subject to results from screening, a regional/cumulative impact assessment may be needed
Step 3. Information, Awareness Raising, Participation and TLR Selection		
Step 4: State Land Identification, Mapping, Classification and Registration	 4.1. Prepare Maps of the proposed SLC and the surrounding areas: GIS based LUP map Environmental 'Hot Spot' Maps 4.2. Implement technical studies 4.3. Detailed survey and mapping of proposed SLC area 4.4. Based on maps and satellite imagery, using the GPS, team will identify the boundaries of and within the proposed SLC area. 4.5. Safeguards Screening Forms are updated 4.6. Provincial meeting with provincial line departments to review the maps, report and safeguards forms. 4.7. Department for Cadastre and Geography conducts an accurate survey of the external and internal boundaries 4.8. Additional review: An independent environmental audit to review the final LUP WB env specialists to conduct a due diligence through a random site check prior to finalizing of the LUP process. 4.9. Decide whether to approve or reject the proposed SLC area 4.10. Final map sent to GDCG for review and finalization 	Location-specific ESMP and SEP are updated based on environmental assessment which incorporates maps, other technical studies, results from independent environmental audit, consultation with key stakeholders, and (if applicable) regional/cumulative impact assessment.
Step 5. Participatory Land Use and Infrastructure Planning	 5.1. Conduct detailed SLC AEA which includes environmental safeguards factors and improve the quality of the safeguards screening, and carrying capacity of the SLC 5.2. Conduct Infrastructure Needs Assessment 5.3. The DWG and Commune Council review the SLC map to address: Potential impacts on present land use and surrounding areas 5.4. Safeguards screening forms are updated to ensure findings from AEA reflect issues identified in the forms. 	 Identify buffer zones between project sites and identified hotspots (in cases where the sites are adjacent to these hotspots) Update location-specific ESMP incorporating detailed AEA, environmental carrying capacity, and results from infrastructure needs assessment. Based on results of infrastructure needs assessment in each site, conduct environmental screening procedure for sub-projects. Submit the result of sub-project screening form for each site to Bank for a No Objection

Table 13.A: Site-Level Risk Management for New SLCs: SLC Process and investments			
Step 6. Review and Approval of Commune SLC Report	 6.1. Allocation for Rural Infrastructure and Services 6.2. SLC report to include safeguards issues 	 Finalize the draft of the location- specific ESMP incorporating type of rural infrastructure and services identified for each SLC and SEP for each identified site and other instruments (if required) based on the result of sub-projects screening. Submit final version of ESMP to Bank for a No Objection For SLC sites that are adjacent to biodiversity hotspots: Establish buffer zone Mechanism and support to sustainably manage local NR Awareness raising for conservation of biodiversity Included in the Commune Development Plan Planting trees in common areas. 	
Step 7. Selection of Land Recipients			
Step 8. Preparation of Full SLC Plan	 8.1. SLC Plots allocated to households 8.2. Commune level meetings to discuss: The final maps highlighting areas designated for agricultural use, conservation/community forest/biodiversity corridor, buffer zone Environmental safeguards Carrying capacity estimation 	 Prepare ES Instrument(s) for sub- projects / investments (incorporating findings from studies and assessments conducted in the previous Steps): If EIA: International environmental specialist will be engaged. If subproject ESMP/ECoP: Follow the generic formats described in Appendix 6 and Appendix 7 Approval. If EIA: TOR and Draft document will be reviewed and cleared by the Bank. If ESMP/ECoP: LASED-III's Environmental Risk Management Adviser will review and approve the document. Consultation and Disclosure If EIA: twice (draft and final stage of documents) If ESMP/ECOP: once (final stage of documents) 	
Step 9. Preparation of Transfer of Land	9.1. SLC Plot boundaries demarcated9.2. Site preparation and basic infrastructure		
Step 10. Settling-In Assistance and Long- Term Rural Development	Rural Infrastructure and Services provided	Implement ES Risk Management Instruments related to Rural Infrastructure Development (Component 2) and Agriculture and Livelihood Development (Component 3)	

233. *For the existing 14 SLC sites,* currently covered by LASED II (see Table 2A), the project will provide development support including small-scale irrigation and agriculture access track roads. The development support will be applied according to Table 13.B.

Process	Risk Management Instruments	Remarks
1. Site-level Screening	Site level screening using the same formats as for new SLC sites.	Screening results will be used to identify any key risks that have not been addressed by previous LASED activities at each site. It is not envisaged that preparation of a location-specific ESMP will be needed, but this will be verified for each site, based on the screening results, by the National E&S risk management advisers.
2. Sub-project level Screening	2.1. Screening Negative list	Excludes activities on the negative list. See Table 15 on the criteria for irrigation works
	2.2. Screening forms for subproject level (Appendix 6) to identify ES instruments based on potential impacts	(Regional) EIA / ESMP / ECoP See ES Risk Management Instruments
3. Prepare ES Instrument(s)	If EIA: International environmental specialist will be engaged to support development of (Regional) EIA.	Incorporates: • Location specific ESMP • Existing technical studies during
	If subproject ESMP/ECoP: Follow the generic formats described in Appendix 6 and Appendix 7	the 10-steps process conducted in LASED-II.
4. Approval	EIA: TOR and Draft document will be reviewed and cleared by the Bank. ESMP/ECoP: LASED-III's	
	Environmental Risk Management Adviser will review and approve the document.	
5. Consultation and Disclosure	EIA: twice (draft and final stage of documents)	See the World Bank ESF and national EIA guidelines
	EMP: once (final stage of documents)	
6. Engage contractors	Environmental management provisions are included in the Bidding documents	LASED-III Environmental Risk Management Adviser will review bidding documents.
		World Bank Environmental Specialist assigned for the project will randomly review bidding documents for quality assurance.
7. Implementation: Monitoring and Reporting	Results of Environmental monitoring will be integrated into project's regular reporting system.	ES Focal staffs, provincial ES RM specialists, and Environmental RM Adviser will regularly monitor the implementation of mitigation measures.

Table 13.B: Site-Level Risk Management for Existing SLCs: development support/investments

228. The project will also support activities to address key community health risks (safe water supplies and sanitation, solid waste management, reduction of GBV) to the same standards as will be applied at the new SLC. Site screening for E&S risks will be carried out at the existing sites using the same formats as for new sites, and the results will be used to identify any key risks that have not been addressed by previous LASED activities at the site. It is not envisaged that preparation of a location-specific ESMP will be needed, but this will be verified for each site, based on screening results, by the national E&S risk management advisers. Detailed E&S risk management measures will be developed in the context of (1) sub-projects needed to address identified E&S risks directly; and (2) E&S

screening, risk assessment and preparation of ESMP as needed for infrastructure and livelihoods subprojects. Screening and risk management measures for existing sites will include:

- (a) Ensuring that proposed activities are not on the negative list;
- (b) Other risk management measures relevant to the proposed activities;
- (c) Updated measures for ensuring safe domestic water supplies, sanitation and management of solid waste.

5.3.2 Indigenous Communal Land Titling (ICLT)

229. The general process for IPs to obtain collective land titles consists of three main phases (see Table 1B): (1) Recognition of a particular group of people as Indigenous community or IC by the Ministry of Rural Development / MRD; (2) Granting Legal Status by the Ministry of Interior / MoI; and (3) Land registration by the Ministry of Land Management, Urban Planning and Construction (MLMUPC). This process takes about 24 months to complete.

230. *For new 15 ICLT sites,* LASED III will provide assistance to the titling process and development support. ICs eligible for this support will have reached the end of Phase 2.5 (i.e. application for ICLT has been submitted to MLMUPC – see Table 1B) but have not yet received land title. Based on figures from MLMUPC current up to January 2020, it appears that up to 111 IC/ICLT communities could be in Phase 3 and so eligible for support. MLMUPC will contact all eligible ICs and invite them to request project assistance. The 15 ICLT to be supported will be selected based on criteria including interest in participating in the project and availability of land.

231. For each ICLT provisionally identified for project support, the project will conduct a due diligence check on the outcomes of the steps of the ICLT process already completed at the site. This will include, (i) the social representativeness and inclusiveness of the IPCC, (ii) whether the community by-laws accommodate the interests of the different social sub-sets of the IP community (est. at Phase 2, Step 3), and (iii) a similar assessment of the IPC internal Rules (established at Phase 2.5, Step 1). Based on the findings of the due diligence check, the project will be determined whether the IP community needs to be engaged in a consultation/FPIC process to review and adjust the by-laws and IPCC to ensure voice and equitable access to project benefits. If this determination is made, then inclusion of the ICLT in the project will be conditional on the community agreeing to the review and adjustment.

232. ES risk management will include elements similar to the ones applied under new SLC (i.e. site level screening, EA, location-specific ESMP, sub-projects level screening for environmental aspect). Based on ES screening form and on mapping, including identification of environmental hotspots, at each ICLT site, the project will identify local natural resources and significant conservation areas. Once identified, the project will facilitate discussion with mandated authority to agree on the role for IP in management of these areas. The location-specific ESMP will outline the provision of mechanism and support for these ICs to sustainably manage their locally significant conservation areas, as well as awareness raising program for conservation of biodiversity.

Table 14: Site-Level Risk Management Measures for New Indigenous Communal Land Titling		
Phase 3: Land Registration	Risk Management Measures (proposed for LASED III)	
Start of Project Engagement (can be any step in Phase 3)	Due diligence checks to verify whether Phase 1 and 2 outcomes comply with ESS7 requirements for Meaningful Consultation in terms of the outputs of these two Phases, namely a gender and socially inclusive CRC and Community By- Laws and Internal Rules that also address the interests of women and the poor. If not, revisit composition of CRC and/or content of Community By-Laws and Internal Rules based on FPIC.	
Step 1 : Measurement and data collection of land boundaries by type	 Screening process by using the following tools: Provincial 'Hot Spot' map that indicates the land boundaries, surrounding areas, upstream and downstream areas 	

of use, determination of boundaries and identification of state land	 Project to obtain relevant information from available databases of biodiversity etc. (e.g. IBAT) Based on maps, GIS, satellite imagery, project team will identify areas for consideration of effects on biodiversity Evaluation team visits to: (i) verify the land and its boundaries, (ii) identify significant conservation areas and buffer zones, and (iii) decide whether regional ESIA will be needed Department of Cadastral and Geography to conduct an accurate survey of the external and internal boundaries
Step 2: Public display of land evaluation documents	
Step 3: Reporting on the result of display of land evaluation documents	
Step 4: Meeting with the provincial state land commission to decide on the report on the result of the public display of the land evaluation and requesting the MLMUPC to issue land titles to the IP community.	
Step 5: MLMUPC issues a letter to the MoE and the MAFF asking for an examination and approval of the land concerned.	 Prepare an ES risk management instrument: Location-specific ESMP. The instrument will be prepared based on technical studies, maps and other relevant assessments (e.g. infrastructure need assessment, etc.). For environmental risk management, this ESMP will cover among others, but not limited to: Identification of local natural resources and significant conservation areas within the boundaries of ICLT and adjacent to project location. Forest or PA management plans, community forestry of community fishery agreements or other similar resource co-management arrangements. Provision of mechanism and support for ICs to sustainably manage their natural resources will be clearly described in the instrument. WB will review and clear all ES instruments. Facilitate discussion with mandated authority to agree on the role for IP in management of significant conservation areas. Establish buffer zones for those areas adjacent to biodiversity hotspots Establish mechanism and support to sustainably manage local natural resources (as described in the location-specific ESMP)
Step 6: The MLMUPC issues a letter to the Council of Ministers requesting the land reclassification to be registered as a collective land in accordance with the decision of the MoE and the MAFF.	
Step 7: Issue collective land titles to indigenous communities.	

233. After the completion of the Step 7 of Phase 3, the project will provide support on development activities through a demand driven approach. The process will be similar to the one designed for the existing 30 ICLT sites (see paragraph below). At this stage, the project will complete screening for sub-project outlined in Section 5.7.1 and Appendix 5.

234. *For existing ICLT sites (anticipated about 30 sites)*, the project will provide support on development activities, such as infrastructure and service support, through a demand driven approach, screening process and assessment. MLMUPC will inform all titled wherever they are of the possibility of assistance, of the criteria for selection to be used, and will ask for expressions of interest. Those that express interests will be screened in the same way as those who express interest in ICLT support and a

due diligence check will be performed to verify that the outcomes of the ICLT process comply with ESS7 requirements for Meaningful Consultation, namely a gender and socially inclusive CRC and Community By-Laws and Internal Rules that also address the interests of women and the poor. If this is found not to be the case, the IC community will be requested, as a condition for project support, to revise the composition of CRC and/or content of Community By-Laws and Internal Rules based on FPIC.

235. For each ICLT, a site screening and risk assessment will be carried out, before an ESMP will be prepared. Activities (e.g. hotspot mapping) completed during the ICLT process need not be repeated. The essential difference between existing and new ICLT will be that risks arising from land identification and titling will no longer apply as this stage will have been completed.

5.3.3 Environmental and Social Risks Screening

236. Site-screening to identify environmental and social risks will be conducted at the start of project activities at proposed SLC and ICLT locations. The Site-screening will be followed by risk assessment and appropriate follow up studies and actions (see Section 5.5 below). Screening may need to be updated as the process of delineating the boundaries and planning land use of SLC and ICLT progresses. Screening will use the formats in Appendix 3. Screening will evaluate, based on the best available information, the likelihood that each identified risk event will occur site and the expected severity of impacts. Screening will lead directly to identification of risk management measures, based on the mitigation hierarchy and proportionate to the nature and scale of the risks. Although Appendix 3 is essentially a checklist approach, it is essential that staff are trained to consider the possibility of other types of risk that do not appear in the checklist.

237. In all cases, site screening and subsequent risk assessment will be carried out in consultation with the community and its leaders, specifically the Commune Council and local residents for SLC and the CRC and IP community members for ICLT.

- 238. Scope of the site-screening questionnaire includes:
 - (a) Initial assessment of water resources at the site, including any potential stress on water resources that could arise from irrigation development;
 - (b) Presence of environmental hotspots (See Section 5.4 on Mapping) both inside the proposed site area and outside but potentially affected due to access from the SLC site
 - (c) Potential regional / cumulative impacts
 - (d) Known risks of ERW in the site area;
 - (e) Presence of any existing or proposed hydropower or other dams upstream of the site area;
 - (f) Mining activity in the adjacent area (legal or illegal);
 - (g) Potential for the site area to be affected by climate disasters, or negative long-term impacts of climate change;
 - (h) Risk of malaria or other vector-transmitted diseases in the area;
 - (i) Quality of surface water and groundwater, to be determined by laboratory testing and to include detection of (i) natural arsenic in groundwater; and (ii) chemical pollution, particularly in surface water, due to agricultural chemicals run-off, mining activities or other sources;
 - (j) Need for land acquisition / resettlement of existing land users in the site area;
 - (k) Adverse impacts on land users who are not the direct occupiers of land, this includes users whose livelihoods could be affected by loss of access to CPR (grazing, NTFP, fishing etc.) and also tenants and employees on land occupied by others, including illegally occupied land;
 - (1) Presence of tangible immovable cultural heritage;
 - (m) Presence of intangible cultural heritage that may be adversely affected, particularly though not exclusively in IP communities;
 - (n) Presence of IP communities who may be positively or adversely affected by the project

5.4 Site-Level Risk Management: Provincial Mapping

239. The site identification, planning and land titling processes for SLC and for ICLT make extensive use of provincial maps which are prepared using a variety of tools including existing data, local knowledge, on-ground surveys and remote sensing. The final maps are produced to a high standard as they are required to support land titling and land allocation as well as land use planning. Many environmental and social risks are associated with specific locations and so identification, assessment and avoidance or mitigation of these risks can be integrated with mapping and land use planning activities.

240. As a risk management tool, the provincial mapping is a part of the screening process during site identification stage, and a part of forming a location-specific ESMP and one of modalities of engaging stakeholders.

- 241. Maps in the SLC process include:
 - (a) Sketch map prepared by Commune Council to support SLC request
 - (b) Provincial "Hot Spots" 10 map considered at the initial screening meeting
 - (c) GIS based Commune Land Use Planning Map and Environmental Hot Spots Map
 - (d) Revised sketch map based on a detailed survey and mapping of the SLC area, showing boundaries of the site and indicating areas that are in private ownership of use, or that are "hotspots" of environmental or cultural importance. This map is displayed at the Commune Office for a minimum 30 days period.
 - (e) Accurate survey using Differential GPS (done by General Department of Cadastre and Geography of MLMUPC, resulting in Social Land Concession Map which must be displayed at the Commune Office for 30 days.
 - (f) Land Use Map prepared based on participatory land use planning and indicating the allocation of the SLC area to residential land, agriculture land and land reserved for community or public purposes, including infrastructure development. (Source: PIM of LASED II)

• Protected Areas and Wildlife Reserves	• Conservation or Watershed	Protection Forests
Community Forests	Forest Concessions	• Forest Cover Change 1993-1997
Wildlife Habitat	• Forest Disturbance (IFSR);	• Forest Cover 1976, 1997, 2002, 2006
Cultural Heritage Sites	UXO and Landmine Contamination	• Land Cover 2002
Arsenic Hazard	Rice Ecosystems	Sub-catchments
Economic Concessions	 Soils and Soil Fertility 	• Wetlands
Deep Pools and Fish Sanctuaries	RAMSAR Sites	• Existing/Proposed Hydropower Dams
Fish Habitats	Fish Migration	Slope and elevation

242. The provincial 'Hot Spots' map is a GIS map allowing display of map layers relating to sensitive environmental areas, including:

243. In addition, it includes standard map layers such as roads, rivers, streams, water bodies, and administrative boundaries. The provincial 'Hot Spots' map is used to:

- (a) Identify sensitive areas for exclusion within SLC and consideration of effects on areas outside of SLC
- (b) Map traditional land use and cultural or spiritual items or areas during the land identification and land use planning processes
- (c) Delineate historical and recent land cover within and nearby the SLC along with Forest Survey

¹⁰ A "hot spot" is an area requiring additional environmental protection, based on its environmental importance or biodiversity, cultural heritage, spiritual value or other significant reason

- (d) Provide historical evidence of occupation and land use allowing identification of new encroachment
- (e) Flags areas with UXO/ERW and landmine contamination as being dangerous
- (f) Strictly designate locations and extent of land clearance and mark areas of special interest for conservation
- 244. The participants in the screening meeting at the provincial level are:
 - (a) District Working Group (DWG)
 - (b) Commune Council
 - (c) Provincial Technical Departments: Land, Forestry, Agriculture, Water Resources, Environment, Culture and Heritage, Mines and Energy, CMAC (Cambodia Mine Action Centre)
 - (d) Other relevant stakeholders in the province.

245. During these mapping activities, locations related to the risks identified in the location-specific ESMP will be marked on the map and will be taken into account in determining the boundaries of the SLC (e.g. excluding land in private ownership, environmental hotspots, cultural heritage sites or land associated with risks such as ERW) and in determining appropriate land use so as to avoid or reduce risks.

5.5 Risk Assessment Procedure

246. For each SLC and ICLT, a risk assessment will be conducted based on outcome of the sitescreening. The risk assessment will be guided by the national E&S risk management advisers.

247. The risk assessment will be based on the findings of screening and mapping (see also Step 1 in the SLC process and equivalent activities in the ICLT). Based mainly on social and physical characteristics identified through screening and by cross-comparison with the risks identified in Section 4 and Table 11 of this ESMF, the risk management advisers will guide the provincial project team to identify risks at location level and to plan additional studies needed to further assess the risks. These studies will include the technical studies routinely carried out at Step 2 of the SLC process (AEA, forest inventory survey, water resources survey, soil survey). However, the need for additional studies may be identified. Additional studies may include, but are not limited to:

- (a) Assessment of risks from ERW;
- (b) Assessment of risks from upstream features on rivers (large dams, potential pollution sources);
- (c) Assessment of potential risks to biodiversity hotspots located outside the site area (from activities of SLC community);
- (d) Health risks associated with moving land recipients to the site;
- (e) Social risks including GBV.

248. The E&S risk management advisers will also determine whether there is a need to carry out a regional ESIA.

249. These studies will be carried out and used to update the risk assessment. The results of the screening, risk assessment and studies will then be used to prepare the location specific ESMP.

5.6 Site-Level Risk Management: The ES Instruments

5.6.1 Location-Specific ESMP

250. For all new SLC and for all ICLT (whether or not the ICLT titling has been completed) a location-specific Environmental and Social Management Plan (ESMP) will be developed based on the risk assessment. A Stakeholder Engagement Plan (SEP) will also be prepared for each of these sites. Indigenous People Plans will be prepared for ICLT and, where indicated, for SLC in line with the IPPF. In any case where involuntary resettlement cannot be avoided, a Resettlement Plan (RP) will be prepared by MEF-GDH. The Resettlement Plan will comply with the SOP-LAR and with additional measures which are detailed in the RPF.

251. In all cases, risk assessments and preparation of the ESMP and other instruments will be carried out in consultation with the community and its leaders, specifically the Commune Council and local residents for SLC and the CRC and IP community members for ICLT.

252. Location-specific ESMP and SEP will be prepared, consulted and disclosed (see Chapter 6 on public consultation and disclosure process) at an early stage of site identification based on available data and will be reviewed and updated at each step of the site mapping, land use planning and infrastructure and livelihoods planning activities, as needed. Therefore, the draft ESMP will assist in guiding the site planning process, rather than emerge at the end of the completed process.

253. The scope of this ESMP will include risk management measures based on the Mitigation Hierarchy for risks identified as moderate or severe based on the screening form or checklist in Appendix 3. The screening aims to:

- (a) Identify vulnerable or disadvantaged groups requiring special measures to ensure inclusion;
- (b) Identify types of workers at the site (direct workers, contracted workers, primary supply workers and community workers) subject to ESS2 provisions, and identify guidelines or protocols for ensuring ESS2 compliance in relation to each type;
- (c) Ensuring construction materials, particularly timber, are sourced from legal and sustainable sources;
- (d) Ensuring universal access to all project supported facilities (e.g. schools, clinics, community buildings);
- (e) Identify measures required to ensure access to natural resources;
- (f) Measures to ensure adoption of sanitation (latrine use) at the site;
- (g) Environmentally friendly management and disposal of solid waste at the site;
- (h) Awareness of safe use and disposal of agriculture chemicals;
- (i) Scope for adoption of renewable energy technologies at the site;
- (j) Measures for protection of cultural heritage, including intangible cultural heritage where relevant.
- 254. The final stage of ESMP development will include:
 - (a) Review of the screening questionnaire, maps, studies and risk assessment, and identification of any risks that might have been omitted;
 - (b) Confirmation that risks have been avoided, e.g. by exclusion of environmental hotspots, land already in private use, locations presenting community health and safety hazards (known areas of landmines) and cultural heritage sites from the site boundaries. In this case no further action is needed, but the risk remains identified in the ESMP together with the avoidance measure, for monitoring purposes;
 - (c) Improved assessment of the potential impact, and likelihood of occurrence, of remaining risks;
 - (d) Refined mitigation measures based on the mitigation hierarchy, and consistent with the ESCP.

255. For ICLT where LASED III will support the land titling process, the site screening, risk assessment and location-specific ESMP will be prepared in consultation with the IP community and its leaders and will integrate the key concerns of the IPPF. Community facilitators will assist the IP

community to understand and evaluate the ESS7 risks identified in Table 11, agree appropriate risk mitigation measures, and agree requirements for FPIC.

256. For ICLT where the project intervention begins after land titling is complete, screening, risk assessment and preparation of the ESMP will also be through consultation with the community but will be integrated with preparation of a livelihoods and infrastructure development plan for the site. The focus will be on potential impacts of the infrastructure and livelihoods investments, including adverse impacts on traditional social structures and cultural heritage.

257. For SLC where screening indicates that IP communities will be affected, an Indigenous People Plan (IPP) will be prepared as a separate document, as required by the IPPF. The IPP should be prepared in draft at the earliest stage of activity planning at the site and can be updated as needed. The project should use a skilled intermediary (expert or NGO used to work with IP communities) to assist in preparing the location-specific IPP.

5.6.2 Stakeholder Engagement Plan (SEP)

258. For new SLC, a location-specific SEP will be prepared after Step 1 of the SLC process. For new ICLT and existing ICLT where LASED III is beginning engagement, an SEP will be prepared before substantive project activities (other than initial identification and scoping) begin. The SEP will guide stakeholder engagement through the site planning and land titling process as well as through implementation of sub-projects. Minimum requirements for a location-specific SEP are described in the project SEP and will include:

- (a) Identification all project-affected groups;
- (b) Identification of other stakeholders (e.g. NGOs supporting the community);
- (c) Plan for dissemination of information at each stage of the process;
- (d) Plan for consultation with stakeholders on identification and management of E&S risks;
- (e) Plan for stakeholder consultations and active participation by stakeholders in project activity planning;
- (f) Special provisions to ensure and verify free, prior, informed consent of IPs,
- (g) Grievance procedures.

259. The location-specific SEP will be submitted to World Bank for No Objection after initial preparation (i.e. after Step 1 of the SEP process, or equivalent) and will be re-submitted for No Objection in case of subsequent changes

5.6.3 Resettlement Plans (RP)

260. As described in the Resettlement Policy Framework (RPF), LASED III will avoid involuntary resettlement through screening and exclusion of land found to be in legitimate private possession and, where necessary and appropriate, through voluntary arrangements including land swaps with SLC land and voluntary land donations by land users who will be net beneficiaries of the project. This is the same approach as in LASED and LASED II in which Resettlement Plans (RP) have not been required. The need for involuntary resettlement could arise in the following cases:

- (a) Need to acquire parcels of land in private possession, without which the SLC or ICLT as a whole will not be viable (e.g. only feasible route for an access road cross private land);
- (b) Rehabilitation and improvement of the site access road (SLC or ICLT) requires land acquisition, beyond minor amounts that can be resolved through voluntary agreements.

261. In cases where land acquisition is found necessary, the RP will be prepared and implemented by MEF-GDH following the procedures described in the RPF.

5.6.4 Indigenous Peoples Plans (IPP)

262. For ICLT where the project supports land titling (so the ESMF with integrated IPP is prepared at an early stage of the titling process), the ESMF and in particular the measures relating to ESS7 risks will be reviewed and validated with the IP community after land use planning and identification of infrastructure and livelihoods sub-projects is complete.

263. For SLC with affected IP communities (so requiring a stand-alone IPP) the IPP will be reviewed, updated and validated in consultation with the IP community after land use planning and identification of infrastructure and livelihoods sub-projects is complete

5.6.5 Participatory Planning

264. Step 5 of the SLC process is Participatory Land Use and Infrastructure Planning and includes a number of sub-activities including Agro-Ecosystems Analysis, Infrastructure Needs Assessment and a participatory planning workshop with project beneficiaries and other stakeholders. Requirements for this workshop include (1) workshop well publicized and local residents, civil society organizations etc. able to participate; (2) Draft SLC Report is presented, discussed and agreed with the participants; (3) meeting is recorded in audio or video.

265. The location-specific ESMP will be considered during each sub-activity of participatory planning, so that the risks identified can be avoided, reduced or mitigated in the land use and infrastructure development plans (this is a change from the LASED II process where safeguards are considered only at a late stage of land use planning). The findings of this assessment will form the basis for risk management at the sub-project level.

5.7 Sub-projects Level Risk Management

5.7.1 Sub-Project Types, Screening and Negative List

266. LASED III may support a range of sub-project types at SLC and ICLT including (1) rural infrastructure; (2) agricultural livelihoods sub-projects; (3) community development sub-projects needed to address specific E&S risks, primarily related to community health and safety (hygiene, GBV, solid waste management).

267. All sub-projects will be subject to an environmental and social risk screening (See Appendix 4). The screening procedure consist of a two-stage process: (a) screening out of proposed sub-projects that fall under the project's negative list, and (b) screening potential environmental and social impacts and risks using a subproject screening format in Appendix 4. The outcome of this screening process will determine eligible sub-projects and the appropriate environmental and social risk management instruments to be used for each sub-project. Screening will take into account of any additional risks identified in the location-specific ESMP and potentially relevant to the sub-project type; and associated activities and ancillary facilities as well as cumulative impacts. The screening results will be submitted to the Bank for No Objection prior to commencement of works.

268. Initial screening will include a determination of whether the sub-project includes activities or outputs on the project Negative List. The project will not finance sub-projects with the following characters:

Table 15: Negative List	
Negative List Additional Negative List	
 Any expenditure with a military or paramilitary purpose; Civil Works for Government administration or religious purposes; 	 National and Provincial Highways Large or high-risk dams (as defined by ESS3 Annex 1) Single purpose religious and security buildings

 Manufacture or use of environmentally hazardous goods, arms or drugs; Manufacture or use of dynamite; Financing of government salaries; Production, processing, handling, storage or sale of tobacco or products containing tobacco and beverage; Activities within a nature reserve or any other area designated for the protection of biodiversity, except with prior approval; Mining or excavation of live coral; Water resources development on rivers which flow out into another country; Alterations to river courses; Provision of goods works or services by any contractor or supplier who has been declared ineligible by World Bank. 	 Agriculture techniques requiring intensive use of hazardous chemicals Buildings or other structures using asbestos as construction material Buildings or other structures using timber from illegal logging
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Source: adapted from PIM of LASED II

269. Screening based on the potential environmental and social impacts and risks using a standard format. The second stage of the screening process screens for activities and investments that will determine type of ES instruments to be prepared, consulted and disclosed by the project. These screening formats screen for the common types of risk associated with infrastructure and agriculture livelihoods sub-projects. However, it may be necessary to screen for additional risks identified in the location-specific ESMP and / or during participatory planning. The main types of risk to be considered include:

- (a) Labor and working conditions of staff of contractors and suppliers, and of community workers, including ensuring safe working condition and avoidance of hazards from ERW, where these are identified as a risk;
- (b) Potential negative environmental impacts of the sub-project, including disposal of nonbiodegradable solid waste generated by agriculture sub-projects (poly-bags etc.);
- (c) Potential community health and safety impacts. These include:
- (d) For road projects, road traffic safety;
- (e) For agriculture sub-projects, safe use and disposal of agriculture chemicals, where relevant;
- (f) For construction contracts, safety hazards to the public during construction;
- (g) Impacts of climate change on the sub-project;
- (h) Physical or economic displacement of land users;
- (i) Adverse impacts on access to land and natural resources;
- (j) Impacts on tangible / immovable Cultural Heritage;
- (k) Risks and impacts on, and additional measures to protect and provide culturally appropriate benefits to IPs.

270. *Approval of screening.* E&S Risk Management Focal Persons will conduct the screening process with support from the E&S Risk Management Adviser at the provincial level. Based on the screening, sub-project specific risks will be listed in the left column of a simple sub-project ESMP matrix (Appendix 1), together with an estimation of potential impacts and probability. At this stage, further studies, to be carried out as part of sub-project feasibility study and design, will be listed in the column headed "mitigation measures" These studies will be carried out during the sub-project preparation, primarily by the design engineer in consultation with the local community, leading to the ESMP matrix being updated with concrete risk avoidance or mitigation measures (or risks being eliminated based on the results of studies). The sub-project ESMP will be reviewed and validated by the E&S risk management advisers at the national level.

5.7.2 Risk Management Instruments for Infrastructure Sub-Projects

271. The following instruments and procedures will be used to manage E&S risks of infrastructure sub-projects:

- (1) A Sub-Project Environmental and Social Management Plan (ESMP);
- (m) A standard Environmental, Social, Health and Safety Specification (ESHSS) to be included in all works contract documents;
- (n) If needed, a sub-project Resettlement Plan, or Voluntary Land Acquisition Plan.

272. These operational risk management instruments will be prepared during project implementation (see below) but will comply with and implement the Environmental Code of Practice (ECOP) attached as Appendix 6.

5.7.3 Environmental, Social, Health and Safety Specification

273. Environmental, Social, Health and Safety Specifications (EHSS) will be developed and integrated in contract documentation for all contracts for works and services. Relevant provisions of the ECOP will be included. It is envisaged that three versions of this ESHSS specification will be required:

- (a) Full version for works contracts procured nationally (these will be larger and more complex contracts);
- (b) Proportionate version for works contracts procured by Commune Councils (these will be smaller and less complex contracts;
- (c) Version for service contractors.
- 274. The scope of the ESHSS will include contractors' obligations in respect of:
 - (a) Terms and conditions of employment;
 - (b) Non-discrimination and equal opportunities;
 - (c) Worker's rights to organize;
 - (d) Prevention of forced labor and restrictions on child labor;
 - (e) Certifying supplies procured from suppliers compliant with Cambodian labor law on forced labor and child labor;
 - (f) Workers' access to grievance mechanism;
 - (g) Safe working procedures on construction sites, including provision of safety clothing and equipment;
 - (h) Standards for clean, safe, hygienic accommodation at site camps;
 - (i) Reporting of incidents;
 - (j) Workers' remedies (compulsory insurance);
 - (k) Prevention of air pollution, water pollution, noise pollution during site works;
 - (1) Management of hazardous and non-hazardous wastes;
 - (m) Prevention of hazards to public from construction works;
 - (n) ERW safety procedures;
 - (o) Cultural Heritage Chance Finds procedures

275. The requirements of the ESHSS in most respects will match the requirements of Cambodian law, but considerably exceed the standards applied in practice in the Cambodian construction industry, particularly by local level contractors. To address this, and to avoid the undesirable outcome that local contractors are excluded as a result of the inexperience with these requirements, the project will prepare a simple illustrated booklet explaining the requirements of the ESHSS. This booklet will be used as a basis for training of contractors and contractors' site supervisors. Contractors will be required to show that site supervisors have completed this training or have equivalent training or experience in complying with the requirements. The booklet will also be distributed to raise awareness of contracted workers' rights under ESS2.

5.7.4 Sub-Project Environmental and Social Management Plan for Infrastructure

276. All infrastructure sub-projects will have an Environmental and Social Management Plan (ESMP) using a simple matrix format that can be understood and used by contractors and local officials. A general format is provided as Appendix 5. During project inception, this format will be developed further to include standard provisions relevant to different infrastructure types (roads, irrigation etc.) as well as space to add sub-project specific provisions

277. Standard sub-project ESMP provisions will be drawn from the ECOP and include, inter alia, (1) management of noise, dust and other pollution from works; (2) provisions for temporary land use needed by the contractor; (3) provisions for safe management of temporary drainage works; (4) provisions for road safety during construction; and (5) provisions for ensuring safety of the public from construction hazards (operating machinery etc.).

278. The sub-project ESMP will be included in contract documentation. The supervising engineer will be required to monitor and report on implementation of the ESMP.

Additional E&S Risk Management Provisions by Sub-Project Type

279. For all infrastructure sub-projects, the design engineer will be responsible to ensure that design reflects relevant provisions of the ECOP.

280. Design of site access roads will require a Road Safety Plan. The Road Safety Plan will be prepared by the design engineer and will demonstrate (1) that potential road safety hazards have been considered; and (2) that relevant measures to minimize road safety hazards have been incorporated in design. All road designs must demonstrate application of relevant climate proofing standards.

281. For all irrigation works, the design engineer will be required to demonstrate (1) adequate water availability (based on detailed cropping models and water balance calculations) and that additional withdrawals will not have adverse impacts on existing users or on ecosystem services; (2) that climate change impacts have been considered in design; and (3) for works including dams, that (1) the dam does not dam fall within the applicability criteria of ESS4 Annex 1 on dam safety review.

5.7.5 Land Acquisition for Sub-Projects

282. LASED III will seek to avoid or minimize land acquisition in all cases. In the case that the initial SLC or ICLT screening identifies that land acquisition will be needed, a Resettlement Plan will be prepared and implemented as described in the RPF. This process will normally ensure that sufficient land is available for sub-projects, including site access roads, without further land acquisition.

283. In exceptional cases (e.g. a need to change the proposed route of the site access road) it may be necessary to conduct additional land acquisition for a specific sub-project. Where required by the RPF, a Resettlement Plan will be prepared and implemented for the sub-project.

284. In some cases, the project may seek voluntary contributions of minor amounts of land for infrastructure sub-projects from the users of land adjacent to the proposed infrastructure. In most cases, these land users will benefit from the sub-project and / or will be beneficiaries of the project overall. In case that voluntary land acquisition is needed, this process, including the informed consent of the land users, will be documented in a Voluntary Land Contribution Plan. A format and process for this is included in the Commune/Sangkat Fund Project Implementation Manual (C/SF PIM).

5.7.6 Risk Management Instruments for Agriculture Sub-Projects

285. Agriculture sub-projects will consist of farmer training, demonstration, supply of planting materials, post-harvest and marketing support, and support to formation of farmer groups and cooperatives.

286. The project will manage E&S risks of agriculture sub-projects within the framework of the Cambodia Good Agricultural Practice (CamGAP) policy. Within this framework, the project will ensure that:

- (a) Sub-projects are screened to ensure they will not result in environmental damage;
- (b) Sub-projects are screened to ensure that they will not result in unsustainable water demand (even if the sub-project does not directly support irrigation works);
- (c) Sub-projects are screened to ensure they will not result in excessive or unsafe use of agriculture chemicals;
- (d) Notwithstanding (c) above, all farmer trainings include instruction on safe handling, use and disposal of agriculture chemicals;
- (e) Plastic and other non-biodegradable wastes produced from the farming activities promoted are appropriately disposed of;
- (f) Sub-projects do not result in children working on family farms in contravention of ESS2;
- (g) Relevant provisions of the ECOP are complied with.

287. All agriculture sub-projects will be screened for these risks. For most agriculture sub-projects, the standard risk management framework based on CamGAP will be sufficient. In cases where additional risks, not addressed by this framework, are identified, a sub-project ESMP will be prepared.

288. Agriculture sub-projects may be implemented by PDAFF, by partner NGOs or by private sector actors. In all cases, the implementer will be responsible to ensure implementation of the risk management measures including reporting on correct implementation of the ESMP where applicable.

5.7.7 Risk Management Instruments for Other Sub-Projects

289. Sub-project types other than infrastructure and agriculture are likely to involve community development activities and / or training and awareness raising, and are not expected to result in E&S risks.

290. Solid waste management sub-projects will be developed specifically to address an identified E&S risk.

291. Sub-projects involving community work will be subject to a Community Labor Management Procedure, to be prepared in the project inception phase (see LWCP).

292. All sub-projects will be screened and where necessary, an ESMP will be prepared.

5.7.8 Summary of Sub-Project E&S Risk Management Instruments by Project Type

293. This ESMF has highlighted potential environmental impacts of each type of sub-projects to be funded by LASED III (see Chapter 4). Table 16 below summarizes instruments for the mitigation of potential negative environmental impacts as well as management of identified risks; based on sub-project typologies.

Table 16: Instruments for the Mitigation of Potential Impacts at Subproject Level				
Sub-project types	Potential Impacts and Risks	Mitigation and risk management	Instruments	ESS
	1. Construction- related impacts such	Environmental risk management instruments that are integrated	Environmental, Social, Health and Safety	ESS1 ESS2

	Table 16: Instruments for the Mitigation of Potential Impacts at Subproject Level			
Sub-project types	Potential Impacts and Risks	Mitigation and risk management	Instruments	ESS
Rural Infrastructure Development	as noise, dust, sedimentation, erosion, waste disposal, management of storm water, community and workers health and safety	sedimentation, erosion, waste disposal, management of storm water, community and workers health andprocurement documents in all works contract documents Sub-project specific measures in a sub-pro ESMP Site risk assessments		ESS3 ESS4
	2. Health and safety of project personnel travelling to remote sites	Adopt and implement OHS that is integrated into procurement documents	OHSP	ESS1 ESS2
	3. Depletion of groundwater surface water sources by inefficient or unsustainable exploitation	Water resource assessment for each project location, no irrigation development without confirming that will not have negative impacts on existing users and / or ecosystem services	Location-specific ESMP (prepared at the site level risk management)	ESS1 ESS3 ESS10
	 4. Health impacts of non-drinking water standard water supplies due to (1) natural arsenic; (2) chemical pollution; (3) biological contamination 	All water sources to be laboratory tested. In case of arsenic or chemical contamination, MRD ¹¹ protocols to be applied and alternative drinking water sources provided In case of biological contamination, wells to be disinfected and re-tested	Location specific ESMP (surface water sources to be tested during site screening) Sub-project ESMP	ESS4
	4. The cultural spaces may include forests, spiritual forest-land, residential and agricultural lands	Mapping of known cultural heritage, Implementation of the Forest Law in regard to the recognition of the traditional use and practice of the local communities as protected forest serving cultural purposes (religious and / or spirit forest)	Location-specific ESMP (prepared at the site level risk management)	ESS1 ESS8 ESS10
	5. Flood damage from failure of project supported dams	Ensure safe design	All dams subject to design safety check. Large / higher risk dams as defined by ESS4 are on negative list.	ESS1 ESS4 ESS10

¹¹ Aligning with MRD's national standards, the following measures would be applied:

new water supply sub-project conduct water testing including Arsenic and compare against National standards;

communicate water quality testing results to the villagers and inform them whether the water is suitable for drinking;
 provide advice on basic treatment options in case parameter/s exceed standards limit; Some village choose to implement Drinking water treatment sub-project in the sub-sequent cycle.

⁻ In case Arsenic is higher than the standards limit, treatment to remove Arsenic is not recommended due to high installation costs, and high maintenance requirements as well as lack of capacity to operate and maintain the system. Instead, substitution of alternative low-arsenic sources of drinking water such as rainwater or spring water, surface water where available and appropriate would be more suitable solution. Alternative water supplies such as surface water should be tested to ensure compliance with drinking water standards

	Table 16: Instruments for the Mitigation of Potential Impacts at Subproject Level			
Sub-project types	Potential Impacts and Risks	Mitigation and risk management	Instruments	ESS
Agriculture & Livelihood Development	1. Impact ¹² on health and safety of project-affected communities, particularly in regard to the safe use and handling of pesticides and chemical fertilizers	Implementation of ES Instruments, MAFF's CamGAP Guideline, Awareness raising, Farmers to receive training on safe use and handling of agriculture chemicals.	ECOP provisions (if not already covered by CamGAP) Where service providers are contracted for livelihood projects, compliance with ECOP is a contract condition.	ESS1 ESS3 ESS4 ESS10
	2. Water contamination from inappropriate use of agriculture chemicals	Awareness raising	Sub-Project ESMP prepared where needed Farmers encouraged to follow standards set by CamGAP / ECOP (whichever is stricter)	ESS1 ESS3 ESS10
	3. Environmental pollution from non- biodegradable solid waste from agriculture activities	Awareness raising, SWM measures	Sub-project ESMP prepared where needed Farmers encouraged to follow standards set by CamGAP / ECOP (whichever is stricter)	ESS1 ESS3 ESS10

5.8 Monitoring of Environmental and Social Risk Management

294. LASED III will systematically monitor and report on implementation of environmental and social risk management procedures, through verification of implementation of all risk management plans, recording key data in the project MIS, mandatory inclusion of E&S risk management sections in all progress reports, and an E&S Audit to be conducted by independent experts prior to the project Mid-Term Review. The E&S Audit team will include expertise in environmental risk management, social risk management and in IP issues.

295. Site-level risk management plans including ESMP, SEP, RP, and IPP as relevant, will be reviewed annually and implementation status of each risk mitigation measure will be recorded. See also implementation and monitoring arrangements in Chapter 8.

296. The implementation of sub-project level ES risk management instruments will be monitored and recorded. A simple reporting outline or format will be developed by the project and will be used to record the outcomes of E&S risk management. At a minimum, the reporting outline will include;

- (a) E&S risk management procedures, and risk management plans prepared;
- (b) Actual risk events occurring;
- (c) Site observations on the quality and outcomes of E&S risk management, based on site visits by the E&S Risk Management advisers;
- (d) Capacity development for E&S risk management;
- (e) Lessons learned and recommendations.

¹² The project will not finance these hazardous materials; however, transformation of land ownership may potentially introduce new famers to the materials.

297. Fulfilment of all contractor's obligations for E&S risk management will be a condition for release of final payment to the contractor.

298. Site and sub-project risk management plans annotated with implementation status, and sub-project final E&S risk management reports, will be kept on file for inspection as needed.

299. The LASED III MIS will record, at a minimum, for site and sub-project level:

- (a) Which E&S risk management procedures are relevant;
- (b) Dates of approval of all required E&S risk management plans.

300. All LASED III periodic physical progress reports will include a section on implementation of E&S risk management. These reports are to be drafted by implementing agencies with support of the E&S Risk Management Advisers at Provincial and National level and to be supported by relevant data.

301. Before the LASED III MTR, the project will engage a suitably qualified independent consultant or consulting firm (i.e. with no other contractual relationship to the project) to review the consistency and quality of implementation of E&S risk management in the project, and compliance with the requirements of ESS1-ESS10. The findings of the Audit will be taken into account in the MTR and modifications to project procedures will be adopted as necessary.

6 CONSULTATION AND INFORMATION DISCLOSURE

302. A Stakeholder Engagement Plan (SEP) has been prepared to comply with the consultation and information disclosure requirements of ESS1-ESS8 and with the requirements of ESS10. The SEP describes the methods of engagement with stakeholders during project preparation and the methods to be used throughout the project cycle, distinguishing between project-affected parties (PAP) and other interested parties. The SEP describes the range of information to be communicated to stakeholders and the methods to be used for stakeholder consultation at each stage. The SEP includes the project Grievance Redress Mechanism (GRM). The SEP presents a template for a simple and concise Stakeholder Engagement Plan (SEP) to be prepared for each new SLC and ICLT site, detailing the activities and timing for information disclosure and stakeholder consultation at the site.

303. The SEP defines principles for identification of stakeholders (project affected parties and other interested parties) and general requirements for information disclosure, meaningful consultation in planning of activities at any SLC or ICLT, engagement during implementation and external reporting and the project grievance mechanism (see below).

304. For any new SLC or ICLT, consultation and information disclosure requirements described in the SEF will reflect the project-level requirements of ESS10. Therefore, a location-specific Stakeholder Engagement Plan (SEP) will be prepared and will be disclosed before substantial activities begin on the site. Disclosure will be by placing the SEP in Khmer language on the project website and through presentation in a stakeholder consultative workshop for each site. Additional disclosure provisions may be required for ICLT where there may be a low level of literacy and / or Khmer language skills.

305. The contents of the location-specific SEP will be aligned with the principles and procedures set out in the project SEP and will include the following content:

- (a) Identification of stakeholders, including their relationship to the project and any special consultation needs or constraints for each group;
- (b) Steps of stakeholder engagement in planning and implementation of the SLC or ICLT;
- (c) Stakeholder engagement for assessing Environmental and Social Risks
- (d) Steps of stakeholder engagement in design of sub-projects

- (e) Strategy to ensure full representation of the views and needs of disadvantaged and vulnerable groups including Indigenous Communities as well as elderly, poor, disabled, women and youth.
- (f) Strategy for Information Disclosure

306. Location-specific E&S risk management instruments (ESMP, SEP, RP, IPP, as required) will be disclosed [in draft prior to approval / after No Objection from World Bank], through the same means as the location-specific SEP.

7 IMPLEMENTATION ARRANGEMENTS

7.1 Roles and Responsibilities

307. MLMUPC as Executing Agency of LASED III will oversee and report on implementation of the ESMF, ESCP and other instruments. However, implementation of E&S risk management procedures is the responsibility of all LASED III implementing agencies and their staff and of NGO partners. To reflect this, it is expected that all project staff, including those of NGO partners, will be aware of the essential principles and instruments for environmental and social risk management within LASED. This responsibility also extends to managers and supervisors of project contractors and suppliers where appropriate.

308. Each key LASED implementing agency (MLMUPC, MAFF and Provincial Administrations) will have two Government officials nominated as focal persons for E&S risk management (one specialized on environment and one on social aspects). Each NGO partner will also be expected to nominate one focal person for E&S risk management. These officials will be expected to attend all relevant trainings and events. The key responsibilities of these focal points include conducting environmental and social screening and preparation of ESMP and other instruments at the site level; screening of sub-projects and identifying where E&S risk management measures procedures are required, preparation of sub-project ESMP and other instruments as needed and supporting the monitoring and reporting of the E&S Risk Management Advisers.

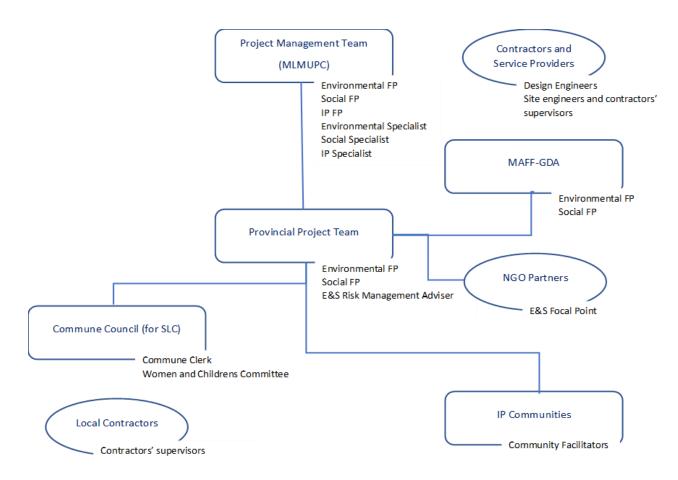


Figure 3: Key Personnel for E&S Risk Management

309. There will be one full-time LASED III Social Risk Management Adviser, one Environmental Risk Management Adviser and one Indigenous People's Issues Adviser based in MLMUPC. There will be a minimum of five full-time E&S Risk Management Advisers who will advise the Provincial Project Teams in provinces where new SLC sites or ICLT are under preparation: in some cases, one adviser may be required to support more than one Province. attached to each Provincial Administration the TORs of these Advisers are attached as Appendix 10. The primary roles of the E&S Risk Management Advisers are (1) to build capacity for implementation of the ESMF, ESCP and other safeguards instruments; (2) to assist in preparing location specific SEP, ESMP, IPP and other instruments as needed; (3) to provide advice as needed in relation to any environmental or social risks identified during implementation; and (4) to monitor and report on implementation of the safeguards procedures, including at sub-project level.

310. The project will engage specialist expertise for E&S issues that are beyond the technical capacity of the E&S advisers, including verifying the safety of dams, and other cases which may be based on advice of World Bank safeguards specialists.

311. The E&S Audit to be conducted before MTR will be procured through MLMUPC.

7.2 Capacity Building Plan

7.2.1 Summary Capacity Assessment

312. LASED III implementing agencies at all levels have developed experience and capabilities in implementing ESS procedures within the framework of the LASED II project. However, LASED III will present additional challenges, including (i) adjusting to the requirements of the ESF; (ii) additional requirements resulting from intensive engagement with IP communities.

- 313. Weaknesses noted in implementation of the E&S safeguards in LASED II include:
 - (a) While required procedures are implemented to acceptable standards; project staff and implementing agencies do not pro-actively analyses potential risks beyond those specifically addressed by the procedures. Safeguards are largely seen as an aspect of spatial planning (this may be partly a result of combining the tasks of GIS and Safeguards Adviser), and non-spatial issues (such as poor solid waste management, or misuse of agricultural chemicals) are not identified and addressed;
 - (b) Project reporting indicates that the complaints handling mechanism (CHM is liable to become overwhelmed by the potential for large numbers of complaints to be generated during land titling procedures);
 - (c) There is not adequate monitoring and reporting of E&S issues.

314. The transition to the ESF framework will require that project staff and implementing agencies at all levels, including local authorities, and contractors and suppliers develop a broad understanding of the ESF approach including the concept of proportionality and adaptive management of E&S risks. It will also require development of specific capacity in relation to each ESS, primarily, but not exclusively (i) ESS2 - labor and working conditions, particularly for workers employed by project contractors and suppliers; (ii) ESS-4 identification and management of community health and safety risks; and ESS8 – in particular, identification and management of risks to intangible community heritage, which are likely to be of especial importance in IP communities.

315. Although there is an existing IPPF dating from preparation of LASED (2007) its provisions have never been activated as no SLC to date has been implemented in an area with a significant presence of IP. Project staff perceptions of the priorities and needs of IP communities may not match the reality in all respects. This is an area in which well-designed capacity development at the start of the project is the key to avoiding potential problems later.

7.2.2 Training Strategy and Key Trainings

316. In most cases, trainings required to build capacity to implement E&S risk management for LASED III will require repeat trainings, either as refresher courses, for new or additional groups of trainees, or for some purposes outside the context of the project. Therefore, it will be worthwhile to invest in developing well-designed training modules in Khmer language, with key content, visual materials, examples and exercises. These materials may be developed by project staff or by subject specialists contracted as necessary. All E&S risk management training materials will be shared as draft for comment with World Bank specialists.

317. Target trainees will include staff of the different LASED III implementing agencies, Province, District and Commune administrations, NGO partners, contractors and suppliers and members of project beneficiary communities. It is anticipated that all project staff will receive basic training in the concepts and framework for E&S risk management in LASED III. E&S risk management advisers and focal points will receive the most intense and comprehensive training. In addition to content training, these E&S risk management staff will receive "Training of Trainers" including training methodology as well as content, so that they are able to conduct lower level trainings on a cascade basis.

318. It is anticipated that the provisions for labor and working conditions risk management in line with ESS2 will be unfamiliar to construction contractors working for LASED III. Therefore, in addition to imposing compliance with these standards as a contract condition, it is proposed that works contractors' management and supervisory staff will be required to undertake short courses on employment law, labor rights and safe working practices.

319. The key E&S risk management training modules to be developed and delivered early in LASED III implementation include:

- (a) General training course / lesson for all project staff and partners on application of the E&S risk management instruments within LASED III;
- (b) Detailed training course for E&S risk management advisers and focal points to develop a thorough understanding of the ESF framework, stakeholder engagement proactive identification of risk, the proportionality principle, preparation of risk management plans (EMP/SRMP, RAP etc.) and E&S monitoring and reporting;
- (c) Stakeholder engagement, including requirement for stakeholder engagement with IP communities;
- (d) Operation of the Grievance Redress Mechanism;
- (e) E&S risk management provisions at sub-project level, including ensuring compliance with ESS in implementation of infrastructure and livelihoods projects;
- (f) Specific training course on compliance with labor and working conditions s (perhaps including other ESS e.g. community health and safety, environmental management) for supervisory staff of construction contractors;
- (g) Training course on improved environmental management of SLC sites including sanitation strategies and solid waste disposal;
- (h) Training course on safe use and disposal of agricultural chemicals and non-bio-degradable solid waste, to be integrated into agriculture training courses;
- (i) Integrating road safety in rural road design, with a sub-module on road safety to be used for community awareness and road safety training.

No.	Training Outcome	Trainees	Trainer/Resources
1	All project implementing agency staff are familiar with the basic principles and tools of environmental and social risk management in LASED III	Staff of MLMUPC, MAFF, Provincial Administration / PLUAC, DWG, CC, NGO partners	ESS specialist with project advisers
2	E&S risk management advisers, focal points and other key staff are able to proactively identify E&S risks and develop risk management measures, lead or advise on implementation of E&S risk management measures, deliver trainings on ESS and conduct E&S monitoring and reporting	E&S risk management advisers, safeguards focal points of implementing agencies, nominated staff of NGO partners etc.	ESS specialist with project advisers
3	Provincial project staff understand tools and methods for stakeholder engagement, including engagement with IP communities	E&S risk management advisers, focal points, Provincial project team	Stakeholder engagement specialist with IP expertise
4	Grievance Redress Mechanism well established and operating effectively, efficiently and transparently	Officials responsible for handling and responding to grievances	ESS specialist
5	ESS are integrated in the design and implementation on infrastructure and livelihoods sub-projects	Infrastructure specialists, staff of Provincial technical departments etc.	ESS specialist
6	Contractors and suppliers to LASED are familiar with and able to fulfil the requirements for labor and working conditions, including workers' rights and access to grievance mechanisms, in accordance with ESS2	Supervisory staff of contractors and suppliers to the project.	Simple booklet explaining requirements
7	Improved environmental management and sanitation at SLC sites through broader understanding of environmental management planning	PLUAC, DWG and others involved in preparation of EMP/SRMP	E&S risk management advisers to train contractors
8	Farmers on LASED sites (including those who are encouraged to adopt organic production, IPM etc.) have a basic understanding of safe use and disposal of agriculture chemicals and also environmentally friendly disposal of solid waste	Farmer-trainees in livelihoods trainings	Trainings to be developed and delivered by MAFF

9	Access roads designed under LASED III incorporate improved road safety features, and road construction is accompanied by road safety awareness campaigns.	Infrastructure staff Local communities.	Road Safety Specialist

7.3 Budget to Implement the ESMF

320. Many of the costs of implementing the Environmental and Social Management Framework (ESMF) for LASED III will be integrated in project budget lines, for example for planning of SLC and ICLT and for implementation of sub-projects. Equally, the benefits of the ESMF will not appear in isolation but in enhanced outcomes and in reduced incidence or severity of negative impacts.

321. The specific identifiable costs of implementing the ESMF will include:

- (a) Salaries and non-salary costs of safeguards advisers and focal points;
- (b) Costs of E&S Risk Management-related trainings,
- (c) Costs of preparing site-level EMP/SRMP, RAP, IPP and other risk management instruments as needed;
- (d) Costs of preparing sub-project EMSP, LMP, RAP etc., as needed;
- (e) Costs of the ESS Audit to be conducted before MTR.

322. The budget for implementing the ESMF does not include the costs of preparing and implementing Resettlement Plans nor the cost of compensation for involuntary resettlement. These costs will be financed separately by MEF as specified in the SOP-LAR (see RPF for details).

	Table 18: Estimated ESMF Implementation Costs				
No.	ESMF Activities	Estimated cost USD	Remarks		
1	Costs of E&S Risk Management advisers and focal points	\$500,000	3 national advisers		
2	Cost of preparing training modules and delivering E&S Risk Management trainings in project start-up period	\$200,000	About 10 modules, about 100 trainee-day per module		
3	Cost of refresher trainings, workshop events, beneficiary trainings on E&S Risk Management issues etc.	\$100,000			
4	Costs of preparing site-level EMP/SRMP, RAP, IPP etc.	\$57,000	57 new sites		
5	Costs of preparing sub-project ESMP and other E&S Risk Management instruments as needed	\$114,000	Est. 10 s-p per site		
6	Costs of E&S Risk Management trainings to project beneficiaries	\$57,000			
7	Cost of the ESS Audit	\$50,000	2 intl. and 2 nat. consultant x 25 wd		
	Total estimated budget	\$1,078,000			

323. Table 18 presents an indicative budget for these costs.

8 GRIEVANCE REDRESS MECHANISM

8.1 Project Grievance Redress Mechanism

324. The LASED III Grievance Redress Mechanism (LASED III GRM) is defined and described in the LASED III Stakeholder Engagement Plan (SEP). The LASED III GRM will be accessible to all project affected persons and other stakeholders for grievances related to any aspect of LASED III including matters covered by ESS1-ESS10. However, the project will establish a separate grievance redress mechanism for project workers, as required by ESS2.

325. The LASED III GRM will receive, record and review grievances on any matter related to the project and its impacts, in fair and transparent manner, and will provide appropriate redress. The GRM will maintain confidentiality and will accept grievances submitted anonymously. All stakeholders will be fully informed of the GRM including how to submit grievances, the procedure for handling grievances and the time within which a decision will be reached. The LASED III GRM will be linked to existing grievance mechanisms (Ombudsman system and Cadastral Commission). Use of the LASED III GRM will not affect the complainant's access to judicial or alternative administrative remedies.

326. The key principles of (1) openness and transparency; (2) fairness; (3) accessibility; (4) responsiveness and effectiveness; and (5) anonymity and confidentiality underlie the design of the GRM.

327. MLMUPC as EA will have overall responsibility for the LASED III GRM. This will include (1) maintaining a consolidated register of grievances submitted and outcomes; (2) building capacity and providing backstopping support and advice to all implementing agencies and partners; and (3) directly intervening to support resolution of a grievance where this becomes necessary.

328. Within 3 months after effectiveness, the project will establish a Grievance Redress Committee (GRM) at national level, chaired by the Project Director and including GRM Focal Points from each national implementing agency. The GRM will include non-government membership. The Project will establish a Provincial Grievance Redress Committee (PGRC) in each province with SLC or ICLT. The PGRC will be chaired by the head of the Provincial Project Team and will include representatives of each agency with implementing responsibilities, as well as a member of the Provincial Administration Complaints Inspection Unit. Each SLC Land Recipients Committee and each ICLT Land Management Committee will select one representative who will be trained in the operation of the GRM and will join as a member of the PGRC when grievances related to the SLC or ICLT they represent are considered.

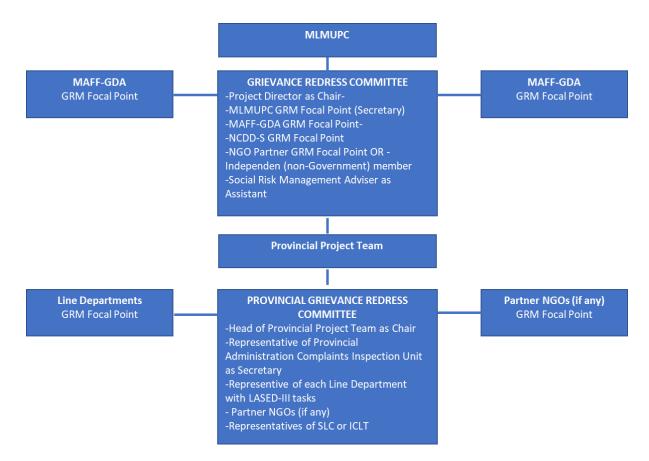


Figure 4:LASED III GRM Institutional Responsibilities

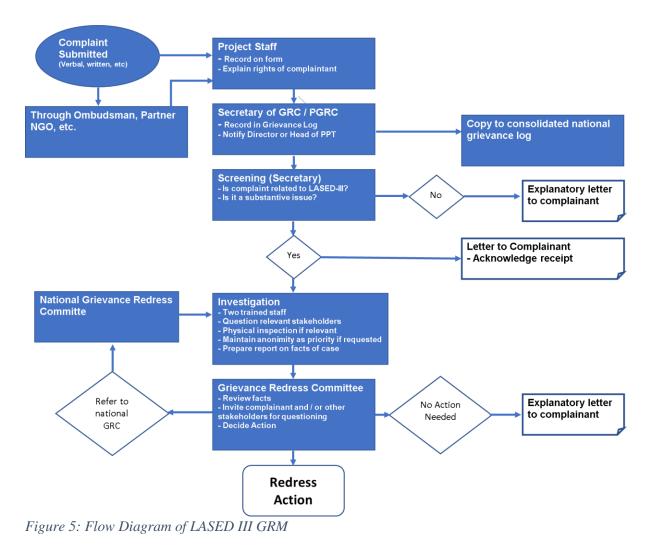
329. Stakeholders may submit grievances by any suitable method. Complainants may request anonymity; in which case their names will not be made public. Confidentiality will also be observed during the period in which the GRM is considering a case

330. Project staff will be trained on action to take if they are informed of a grievance, including 1) how to explain the rights of the stakeholder submitting the grievance, the grievance process, and the option of remaining anonymous; and (2) recording the grievance on a standard form (Annex 9); and (3) passing the completed grievance form together with any written complaint or other documentary evidence to the Secretary of the PGRC.

331. On being notified of a grievance, the Secretary of PGRC will (1) enter the details in the complaints register, which is consolidated nationally; (2) copy the updated register to the Head of the Provincial Project Team; (3) with one other trained staff member, screen the complaint to determine whether it is related to LASED and concerns a matter of substance that can be investigated; and (4) notify the complainant in writing, acknowledging the complaint, stating what follow-up action will be taken, and stating the rights of the complainant.

332. The chair of the PGRC will assign two project staff with appropriate training to investigate the grievance, including interviews with the complainant and other stakeholders, review of documents and inspection of physical evidence. Where requested, the complainant's anonymity will be prioritized. The investigation team reports to PGRC.

333. PGRC may decide (1) that no action is required; (2) to take appropriate action to redress the grievance; or (3) to refer the grievance from the PGRC to the national GRC. The complainant will be notified in writing of the decision of the PGRC.



334. Indigenous People will be provided with additional assistance to ensure they have equal access to the GRM. The project will support and pay the costs of a facilitator chosen by the IP and conversant in the IP language or dialect, to serve as an advocate for the complainant. Grievances related to matters internal to the IP community will be handled within the IC, following culturally acceptable dispute resolution processes, in the first instance.

335. Audit of the Grievance Redress Mechanism will form part of the ESS Audit to be conducted before MTR.

336. Project stakeholders and affected parties will have access to existing grievance mechanisms in addition to the project GRM. These are described in the SEP and include:

- (a) Ombudsman system for grievances related to sub-national administrations;
- (b) Grievance Mechanism of the Inter-Ministerial Resettlement Committee, which establishes a Provincial Grievance Redress Committee in cases where NEF-GDR consider this to be necessary; and
- (c) The courts.

337. Lessons learned from LASED II indicate a need for improved capacity to handle grievances, which may be generated in large numbers in response to the SLC and ICLT preparation processes. This will be a key consideration in capacity building for implementation of the ESMF and SEP (see below).

8.2 World Bank Grievance Redress Service

338. Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the WB's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate GRS, please visit http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

9 ESMF CONSULTATION AND DISCLOSURE

9.1 Stakeholder Consultation of ESMF and Related Instruments

339. Stakeholder consultation on the ESMF and its Annexes and on the SEP, will be undertaken in parallel with appraisal – after the documents have been publicly disclosed – with the planned date for disclosure on April 11, 2020. In view of government measures to avoid the spread of Covid-19, the normal extent of face-to-face consultations will not be possible so virtual consultations will be used where appropriate. As agreed with World Bank, the consultation process will follow a 3-way approach including online, phone calls / emails and commune office.

340. Online Consultations: Implementing agencies (IAs) including MLMUPC, MAFF announce the documents are online on their website and other online sources (such as Facebook page) providing links to documents. This also includes translation into Khmer executive summaries of documents, GRM and Table 11 on ESMFs (summary of risks/impacts and mitigation measures). MLMUPC produces a short 5-10 min video (or audio) explaining the project, impacts, mitigation measures, GRM, where documents can be found online and how to share concerns/comments/questions.

341. Telephone Consultations: IAs designate SEO staff to quickly draw up a list of participants/affected people from project area and their telephone numbers, ensuring there is a good representation of women in the list.

342. During each phone call, the SEO team can brief each person (participant) on the project, potential impacts and risks as well as mitigation measures, grievance redress and contact info, and ask for their feedback. They can also send a link via sms, after the phone call, with the Facebook and YouTube (if have) pages and links of the documents. Participants can also be asked to forward the information to their neighbors.

343. Consultations at the Commune Office: All translated documents, including GRM and Table 11 of ESMF (summary of risks/impacts and mitigation measures), to be made available at commune office. Posters letting people know of documents can also be posted in visible locations such as outside of schools, pagodas and markets.

344. Documentation and Feedback will be as follows:

- (a) In phone calls and Facebook/website, IA to establish a clear deadline to receive the feedback of the draft documents.
- (b) As comments/questions get posted, for these to be included on Facebook site so other people can also see them (since in consultation people get to hear other people as questions).
- (c) Based on the feedback, prepare a Consultations Report, noting the method used and comments/questions received.

9.2 Public Disclosure and Consultation

345. In accordance with WB policy and the requirements of ESS10, the ESMF and E&S risk management instruments have been disclosed and reviewed through an inclusive stakeholder process which is summarized below:

- **Documents were posted** on the websites of the MLMUPC (http://www.mlmupc.gov.kh/) and of the MAFF (https://web.maff.gov.kh/):
- **Public consultations** were held from April 10 to May 1, 2020. Following agreement between the World Bank and the Royal Government of Cambodia (RGC), the consultations were held virtually in lieu of face to face meetings in Phnom Penh or in target provinces, owing to the COVID-19 related restrictions;
- **Establishment of a social media platform** (Telegram Group) for stakeholders' feedback; telephone consultations; and, a video featuring both the format of the online consultation and the brief descriptions project. The Telegram group included 87 participants who were officials at national and sub-national levels of government, representatives of UN agencies and civil society organizations across Cambodia. Telephone calls were made to several NGOs to ensure that their views were heard directly.
- The objectives of the public consultations were (i) to present the design and other key features of the LASED III project; (ii) to obtain feedback from stakeholders on the project, including on the Environmental and Social Framework (ESF) instruments ESMF, the RPF, the IPPF, the CHPF, the LWCP, the ESCP, and the SEP; and (iii) to prepare minutes of the consultations as a "reference material" for the revision, as needed, of ESF instruments. These consultations build on previous direct consultations at the PCN and project preparation and design stages. These were conducted with prospective beneficiary communities of LASED III, civil society organizations, private sector and other relevant stakeholders, and also covered issues pertaining to ICLT, and SLC as well as development support for the vulnerable groups;
- Written feedback was received from 31 participants in the consultation. Some shared their feedback both through the given email address and Telegram group. These include: one government official from the Kratie province, two UN Agency officials, one independent consultant, and twenty-seven from the "NGO Forum" and their membership organizations. Of important note, NGO Forum organized a virtual group discussion amongst their member organizations to review the safeguard documents and consolidated all feedbacks, and then sent to the RGC consultation team along with list of representatives of participating organizations. In addition, there were 259 viewers of the documents posted on the Websites, 18 of them provided written feedbacks on the quality of the documents.
- Summary of issues discussed. The main points of virtual discussion focused on: (i) the ICLT process and impacts on indigenous peoples (IP); (ii) the SLC process; (iii) protection of natural resources and biodiversity; and, (iv) the importance of avoiding involuntary resettlement or ensuring fair compensation for displaced people. Generally, the participants of the online consultation appreciated the good quality of the documents and the availability of both Khmer and English versions, as well as the different formats of presentation such as video clips, summaries, and PowerPoint slides.
- **Revision of documents in response to comments:** Following the consultation exercise, the ESMF and other ESS instruments have been revised in order to take account of comments received. A summary of responses to comments received and revisions made to documents has been prepared and circulated to participants;
- **Disclosure of final documents:** The revised ESMF and ESS instruments will be disclosed through the website of MLMUPC (<u>http://www.mlmupc.gov.kh</u>), MAFF (<u>http://www.maff.gov.kh</u>) and on the website of World Bank.

346. Annex 11 of SEP provides more detailed description of the feedback from the virtual consultations.

APPENDICES

APPENDIX 1: SUMMARY OF LASED III ELIGIBLE AND NON-ELIGIBLE SUB-PROJECT TYPES

1. Positive Lists from PIM

Infrastructure

a) Rural roads and access tracks,

- (b) Rural water supply,
- (c) Small-scale irrigation systems,
- (d) School buildings and teachers' houses,
- (e) Health posts,
- (f) Community centres,
- (g) Setting up and running O&M committees and activities

2. Community Development Support

- (a) Select and train community groups and leaders;
- (b) Establish and run economic interest groups;
- (c) Establish and run infrastructure maintenance groups;
- (d) Establish and run revolving fund groups (including, Savings and Credit Revolving Fund Groups
- [SCGs] and Most Vulnerable Household Revolving Fund Groups [MVHGs]);
- (e) Establish and run livelihood groups;
- (f) Establish and run agriculture production/marketing groups;
- (g) Establish and run Agricultural Cooperative (AC).

Farmer Field School, Farmer Business School etc

3. Inferred Negative List

- National and Provincial Highways
- Large or high-risk dams (as defined by ESS4 Annex 1)
- Religious and security buildings
- Agriculture techniques requiring intensive use of hazardous chemicals
- Any expenditure with a military or paramilitary purpose;
- Civil Works for Government administration or religious purposes;
- Manufacture or use of environmentally hazardous goods, arms or drugs;
- Manufacture or use of dynamite;
- Financing of government salaries;
- Production, processing, handling, storage or sale of tobacco or products containing tobacco and beverage;
- Activities within a nature reserve or any other area designated for the protection of biodiversity, except with prior approval;
- Mining or excavation of live coral;
- Water resources development on rivers which flow out into another country;
- Alterations to river courses;
- Provision of goods works or services by any contractor or supplier who has been declared ineligible by World Bank.
- Any expenditure with a military or paramilitary purpose;
- Civil Works for Government administration or religious purposes;
- Manufacture or use of environmentally hazardous goods, arms or drugs;
- Manufacture or use of dynamite;
- Financing of government salaries;
- Production, processing, handling, storage or sale of tobacco or products containing tobacco and beverage;
- Activities within a nature reserve or any other area designated for the protection of biodiversity, except with prior approval;

- Mining or excavation of live coral;
- Water resources development on rivers which flow out into another country;
- Alterations to river courses;
- Provision of goods works or services by any contractor or supplier who has been declared ineligible by World Bank.

APPENDIX 2: EXPERIENCE WITH ENVIRONMENTAL AND SOCIAL RISK MANAGEMENT IN LASED II

1. Framework for Management of Environmental and Social Risks

- 1. The framework for environmental and social risk management in LASED is defined by the following documents:
 - (a) The LASED PIM (current version dated January 2017);
 - (b) The Resettlement Policy Framework (dated April 2016 and comprising Annex 6 to the PIM);
 - (c) The Environmental Assessment and Environmental Management Plan (EA-EMP), dated December 2007; this document appears to form Annex 7A to the current PIM);
 - (d) The Cultural Heritage Protection Framework, dated December 2007;
 - (e) The Indigenous Peoples Planning Framework, dated December 2007;
 - (f) The Civic Engagement Framework, dated November 2007;
 - (g) Screening forms for Social Safeguards (PIM Form 4) and Environmental Safeguards (PIM Form 5).
- 2. Environmental and social risk management in LASED II may occur either at the site level (i.e. associated with identification, survey, land use planning, land allocation and titling etc. at the SLC (in LASED III, also in ICLT); or at the sub-project level, where environmental and / or social impacts may arise as a result of the design and implementation of infrastructure or livelihoods support sub-projects.
- 3. Site identification and land use planning procedures described in the LASED PIM include the following specific provisions to identify and manage environmental and social risks:
 - (a) Step 1.3: Provincial Meeting to Screen SLC request includes representatives of indigenous communities, if any, in the SLC area. A Provincial "Hot Spot" map is presented which indicates the potential SLC area, surrounding areas, upstream and downstream areas and implications for social, legal and environmental safeguards;
 - (b) Also, at Step 1.3, it must be verified that the proposed SLC is not being used to resettle people away from an Economic Land Concession (ELC);
 - (c) Step 1.4: Commune Visits to Screen SLC Request, include preparation of Form 4: Social Safeguards Screening; and Form 5: Environmental Safeguards Screening;
 - (d) To avoid encouraging encroachment on the proposed SLC land, beyond informal settlement that may have occurred already, a cut-off date for purposes of demonstrating prior occupation is determined as two months before the first public meeting on the SLC plans. The Commune Council is required to provide records of occupancy before that date;
 - (e) At Step 3, public information on the SLC plans is systematically disseminated for information of potential land recipients and existing land users;
 - (f) A Gender Analysis Report is also prepared at Step 3; and
 - (g) A set of transparent, equitable criteria are determined and announced. The selection criteria must be gender-neutral and must not be biased against any social group. Vulnerable and displaced people, and indigenous people may receive preferential treatment;
 - (h) Step 4: State Land Identification, Mapping, Classification and Registration includes surveying and detailed mapping of the proposed SLC area and includes inter alia (1) land already in private use or collectively owned; (2) reserved forestry or otherwise environmentally protected land; (3) archaeological and culturally important sites; and (4) sites of importance to local indigenous communities. A Sketch Map and table of individually held land must be displayed for 30 days;
 - (i) Step 5: Participatory Land Use and Infrastructure Planning includes further consideration of environmental safeguards and improvement of the environmental screening. An outline infrastructure development plan is also prepared at this step with the cooperation of the Commune Council;

- (j) After preparation of an Agro-Ecosystems Analysis (AEA), a Carrying Capacity Assessment and an Infrastructure Needs Assessment, the DWG together with the Commune Council review and revise the screening forms (Form 4: Social Safeguards and Form 5: Environmental Safeguards) and the Social Land Concession Map to ensure that all outstanding issues related to the following are addressed or clarified: (1) Impact of the proposed SLC on present land use, forests and other habitats; (2) Impact on indigenous peoples; (3) Resettlement implications; (4) Impact on cultural heritage sites;(5) Land suitability for agriculture; and (6) Response to issues raised in the gender analysis.
- (k) At Step 6: Review and Approval of the Commune SLC Report, PLUAC is responsible to check that the SLC report respects social and environmental safeguards and that the TLR selection process is legal and transparent.
- (1) In Step 7, land recipients are selected based on an open, participatory and transparent process that safeguards equity and includes a grievance mechanism.
- 4. For design of infrastructure sub-projects, which may include roads, water supplies, irrigation infrastructure and community buildings, engineers employed by the project are tasked to conduct feasibility studies and prepare designs. For irrigation development, which has more complex technical requirements, a consulting firm is hired to carry out this work. ESS screening and risk management plans, primarily land acquisition plans and environmental management plans, are prepared as needed at this stage. Given that areas required for infrastructure development within the boundaries of the SLC are reserved at the land use planning stage, it is unusual for further land acquisition planning to be required, but this could occur in case that (1) construction, e.g. of an access road, is required outside the boundaries of the SLC area; or (2) feasibility studies show a need to change the proposed location of infrastructure from that initially proposed in the land use plan (in fact, this occurred on one SLC site in Kampong Chhnang during development of a road supported by the KfW-IPLR project..
- 5. The PIM contains provisions for non-infrastructure sub-projects and grants to be checked for safeguards compliance, including applications for seed grants (Para. 340) and proposals for livelihood investments (Para 348). The scope of these checks includes social impacts, gender equity, environmental impact assessment and "compliance with the legal framework of the Kingdom of Cambodia, and Environmental and Social Safeguards of the Project."
- 6. The description of implementation roles and responsibilities in the PIM assigns MLMUPC the responsibility for "monitoring and guiding ... safeguard activities carried out at the sub-national level including the implementation of sub-projects" (Para 392). However, it is not spelled out in detail how this responsibility is to be discharged.
- 7. Section 5.6 of the PIM describes the Civic Engagement Framework (CEF), Community Dialogue Framework and Complaints Handling Mechanism of the project. The CEF is a leading best-practice document that has evolved through several revisions based on project experience and "describes the principles and processes for public information dissemination and disclosure, encouraging public participation, ensuring transparency, accountability, and conflict resolution" in the project (PIM para 528). The Complaints Handling Mechanism works at two levels: at local level, primarily for complaints from project affected people and institutions at local or province level, and at Project Management Team (PMT) level, primarily for project staff, consultants, NGOs and private sector contractors / suppliers. The PIM assigns responsibility for local level complaints handling to NGO partners. PMT level complaints are to be submitted through the Provincial Accountability Working Groups (PAWG), which are currently being replaced by the Ombudsmen's Offices. The PIM (para 544) also provides for complaints directly to PMT through the office, project website e-mail or telephone, or forwarded by service providers and NGOs. The PMT is to establish a Complaints Handling Committee (CHC). The process to be followed by the CHC is detailed in PIM para 546. In addition, the PIM provides details of the World Bank Grievance Redress Service including its purpose, scope and process (Paras 547 - 585).

8. Section 5.8 of the PIM summarizes the World Bank Safeguards Policies considered to be triggered by LASED (table 43 of the PIM, reproduced as Table 1 below).

Table 19: Safeguard Policies Triggered by LASED II		
Safeguard Policies	Triggered	
Environmental Assessment OP/BP 4.01	Yes	
Natural Habitats OP/BP 4.04	Yes	
Forests OP/BP 4.36	Yes	
Pest Management OP 4.09		No
Physical Cultural Resources OP/BP 4.11	Yes	
Indigenous Peoples OP/BP 4.10		No
Involuntary Resettlement OP/BP 4.12	Yes	
Safety of Dams OP/BP 4.37	Yes	
Projects on International Waterways OP/BP 7.50		No
Projects in Disputed Areas OP/BP 7.60		No

9. PIM Section 5.8 also contains a section described as "Lessons Learned" from safeguards implementation in the project, though this more a summary of project safeguards practices rather than an assessment and reflection on results.

2. Evidence of Environmental Impacts of the Project

- 10. This section, together with the following section on social impacts, is based on LASED project documentation and reporting and on observations at existing Social Land Concession sites. It is not an exhaustive list of all environmental (or social) impacts of the project.
- 11. Spatial planning is a key strength of the LASED project. From a safeguard viewpoint, this ensures that, with a high level of confidence, environmentally sensitive or high-value locations will be identified during the SLC identification, hotspot mapping, screening and planning process and that appropriate conservation measures will be adopted. The project has avoided encroaching on or damaging environmental hotspots. As a result of project activities, the boundaries of hotspots are defined legally through cadastral mapping and physically by placement of boundary markers, and awareness of the hotspots is raised. Community forest areas have been established within SLC and institutions for their management created.
- 12. The project has not been fully successful in preventing further encroachment on protected areas. This seems to be a particular problem where protected areas such as community forest border on farmland outside the SLC, giving the (non-SLC) farmers an incentive to encroach. To be successful, community forests should be valued as living resources by the community, including as a sustainable source of products such as firewood and non-timber forest products. While there is some evidence of use for these purposes, the impression is gained from interviews with SLC stakeholders that community forests are viewed mainly as an arrangement to protect the forest for its own sake, rather than because of the value of the forest to the community. If this is indeed the perception, the community forest institutions will fail. It is possible that more could be done to adapt community forest management to the needs of the community. It was also noted that, while community forests have been created by defining and conserving areas of existing forest within the SLC, albeit usually heavily degraded, there are land areas in the SLC without substantial tree cover, but which are unsuited to agriculture. These areas have been allocated as farmland despite their unsuitability for the purpose, and in some cases, it appears that the farmers who received those lands are actually farming land allocated to others. It may have been better to re-plant these low-fertility lands with native tree species and allow them to regenerate as community forest land.
- 13. There is no evidence, either from site observations or from project reporting, of substantial, sustained negative impacts from small scale infrastructure activities of the project. Some roads and irrigation earthworks have been inadequately designed and have suffered erosion to the earthworks and the immediate area, but due to the generally flat topography this has not resulted in widespread erosion problems.

- 14. The LASED II MTR reports on the success of environmental risk management at sub-project level, including preparation and implementation of Environmental Management Plans (EMP) for each sub-project. Implementation of these EMP is monitored and no serious breaches have been reported. However, the MTR notes that monitoring could be improved, including by preparation of consolidated reports on safeguards compliance. The MTR does report on difficulties encountered in applying the safeguards procedures in relation to safety of dams, with the engineering consultant engaged for the purpose struggling to assess safety aspects and design and cost alternatives.
- 15. LASED project safeguards arrangements appear notably less developed and robust in respect of impacts that cannot be managed through land use planning. These impacts include (1) environmental health aspects of the residential SLC areas; (2) potential environmental and health risks of agriculture activities; and (3) potential environmental damage as a secondary effect of population movements.
- 16. SLC land recipients in most cases move to the SLC sites from traditional, low density villages. The residential areas of the SLC sites are planned in effect as small towns with urban layouts. Village arrangements for solid waste disposal and sanitation may become unacceptable in this new environment. LASED site planning includes areas identified for solid waste disposal, but no collection system is in place, so solid waste is either burned, generating toxic fumes, or simply scattered around the site. This problem will become worse if successful markets are established on the SLC. Land recipients have moved from villages where open defecation was common or the norm. LASED has provided materials for construction of toilets but this strategy is not adequate in itself: toilet materials can be observed abandoned or used for other purposes at the sites, while many houses lack functioning toilets. In settlements of the density of the SLC residential areas, this must be regarded as creating a health hazard directly and through potential contamination of water supplies.
- 17. Much agriculture practice in the project areas and on the SLC sites is low-intensity and farmers use only limited quantities of agriculture chemicals. Some farmers, with project support, are growing organic crops. This is an attractive strategy so long as it is demand-driven: farmers will produce organic crops if the crops sell at a premium price and so generate more profit for the farmer. However, evidence was seen of agriculture chemical use, including potentially harmful pesticides, at the SLC sites. Farmers who were interviewed had not received, or did not recall, any training in safe use of agriculture chemicals. It is important to accept that farmers will use agriculture chemicals when it is commercially beneficial for them to do so, and the project should increase efforts to ensure that farmers have the knowledge and skills needed to use chemical safely.
- 18. LASED SLC sites are substantial settlements with populations of up to 3,000 5,000 people in some cases. The available land for the sites is mainly remote from existing settlements. Therefore, creation of the SLC results in significant relocations of people, often into areas that may be adjacent to environmentally sensitive areas or conservation zones. There is an obvious risk that proximity, say, to a wildlife conservation area, might result in an increase in harmful activities such as timber cutting, hunting or even land encroachment. There is no direct evidence of this actually occurring as a result of the LASED project. However, at some SLC sites charcoal production is an important livelihood activity. If the charcoal is produced using wood cleared from the agricultural SLC land then this activity is harmless, but if wood is sourced, now or in future, from forest areas, this could have harmful environmental impacts. The project framework for environmental protection should include consideration of potential secondary impacts of this type, which may take place beyond the boundaries of the SLC itself.

3. Evidence of Social Impacts of the Project

19. The purpose of LASED is to deliver primarily social benefits to the poorest members of the rural community through increased and more secure access to land, and through associated benefits from

settling-in assistance, livelihood support activities and support to social services in the project areas. The project is regarded as a notable success because of its achievements in these areas.

- 20. The LASED II MTR reports that the Resettlement Policy Framework (RPF) has not been triggered as the infrastructure sub-projects have not resulted in any need for resettlement. Land distribution in LASED appears to have been implemented in a transparent and equitable manner, with relatively few complaints generated, considering the potential sensitivity of the process. Potential disputes with prior land users (including in some cases with opportunistic encroachers on proposed SLC sites) seem to have been handled sensitively. However, some issues have arisen, as detailed in the LASED II MTR. This included a substantial number of claims of prior land ownership within the area of Dong Commune SLC site (Kratie Province). The majority of these claims were settled by negotiation, including by land swaps with SLC land or land outside the SLC. At the time of the MTR (March 2019), 76 claims had been settled and a further 51 were outstanding, mainly from households that did not participate in the investigation and negotiation process. The experience with the Complaints Handling Mechanism is further discussed in the next section.
- 21. The process of land allocation itself generated a number of complaints, detailed in the MTR. Some of these appear to have originated in attempts by land recipients to extend their plots by moving marker posts. In one case the complainant had received a smaller plot than was promised and was compensated with additional land. The MTR also implies there have been issues with SLC land recipients encroaching onto administrative and reserved land, including land needed for construction of the irrigation system at Tipo, Kampong Thom (MTR para 254).
- 22. LASED and LASED II target communities did not include any indigenous communities, although there are a number of individuals of indigenous minority origin at the SLC sites. No issues have arisen with regard to indigenous minority rights.
- 23. The households that have succeeded in establishing themselves at the SLC sites generally appear to be doing well, with a notable minority having become relatively prosperous through a combination of agriculture and business activities at the sites. However, the fact that a significant proportion of SLC plots remain unoccupied indicates that not all land recipients have succeeded making this transition. In some cases, land recipients are farming their SLC agriculture land, but their residential land is empty, as they find it easier to continue to live in their village of origin and travel to work on the land. Reasons for this may vary, but social challenges of living on SLC sites must be a factor.
- 24. SLC land recipients are selected from amongst the poor and landless sections of the community within the home commune formally, allocations to families from outside the commune are not permitted. In their villages of origin, these families, though poor, would have benefited from support networks including relatives and neighbors as well as established local authorities. They would have relatively easy access to education and health services. Moving to live on sometimes remote SLC sites would have the effect of removing existing support networks as well as making access to services more difficult which could be especially challenging for poorer families. It is notable that the LASED II MTR identifies the need to facilitate land recipients' travel between their villages of origin and the SLC as a high priority in the early stages of SLC development (MTR para 245).
- 25. There is a risk that patterns of social discrimination, based on poverty or other factors, could be transferred to SLC sites, although it has been noted in the past that some SLC residents expressed satisfaction at having escaped from a situation where they were perceived as of low social status to a new community where they could be treated with respect. Other social issues including gender-based violence (often closely related to alcoholism) may also transfer to SLC sites, where there may be less scope for effective intervention and assistance from local authorities or such social service institutions as exist in rural Cambodia (e.g. the Commune Women and Children's Committee).

4. Experience with Complaints Handling Mechanism

26. The LASED II MTR discusses the experience with the Complaints Handling Mechanism (CHM) which was also the subject of a stand-alone report. The practice of widely disseminating information about the SLC developments appears to have attracted a significant number of complaints, particularly in relation to the SLC development at Dong commune, such that the capacity of the system to cope became stretched. The majority of complaints were submitted verbally (presumably, by telephone) and the person receiving the complaint was not always able to record details adequately. The project prepared a proposal to simplify the formats used in recording and processing complaints. The MTR proposes as alternatives, either increased training of Provincial staff and increase in human resources for complaints handling, or integrating the CHM with the complaints handling system of the Cadastral Committees, which are chaired at national level by MLMUPC, by a Deputy Governor at Provincial level and by the head of the Provincial Department of Land Management at District level.

5. Gap Analysis

ESS1 - Assessment and Management of Environmental and Social Risks and Impacts

- 27. This and the following sections of the ESMF summarizes the gaps in the safeguards framework for LASED II (which was developed to comply with the World Bank's previous Safeguard Policies) in relation to the requirements of ESS1-ESS8 and ESS10 of the ESF. The section notes feature of the project that may prove relevant to requirements of each ESS. It is not attended as a full risk analysis, which follows in a later section.
- 28. LASED II has a detailed and robust set of safeguards documents prepared to comply with the Safeguards Policies. These documents have mainly proved adequate to manage environmental and social risks encountered in project implementation, as described above. However, (1) not all the safeguards provisions of LASED II have been triggered in practice; (2) LASED III includes activities and locations significantly different from those in LASED II; and (3) the scope of the ESF require consideration of potential risks that are not captured by the LASED II framework.
- 29. The current state of safeguards document development is illustrated in the table below, showing the set of safeguards tools required for ESF compliance on the left, followed by relevant existing documents in LASED II, then comments on potential gaps.

Table 20: ESF Safeguards Tools Compared with LASED II Safeguards Framework			
ESF Safeguard Tool	Relevant LASED II Document	Comment	
Environmental and Social Management Framework (ESMF)	EA-EMP	Dated 2007	
Environmental and Social Commitment Plan (ESCP)	EA-EMP	Dated 2007	
Resettlement Policy Framework (RPF)	RPF	Prepared April 2016. Has not been triggered in LASED II	
Indigenous People Planning Framework (IPPF)	IPPF	Prepared 2007. Has not been triggered in LASED II	
Cultural Heritage Protection Framework (CHPF)		Prepared 2007. Not clear if it has been triggered in LASED II	
Labor Management Framework (in ESMF)		No specific provisions	
Community Health and Safety Procedure (in ESMF)		No specific provisions	

Stakeholder Engagement Framework (SEF)	Civic Engagement Framework (2007) Complaints Handling Mechanism

- 30. Where relevant documents from LASED II exist, they require review and updating to bring into line with the design of LASED III and with the requirements of the ESF. The inclusion in LASED III of support to indigenous communities (IC) and to the ICLT process require revisions to the IPPF and potentially also to the RPF and the CHPF.
- 31. In general, the ESP places a greater emphasis on the "mitigation hierarchy" (avoid, minimize, mitigate, compensate) as compared to the OPs, and procedures may need to be adjusted to reflect this.
- 32. As noted above, the provisions for monitoring implementation of safeguards procedures in LASED II are not especially robust. Monitoring and reporting of ESS performance is one of the key responsibilities of the Borrower under ESS1.

ESS2: Labour and Working Conditions

- 33. Labor employment, working conditions and occupational health and safety are not considered within the safeguard framework of LASED II, though some oversight may be exercised, for example through contract management procedures. In LASED III, project staff ("direct workers"), contracted workers and community workers are all potentially subject to the provisions of ESS2. Ensuring equitable, legal and safe working conditions, and accommodation where relevant, and adequate rights to organize and to express grievances, for contracted workers, is likely to be the most prominent issue in practice. The scope of ESS2 potentially extends to workers who are not physically present on the project sites, so enforcement could be challenging. The approach of ESS2 is somewhat different from the traditional working culture of construction contractors such as those who will be employed in LASED III, and effective implementation of ESS2 is likely to require a capacity development approach as well as enforcement controls.
- 34. The C/SF PIM is used as a basis for sub-project implementation including contracting for small infrastructure sub-projects in LASED II. A gap analysis of the C/SF PIM as compared with ESS2 requirements is provided as Appendix 9.
- ESS3 Resource Efficiency and Pollution Prevention and Management
- 35. LASED II safeguards documents do not include specific provisions to ensure resource efficiency or pollution prevention and management.
- 36. LASED III is not expected to result in any installations that are major energy users in significant emissions of greenhouse gases (GHG). ESS3 requires an estimate of gross GHG emissions but provides for an exception for projects that have diverse and small sources of emissions (for example, community-driven development projects). It is considered likely that LASED III would fall within this latter category if it is determined otherwise, specialist assistance from World Bank is likely to be needed for this aspect. LASED III is not expected to result in significant point pollution sources.
- 37. Aspects of ESS3 that are most relevant to LASED III are (1) requirement to ensure efficiency of water use; and (2) provisions for management of pesticides. The project will not procure pesticides directly, but it is possible that the project will lead to increases in pesticide use.

ESS4 – Community Health and Safety

- 38. ESS4 has a number of requirements that are not covered as safeguards issues in LASED II, or that will need to be assessed and managed in more depth in LASED III. These are likely to include:
 - (a) Traffic and road safety;
 - (b) Community exposure to health issues.
- 39. Safety of Dams was included in the LASED II framework as the project was considered to trigger OP/BP 4.37. LASED III is expected to support construction of irrigation dams of similar type and scale to LASED II. None of these dams would fall within the definition of large dams in ESS-3 Annex 1, and in practice it seems unlikely that the smaller dams would meet the conditions under which smaller dams trigger the dam safety requirements (ESS3 Annex 1 paragraph 2). Nevertheless, the dam safety procedures adopted for LASED II should be retained and reviewed for ESS3 compliance.
- 40. A further potential issue, not considered in LASED II, is the possibility that SLC or ICLT locations could be within the area of influence of hydropower dams, either existing or planned. This aspect will be discussed further below.
- 41. Landmines and unexploded ordnance (UXO), now often referred to as Explosive Remnants of War (ERW) are present in the LASED II and potential LASED III target provinces. The issue is noted in the EA-EMP and in fact one of the first LASED sites required extensive de-mining. However, the LASED II PIM does not appear to contain specific provisions to manage this risk.

ESS5 – Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

- 42. A Resettlement Policy Framework (RPF) was prepared for LASED II in 2016 but has not been triggered, as land issues have been managed under the project land use planning / SLC identification, screening and planning framework, so that sub-projects in most cases will be on land already mapped and confirmed as public land and with any ownership claims resolved.
- 43. Although the LASED II RPF is relatively recent, it was prepared under the previous OP/BP 4.12. The requirements of ESS5 are broadly similar but there are significant differences, particularly including impacts on land users that fall short of physical resettlement, and restrictions on access to legally protected areas. The RPF will need to be reviewed and updated to be consistent with these provisions. In addition, support to IPs and ICLT may require specific consideration for safeguarding land users' rights in these areas.

ESS6 - Biodiversity Conservation and Sustainable Management of Living Natural Resources

44. The provisions of LASED II EA-EMP and PIM for identification and avoidance of negative impacts on environmental hotspots and conservation areas are likely to be broadly adequate to ensure LASED III compliance with ESS6. Potential areas where this may not be the case include (1) ensuring that all types of sensitive area and living natural resource covered by ESS6 are included; and (2) provisions to identify and manage potential risks to areas outside the boundary of the SLC or ICLT locations.

9.2.1 ESS7 – Indigenous Peoples / Sub-Saharan African Historically Underserved Traditional Local Communities

45. LASED II has an existing Indigenous People Planning Framework (IPPF) drafted in 2007 for compliance with OP/BP 4.10, although as the project has not supported any SLC sites in areas with indigenous communities, the provisions of this document have never been triggered. The IPPF need revision to bring it into line with the updated ESS7. The 2007 IPPF is quite brief and mainly provides for identifying IP land and excluding IP land from SLC sites (though IPs as individual households are to have equal rights to be land recipients). The document does not specifically state

the key ESS7 principle of free, prior and informed consent (FPIC). The document will also require review and updating to reflect that LASED III will specifically support the ICLT process, which is different from the SLC process LASED II has supported to date. The situation of Cambodia's indigenous communities has evolved significantly since 2007 because of rapid development of the areas where IPs live, closer integration of IPs into the economy, and because of the progress of the ICLT process itself which had not effectively begun in 2007.

ESS8 - Cultural Heritage

- 46. LASED II has a Cultural Heritage Protection Framework (CHPF) which was drafted in 2007 to comply with OP/BP 4.11. It is not clear that the procedures in the CHPF have ever been formally triggered, although it is known that construction of an SLC site access road in Kratie Province, funded by the KfW-IPLR project, encountered an Angkorean statue which was subsequently taken into the safekeeping of the Provincial Department of Culture and Fine Arts.
- 47. The CHPF is broadly consistent with ESS8 but will require review and updating, perhaps including greater emphasis on identifying potential impacts on intangible cultural heritage and on natural sites with cultural significance. The existing CHPF is based on an analysis of cultural heritage in the early LASED target provinces of Kratie, Kampong Thom and Tbong Khmum (previously in Kampong Cham) although potential issues will be broadly similar in other provinces.

ESS10 - Stakeholder Engagement and Information Disclosure

48. LASED has a detailed Civic Engagement Framework (CEF) prepared in 2007. The CEF describes purposes, process, formats and mandatory requirements for engagement with stakeholders at each stage of the SLC process, and guidelines for information sharing and communications. Many of the requirements for a Stakeholder Engagement Plan (SEP) in ESS10 are adequately covered by the CEF, as illustrated in Table 21 below.

Table 21: Comparison of Requirements of ESS10 with LASED CEF		
Requirements of ESS10	Matching Provisions in LASED CEF	
Timing and methods of engagement with stakeholders	Engagement with stakeholders at each stage of SLC process	
Communications with stakeholders	Guidelines for communications and information sharing	
Overcoming obstacles to participation / differently affected groups	Importance of including vulnerable groups stressed, but no specific measures	
Information disclosure	Detailed procedures and timelines for key information disclosure	
Meaningful consultation	CEF was developed through an inclusive process of consultation	
Grievance Mechanism	Complaints handling directly related to SLC land allocation described in each step of the process in the CEF Complaints Handling Mechanism is described separately in the PIM	

49. Therefore, the CEF is suitable to be reviewed and updated to become the SEP required by ESS10. Some ESS10 requirements may need additional detail in the SEP, including specific provisions for ensuring that different groups within the local community are enabled to participate. This could be important given that LASED III will work with IP communities, but may also need stronger provisions for women's participation, for example.

- 50. The LASED Complaints Handling Mechanism (CHM) is not described in the CEF but is presented in detail in the PIM. The CHM needs review to ensure it meets the requirements of ESS10 as well as to resolve the difficulties encountered in its implementation (see above).
- 51. The SEP will require re-validation for LASED III through disclosure and stakeholder dialogue. As the LASED III target communities are not known in advance, this will be done through a stakeholder consultation workshop at which representatives of the current SLC communities, IP representatives and other relevant stakeholders will participate.

APPENDI	APPENDIX 3: SITE SCREENING FORMAT										
Date			GIS reference								
	Province	District		Commune							

. Commune Administrative and Population Data (obtain information from Commune and village chiefs)										
Name of village or sub-	Number of	Ethnicity:		LASED III						
villages	families	Khmer or indigenous (name)	Without residential or agricultural land	Residential but no agricultural land	Landless displaced by an ELC					
Total										

1. Commune Administrative and Population Data (*obtain information from Commune and village chiefs*)

2. Current land use in proposed SLC area (obtain information from Commune and village chiefs)

Origin of SLC land users		Ethnicity	Total number		Current lan (# fai	Land also held outside proposed SLC				
Name of village of origin	Whether village is located in SLC Commune	of families in SLC		House plot	Stable land use (paddy land)	Chamkar	Total land in ha	House plot	Farn < 5ha	n land > 5 ha
	zed land use in p	roposed SLC	area before t	he Cut-Of	f Date of:			1		
Unauthoriz	zed land use in p	roposed SLC	area which s	tarted afte	r the Cut-Of	f Date		1		

Legal land	ownership in pr	oposed SLC a	irea				

3. Indigenous peoples

Does the Commune Council have representatives from indigenous peoples?	Yes	No	
Does any village in the Commune have an ethnic minority chief?	Yes	No	
Do any of the indigenous peoples practice shifting cultivation in the planned SLC	Yes	No	

4. Show location of all Khmer and indigenous peoples' villages, if any, on SLC Land Use Map

5. Show location of all cultural heritage sites on SLC Land Use Map

No	Name of		Whether	Unauthorized	No. Of		a used within th	e SLC	Land	Whether	Whether
	Occupant (head	Ethnicity	Unauthorized	Occupancy	Family	Residence	Agriculture	Both	owned	impacted	awarded
	of family)		or Legal	started before	Members	only	only	Residence	outside	by land	plot in
			Occupancy	or after Cut-		(Yes/No)	(in ha)	and	SLC	acquisition	SLC
				Off Date				Agriculture	area (in	(Yes/No)	(Yes/No)
								(in ha)	ha)		
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
		•	•	Extend th	ne table and lis	sting as require	d.	•	•	•	•

Land Use by Families in SLC Area

Cut-off date for claims by unauthorized land users in SLC to become TLRs:

SITE SCREENING FORM FOR FEATURES GIVING RISE TO ENVIRONMENTAL AND SOCIAL RISKS

Complete this screening for each SLC or ICLT site

Based on the answers, evaluate impact and likelihood of occurrence of each risk and propose mitigation measures in the location ESMP

#	Feature	Within Site Area	Immediately Adjacent	Within 1 km	Within 5km	Relevant ESS	Detail
1	Natural water body or water course (lake, river etc)					ESS3	If within site, complete screening form for water bodies
2	Commercial agriculture using pesticides intensively					ESS3, ESS4	Risk of contamination of water supplies on SLC or ICLT
3	River with large dam upstream					ESS4	Risk of flood from sudden release of water
4	Area that is subject to natural flash flooding					ESS4	Risk of damage and loss of life from floods
5	Known location of minefield					ESS4	Risk of death or injury from ERW
6	Location of any known ERW incident					ESS4	Risk of death or injury from ERW
7	Mining operation, or water course that is polluted by a mining operation					ESS4	Risk of contamination of water supplies on SLC or ICLT
8	Forest area known to have high incidence of malaria					ESS4	
9	Dangerous snakes or other animals					ESS4	
10	Areas that are used for growing crops					ESS5	Displacement of existing land users
11	Areas that are used for grazing animals					ESS5	Loss of access to resources for existing land users
12	Areas that are used for collecting firewood, fishing or collecting non-timber forest products					ESS5	Loss of access to resources for existing land users

13	Protected area (nature reserve, wildlife reserve, protected forest)			ESS6	Potential risk of direct damage Potential risk of indirect damage if SLC land recipients use the area for illegal purposes
14	Non-Khmer communities			ESS7	NB that communities who are not considered IP by Cambodian government may be protected by ESS7
15	Site of tangible or intangible cultural heritage			ESS8	Potential for damage to cultural heritage

SITE SCREENING FORM FOR WATER BODIES AT THE SITE

Complete this screening for each lake or stream in the area of the site

Based on the answers, evaluate impact and likelihood of occurrence of each risk and propose mitigation measures in the location ESMP

- 1. Describe the location and type of water body
- 2. For a lake:
 - a. What is the surface area in the wet season
 - b. What is the surface area in the dry season (can be zero of the lake dries up)
 - c. Is the whole of the lake inside the site area?
 - d. Is the lake used for fishing?
 - e. Is the lake used for extracting water for agriculture or another purpose?
 - f. Is the lake polluted from any source (conduct water quality tests)
 - g. Is the lake an important habitat for birds or animals?
- 3. For a stream or river:
 - a. How long is the part of the stream or river inside the site?
 - b. How wide is the stream or river in the wet season?
 - c. How wide is the stream or river in the dry season?
 - d. How many months per year does the stream or river flow?
 - e. Does the stream or river flow into the site from outside? If yes:
 - i. Is water extracted from the stream or river, upstream of the site, for irrigation or other purposes?
 - ii. Are there any potential pollution sources (e.g. commercial agriculture plantations, mining or industry operations, etc) close to the stream or river and upstream of the site?
 - iii. Has the quality of the water been tested?
 - f. Does the stream or river flow out across the site boundary? If yes:
 - i. Is water extracted from the stream or river, downstream of the site, for irrigation or another purpose?
 - ii. Does the stream or river flow into a lake that is used for fishing, or that is an important habitat for birds or animals?

APPENDIX 4: OUTLINE OF LOCATION-SPECIFIC ESMP

Proposed Elements of Location-Specific ESMP

1. Location/site Description

- Concisely describes the proposed location and its geographic, ecological, social and temporal context including any offsite investments that may be required (e.g. access roads, water supply, etc.). Normally includes a map showing the location and project areas of influence.

- Describes relevant physical, biological, and socioeconomic conditions including any changes anticipated before the project commences.

2. Potential Impacts

Predicts and assesses the likely positive and negative impacts.

3. Mitigation Plan.

The ESMP should identify measures to reduce potentially significant adverse environmental impacts to acceptable levels. The plan should include compensatory measures if mitigation measures are not feasible. Specifically, the mitigation plan:

- a. identifies and summarizes all anticipated significant adverse environmental impacts (including those involving indigenous people or involuntary resettlement);
- b. describes--with technical details--each mitigation measure, including the type of impact to which it relates and the conditions under which it is required (e.g., continuously or in the event of contingencies), together with designs, equipment descriptions, and operating procedures, as appropriate;
- c. estimates any potential environmental impacts of these measures; and
- d. provides linkage with any other mitigation plans (e.g., for involuntary resettlement, indigenous peoples, or cultural property) required for the project.

4. Monitoring Plan

The plan should provide information about key environmental and social aspects of the project, particularly their impacts of the project and the effectiveness of mitigation measures. It identifies monitoring objectives and specifies the type of monitoring, with linkages to the potential impacts identified and the proposed mitigation measures. Specifically, the monitoring plan provides

- a. a specific description, and technical details, of monitoring measures, including the parameters to be measured, methods to be used, sampling locations, frequency of measurements, detection limits (where appropriate), and definition of thresholds that will signal the need for corrective actions; and
- b. monitoring and reporting procedures to (i) ensure early detection of conditions that necessitate particular mitigation measures, and (ii) furnish information on the progress and results of mitigation.

5. Implementation Arrangements and Capacity Development

a. cover other sub-plans such as (i) location-specific stakeholder engagement plan, (ii) disclosure and consultation, (iii) grievance redress mechanism, (iv) cultural heritage protection plan, and others that are applied to the proposed SLC/ICLT.

b. provides a specific description of institutional arrangements--who is responsible for carrying out the mitigatory and monitoring measures (e.g., for operation, supervision, enforcement, monitoring of implementation, remedial action, financing, reporting, and staff training).

7. Implementation Schedule and Cost Estimates

- a. provide an implementation schedule for measures that must be carried out as part of the project, showing phasing and coordination with overall project implementation plans; and
- b. describe the capital and recurrent cost estimates and sources of funds (e.g. per the project cost tables. for implementing and monitoring the ESMP.

B. An Example of Table of Contents

Table of Contents
1 Introduction
1.1 Description
1.2 Scope and Development
1.3 Integration of ESMP
2 Potential Environmental and Social Impact Identification
2.1 Environmental Impacts
2.1.1 Air Pollution
2.1.2 Water and Wastewater Pollution
2.1.3 Solid Waste
2.1.4 Noise
2.1.5 Odor
2.1.6 Occupational Health and Safety (OHS)
2.1.7 Community Health and Safety (CHS)
2.1.8 etc.
2.2 Social Impacts
2.2.1 Occupational Health and Safety (OHS)
2.2.2 Community Health and Safety (CHS)
2.2.3 Conflicts
2.2.4 Gender Based Violence
2.2.5 Labor Influx
2.2.6 etc.
3 Environmental and Social Management Plan
3.1 Proposed Mitigation Measures
3.2 Monitoring Plan
3.3 Contractors ESMP
4 ESMP Implementation
4.1 Institutional Arrangement
4.2 ESMP Monitoring and Reporting
4.3 Schedule and Implementation Budget
4.4 Stakeholder Engagement Plan
4.5 Disclosure and Consultation
4.6 Grievance Redress Mechanism
5 Capacity Development and Training
5.1 Capacity Development
5.2 Training
5.3 Civil Works
5.4. Budget for ESMP implementation
Appendix A: Monitoring Checklist
Appendix B: Physical Cultural Resources Management Plan (if necessary)
Appendix C: Pest Management Plan (if necessary)
Appendix D: Resettlement Action Plan (if necessary)
Appendix E: Ethnic People Plan (if necessary)
-and other appendices as applied-

APPENDIX 5: SUB-PROJECT SCREENING FORMAT

Sub-Project Environmental and Social Risk Screening Form

The purpose of this form is to identify environmental and social risks that may arise from implementation of the sub-project. Based on the results of this screening, environmental and social risk management measures will be developed in a sub-project environmental and social management plan (ESMP).

Category	Screening Question	Yes/No	Comment
Identify the sub-	Road		
project type from this list	Irrigation		
	Building Construction		
	Water Supplies		
	Sanitation		
	Other Infrastructure		
	Agriculture Training		
	Agriculture Demonstration		
	Supply Agriculture Materials		
	Agriculture Marketing		
	Community Organisation		
	Capacity Building		
	Other Type		
Location	Will any part of the sub-project be located outside the area of the SLC or ICLT?		
Water Courses	Will the sub-project affect any water body or water-course that has a part that is outside the area of the SLC or ICLT?		
Labor and Working Conditions	Will the sub-project be implemented by workers employed by a construction contractor?		
	Will the sub-project be implemented by workers employed by any other type of contractor or service provider?		
	Will any community workers be used to implement the sub-project?		
	Will the sub-project require use of bricks or tiles?		
	Will the sub-project require use of agriculture planting materials produced on a commercial plantation?		
Environment	Will the sub-project create dust pollution that may affect people living nearby?		
	Will the sub-project create noise pollution that may affect people living nearby?		
	Are there any streams or water bodies that may be polluted due to the sub-project?		
	Will the sub-project result in non-biodegradable solid waste that will need to be disposed of properly?		
	Will the sub-project result in increased road traffic?		

Category	Screening Question	Yes/No	Comment
Community Health and Safety	Will construction of the project result in road traffic hazards during construction?		
	Will implementation of the sub-project involve use of heavy machinery in places where the public has access?		
	Will any type of chemical be used in implementation of the sub- project?		
	Is there any known hazard of landmines / UXO / ERW at the sub- project site or close to the sub-project site?		
	If the sub-project involves drinking water supplies, has the supply been tested for arsenic?		
	If the sub-project involves drinking water supplies, has the supply been tested for chemical pollution?		
	If the sub-project involves drinking water supplies, has the supply been tested for biological pollution?		
Climate Change	Will the sub-project result in a large increase in CO2 emissions?		
	Is the sub-project in an area that is at risk of climate hazards (e.g. floods)?		
	Is there a risk that climate change will make the project unsustainable (e.g. growing a crop that will not grow when the climate becomes hotter)?		
Land Acquisition	Will the sub-project be constructed on land that is in private ownership or in private use?		
	Will any people have to move their home to make room for the sub- project?		
	Will any people lose part of their productive land because of the sub- project?		
	Will the sub-project be constructed on land that is used for common property resource purposes (grazing, fishing, non-timber forest products, etc.)?		
Natural Resources	Will the sub-project result in increased extraction of water from a natural river?		
	Will the sub-project result in increased extraction of water from a natural lake?		
	Will the sub-project result in increased extraction of groundwater (except for domestic consumption)?		
	Will the sub-project be constructed in any area that is natural forest or natural wetland now?		
	Are there any areas that are important for biodiversity within 1km of the sub-project?		
	Will the sub-project require extraction of mineral resources of any kind?		
Cultural Heritage	Are there any places of tangible cultural heritage (ancient temples, valuable cultural buildings, places that are culturally important to local communities) that may be affected by the sub-project?		

Category	Screening Question	Yes/No	Comment
	Are there any places that are important because of their natural beauty (e.g. waterfalls, lakes, etc.) that may be affected by the sub-project		
	Are there any risks that the sub-project will have a negative effect on non-physical cultural heritage that is important to the local community?		
Indigenous People	Will the sub-project affect any indigenous minority people in any way?		
	If the sub-project will affect indigenous minority people, have they been fully consulted and agreed to the sub-project?		
Stakeholder Consultation	Have the communities that will be affected by the sub-project been informed about the sub-project plans?		
	Have the communities that will be affected by the sub-project participated in discussions about the design of the sub-project		
	Have there been any objections to any aspect of the sub-project from the local community?		
Additional			
Questions			
Based on Risks Identified in the			
Location-			
Specific ESMP			
L			

APPENDIX 6: SUB-PROJECT ESMP FORMAT

The sub-project ESMP will consist of a simple matrix in the format below. This format is appropriate as it will be simple for Commune officials, construction contractors etc. to become familiar with the format, understand it and use it to manage environmental and social risks during sub-project implementation. The format will be developed further during the LASED III project inception period, including developing standardized risks and mitigation measures for common infrastructure sub-project types (roads, irrigation, water supplies etc.). These standard provisions will be consistent with the Environmental Code of Practice (ECOP, Appendix 6) but, unlike the ECOP, will be used directly in contract documentation and contract implementation.

For each identified environmental and social risk, the format shows (1) level of impact, if the risk event occurs: High, Severe, Moderate or Low; (2) probability of the risk event occurring during sub-project implementation (High, Severe, Moderate, Low); (3) risk mitigation measures, including measures to be implemented by the construction contractor; (4) responsibility for each risk mitigation measure, and (5) Timing (e.g. before construction starts, during construction etc.). For mitigation measures that are the responsibility of the construction contractor, the supervising engineer will verify that measure have been properly implemented. Implementation of E&S risk mitigation measures will be reported and will be a condition for approval of payments.

Description of Risk	I	evel o	of Imp	act	Probability			Risk Mitigation Measures	Responsibility	Timing	
	Η	S	Μ	L	Η	S	Μ	L			

APPENDIX 7: ENVIRONMENTAL CODES OF PRACTICE (ECOP) FOR SUB-PROJECTS ECoP #1. Community / Rural Infrastructure Development

1. Building

Sub-Projects	Environmental Prevention/Mitigation Measures
School buildings and Community centres	 a. Provide adequate drainage in the buildings' immediate surroundings to avoid standing water. Possible insect disease vectors and unsanitary conditions may develop due to inadequate drainage.
	 b. Maximize natural light and ventilation systems to minimize needs for artificial light and the necessities of air conditioning; use large windows for bright and well-ventilated rooms. c. School buildings should comprise a large room for indoor activities, an outdoor playground
	and sanitary facilities (washrooms, and toilets with a septic tank).d. Avoid using asbestos cement tiles as roof materials.
Rural health centres	a. Provide an adequate number of rooms that may consist of a treatment room, a patient's room, waiting area and sanitary facilities (washrooms, and toilets with a septic tank).
	 b. A tiled floor is preferred as it makes the cleaning easier and more hygienic. c. Provide adequate drainage in the buildings' immediate surroundings to avoid standing water. Possible insect disease vectors and unsanitary conditions may develop due to inadequate drainage.
	d. Make sure rooms are well ventilated.e. Avoid using asbestos cement tiles as roof materials.
Rural markets	a. Good drainage is needed in and around markets (the slabs of the sheds) for hygienic reasons.
	b. For permanent market buildings, it is highly recommended to provide sanitation facilities (e.g. toilet(s) with a septic tank, and basins for hand washing) within the proximate distance of the market buildings. Permanent markets refer to those buildings with concrete structures that are permanently built on a location.
	 c. Provide garbage/waste disposal that can be emptied regularly. d. Separate the stalls/shops in the market for dry and wet produce/products. e. Tiled/paved floor is preferred for easy cleaning and maintenance. Slope floor for drainage. f. Ensure the stalls/shops have covers/roof to avoid standing waters during rainy seasons.

2. Road Infrastructure (Providing Access to and/ within the site)

Sub-projects	Environmental Prevention/Mitigation Measures
Roads	 General considerations: a. Control placement of all construction waste (including earth cuts) to approved disposal sites (at >300 m from rivers, streams, lakes, or wetlands). Dispose in authorized areas all of garbage, metals, and excess materials (fuels, oil, grease) generated during construction. Never dispose spent oils on the ground and in water courses as it can contaminate soil and groundwater. b. Erosion control measures should be applied before the rainy season begins, preferably immediately following construction. Maintain, and reapply the measures until vegetation is successfully established. c. Sediment control structures should be applied where needed to slow or redirect runoff and trap sediment until vegetation is established. d. Spray water on dirt roads, cuts, fill materials and stockpiled soil to reduce wind-induced erosion, as needed. e. Stockpiles of topsoil stripped must be covered when not in use f. Avoid road construction through primary forests as it gives access to illegal logging. g. Avoid road construction in unstable soils, steep slopes and nearby river banks. Additional measures (see Section 4.2. below) need to be applied should there be no alternatives for road alignments.
	 Protect slopes from erosion and landslides by the following measures: a. Plant locally available, fast-growing grass on slopes prone to erosion. These grasses help stabilize the slope and protect soil from erosion by rain and runoff. Locally available species possessing the properties of good growth, dense ground cover and deep roots shall be used for stabilization. b. Place interceptor ditches, particularly effective in the areas of high intensity rainfall and where slopes are exposed. This type of ditch intercepts and carries surface run-off away

	from erodible areas and slopes/before reaching the steeper slopes, thus reducing the
	potential surface erosion.
c.	
d.	steep slopes the material is unstable and will collapse slowly. Place a retaining wall at the lower part of the unstable slope. The wall needs to have
u.	weeping holes for drainage of the road sub-base, thus reducing pressure on the wall.
e.	
f.	
	ditches and to drain water away from the down slope.
	, I
E	rosion
a.	Wherever possible, road works must be located on previously cleared areas.
b.	5 5 1 1
с.	
	- clearly mark the areas to be cleared prior to commencing clearing;
	- chip or otherwise process cleared trees etc. for use as mulch on site.
	- progressively clear the site as works progress;
	 strip the topsoil immediately after clearing and stockpile onsite; cover the stockpiles when not in use;
	 cover the stockplies when not in use, install temporary erosion control measures and runoff/sediment control structures
	around cleared areas immediately after clearing;
	 reinstate cleared areas as soon as possible;
	 return cleared topsoil and mulch to approximately the same area of the road it came
	from; and
	- mulch batter slopes before planting.
d.	
	a. on clear, even, firm, well-drained ground and in locations where they can be
	clearly identified;
	b. away from drainage lines; and
	c. at least 30 m from a watercourse or mean high water mark.
e.	1
f.	1 5 1
g. h.	
	Latarworks during nearly rainfait are promoted.
a.	Where road works occur within a watercourse, machinery used for the works must not be
a.	Where road works occur within a watercourse, machinery used for the works must not be positioned outside the carriageway within the watercourse.
a. b.	positioned outside the carriageway within the watercourse. Natural runoff from undisturbed areas must be diverted around the site prior to site
	positioned outside the carriageway within the watercourse. Natural runoff from undisturbed areas must be diverted around the site prior to site disturbance.
	positioned outside the carriageway within the watercourse. Natural runoff from undisturbed areas must be diverted around the site prior to site disturbance. Protect drainage lines likely to be affected by road works with runoff/sediment control
b. c.	positioned outside the carriageway within the watercourse. Natural runoff from undisturbed areas must be diverted around the site prior to site disturbance. Protect drainage lines likely to be affected by road works with runoff/sediment control structures.
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b. c. d. e. f. g.	 positioned outside the carriageway within the watercourse. Natural runoff from undisturbed areas must be diverted around the site prior to site disturbance. Protect drainage lines likely to be affected by road works with runoff/sediment control structures. The direct discharge of stormwater from drainage structures, cuttings and embankments is prohibited unless sediment control structures have been installed on the drainage structures, cuttings and embankments. Runoff/sediment control structures must be maintained so that they continue to control sediment loads. Stormwater discharge from road drainage must not cause: erosion of the banks of a watercourse; or sedimentation of the receiving watercourse. Storage of fuels, lubricants, chemicals and other hazardous substances within 30m of a watercourse or mean high water mark is prohibited.
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b. c. d. e. f. g. h.	 positioned outside the carriageway within the watercourse. Natural runoff from undisturbed areas must be diverted around the site prior to site disturbance. Protect drainage lines likely to be affected by road works with runoff/sediment control structures. The direct discharge of stormwater from drainage structures, cuttings and embankments is prohibited unless sediment control structures have been installed on the drainage structures, cuttings and embankments. Runoff/sediment control structures must be maintained so that they continue to control sediment loads. Stormwater discharge from road drainage must not cause: erosion of the banks of a watercourse; or sedimentation of the receiving watercourse. Storage of fuels, lubricants, chemicals and other hazardous substances within 30m of a watercourse or mean high water mark is prohibited. Refuelling of machinery within 30m of a watercourse, mean high water mark or known groundwater source is prohibited.
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b. c. d. e. f. g. h. i.	 positioned outside the carriageway within the watercourse. Natural runoff from undisturbed areas must be diverted around the site prior to site disturbance. Protect drainage lines likely to be affected by road works with runoff/sediment control structures. The direct discharge of stormwater from drainage structures, cuttings and embankments is prohibited unless sediment control structures have been installed on the drainage structures, cuttings and embankments. Runoff/sediment control structures must be maintained so that they continue to control sediment loads. Stormwater discharge from road drainage must not cause: erosion of the banks of a watercourse; or sedimentation of the receiving watercourse. Storage of fuels, lubricants, chemicals and other hazardous substances within 30m of a watercourse or mean high water mark is prohibited. Refuelling of machinery within 30m of a watercourse or mean high water mark overnight or when not in use is prohibited.
b. c. d. e. f. g. h. i. j.	 positioned outside the carriageway within the watercourse. Natural runoff from undisturbed areas must be diverted around the site prior to site disturbance. Protect drainage lines likely to be affected by road works with runoff/sediment control structures. The direct discharge of stormwater from drainage structures, cuttings and embankments is prohibited unless sediment control structures have been installed on the drainage structures, cuttings and embankments. Runoff/sediment control structures must be maintained so that they continue to control sediment loads. Stormwater discharge from road drainage must not cause: erosion of the banks of a watercourse; or sedimentation of the receiving watercourse. Storage of fuels, lubricants, chemicals and other hazardous substances within 30m of a watercourse or mean high water mark is prohibited. Refuelling of machinery within 30m of a watercourse or mean high water mark overnight or when not in use is prohibited. The direct discharge waste into water is prohibited.
b. c. d. e. f. g. h. i.	 positioned outside the carriageway within the watercourse. Natural runoff from undisturbed areas must be diverted around the site prior to site disturbance. Protect drainage lines likely to be affected by road works with runoff/sediment control structures. The direct discharge of stormwater from drainage structures, cuttings and embankments is prohibited unless sediment control structures have been installed on the drainage structures, cuttings and embankments. Runoff/sediment control structures must be maintained so that they continue to control sediment loads. Stormwater discharge from road drainage must not cause: erosion of the banks of a watercourse; or sedimentation of the receiving watercourse. Storage of fuels, lubricants, chemicals and other hazardous substances within 30m of a watercourse or mean high water mark is prohibited. Refuelling of machinery within 30m of a watercourse or mean high water mark overnight or when not in use is prohibited. The direct discharge waste into water is prohibited. The direct discharge waste into water is prohibited.
b. c. d. e. f. g. h. i. j.	 positioned outside the carriageway within the watercourse. Natural runoff from undisturbed areas must be diverted around the site prior to site disturbance. Protect drainage lines likely to be affected by road works with runoff/sediment control structures. The direct discharge of stormwater from drainage structures, cuttings and embankments is prohibited unless sediment control structures have been installed on the drainage structures, cuttings and embankments. Runoff/sediment control structures must be maintained so that they continue to control sediment loads. Stormwater discharge from road drainage must not cause: erosion of the banks of a watercourse; or sedimentation of the receiving watercourse. Storage of fuels, lubricants, chemicals and other hazardous substances within 30m of a watercourse or mean high water mark is prohibited. Refuelling of machinery within 30m of a watercourse or mean high water mark or known groundwater source is prohibited. The direct discharge waste into water is prohibited. The direct discharge waste into water is prohibited.
b. c. d. e. f. g. h. i. j. k.	 positioned outside the carriageway within the watercourse. Natural runoff from undisturbed areas must be diverted around the site prior to site disturbance. Protect drainage lines likely to be affected by road works with runoff/sediment control structures. The direct discharge of stormwater from drainage structures, cuttings and embankments is prohibited unless sediment control structures have been installed on the drainage structures, cuttings and embankments. Runoff/sediment control structures must be maintained so that they continue to control sediment loads. Stormwater discharge from road drainage must not cause: erosion of the banks of a watercourse; or sedimentation of the receiving watercourse. Storage of fuels, lubricants, chemicals and other hazardous substances within 30m of a watercourse or mean high water mark is prohibited. Refuelling of machinery within 30m of a watercourse or mean high water mark overnight or when not in use is prohibited. The direct discharge waste into water is prohibited. The direct discharge waste into water is prohibited.
b. c. d. e. f. g. h. i. j. k.	 positioned outside the carriageway within the watercourse. Natural runoff from undisturbed areas must be diverted around the site prior to site disturbance. Protect drainage lines likely to be affected by road works with runoff/sediment control structures. The direct discharge of stormwater from drainage structures, cuttings and embankments is prohibited unless sediment control structures have been installed on the drainage structures, cuttings and embankments. Runoff/sediment control structures must be maintained so that they continue to control sediment loads. Stormwater discharge from road drainage must not cause: erosion of the banks of a watercourse; or sedimentation of the receiving watercourse. Storage of fuels, lubricants, chemicals and other hazardous substances within 30m of a watercourse or mean high water mark is prohibited. Refuelling of machinery within 30m of a watercourse or mean high water mark or known groundwater source is prohibited. The direct discharge waste into water is prohibited. The direct discharge waste into water is prohibited.
b. c. d. e. f. g. h. i. j. k. l.	 positioned outside the carriageway within the watercourse. Natural runoff from undisturbed areas must be diverted around the site prior to site disturbance. Protect drainage lines likely to be affected by road works with runoff/sediment control structures. The direct discharge of stormwater from drainage structures, cuttings and embankments is prohibited unless sediment control structures have been installed on the drainage structures, cuttings and embankments. Runoff/sediment control structures must be maintained so that they continue to control sediment loads. Stormwater discharge from road drainage must not cause: erosion of the banks of a watercourse; or sedimentation of the receiving watercourse. Storage of fuels, lubricants, chemicals and other hazardous substances within 30m of a watercourse or mean high water mark is prohibited. Refuelling of machinery within 30m of a watercourse or mean high water mark overnight or when not in use is prohibited. The direct discharge waste into water is prohibited. The direct discharge waste into water is prohibited. The discharge of waste within 30m of a watercourse or mean high water mark overnight or when not in use is prohibited. The direct discharge waste into water is prohibited. The use of herbicides within 150m of a watercourse or mean high water mark or known groundwater source is prohibited. The use of herbicides within 150m of a watercourse or mean high water mark is prohibited.
b. c. d. e. f. g. h. i. j. k. l. l. L. a.	 positioned outside the carriageway within the watercourse. Natural runoff from undisturbed areas must be diverted around the site prior to site disturbance. Protect drainage lines likely to be affected by road works with runoff/sediment control structures. The direct discharge of stormwater from drainage structures, cuttings and embankments is prohibited unless sediment control structures have been installed on the drainage structures, cuttings and embankments. Runoff/sediment control structures must be maintained so that they continue to control sediment loads. Stormwater discharge from road drainage must not cause: erosion of the banks of a watercourse; or sedimentation of the receiving watercourse. Storage of fuels, lubricants, chemicals and other hazardous substances within 30m of a watercourse or mean high water mark is prohibited. Refuelling of machinery within 30m of a watercourse, mean high water mark or known groundwater source is prohibited. The direct discharge waste into water is prohibited. The use of herbicides within 30m of a watercourse or mean high water mark or known groundwater source is prohibited. The use of herbicides within 150m of a watercourse or mean high water mark is prohibited.
b. c. d. e. f. g. h. i. j. k. l. l. L a. b.	 positioned outside the carriageway within the watercourse. Natural runoff from undisturbed areas must be diverted around the site prior to site disturbance. Protect drainage lines likely to be affected by road works with runoff/sediment control structures. The direct discharge of stormwater from drainage structures, cuttings and embankments is prohibited unless sediment control structures have been installed on the drainage structures, cuttings and embankments. Runoff/sediment control structures must be maintained so that they continue to control sediment loads. Stormwater discharge from road drainage must not cause: erosion of the banks of a watercourse; or sedimentation of the receiving watercourse. Storage of fuels, lubricants, chemicals and other hazardous substances within 30m of a watercourse or mean high water mark is prohibited. Refuelling of machinery within 30m of a watercourse, mean high water mark or known groundwater source is prohibited. The direct discharge of waste into water is prohibited. The direct discharge waste into water is prohibited. The discharge of waste within 30m of a watercourse, mean high water mark or known groundwater source is prohibited. The discharge of waste within 150m of a watercourse or mean high water mark or known groundwater source is prohibited. The use of herbicides within 150m of a watercourse or mean high water mark is prohibited. The use of hydrocarbons or other hazardous substances for dust suppression is prohibited. All fuels, lubricants, chemicals and hazardous substances must be clearly labelled.
b. c. d. e. f. g. h. i. j. k. l. l. L. a.	 positioned outside the carriageway within the watercourse. Natural runoff from undisturbed areas must be diverted around the site prior to site disturbance. Protect drainage lines likely to be affected by road works with runoff/sediment control structures. The direct discharge of stormwater from drainage structures, cuttings and embankments is prohibited unless sediment control structures have been installed on the drainage structures, cuttings and embankments. Runoff/sediment control structures must be maintained so that they continue to control sediment loads. Stormwater discharge from road drainage must not cause: erosion of the banks of a watercourse; or sedimentation of the receiving watercourse. Storage of fuels, lubricants, chemicals and other hazardous substances within 30m of a watercourse or mean high water mark is prohibited. Refuelling of machinery within 30m of a watercourse, mean high water mark or known groundwater source is prohibited. The direct discharge waste into water is prohibited. The direct discharge waste into water is prohibited. The use of herbicides within 150m of a watercourse or mean high water mark is prohibited. and Contamination The use of hydrocarbons or other hazardous substances for dust suppression is prohibited. All fuels, lubricants, chemicals and hazardous substances for dust suppression is prohibited.

	 d. Water discharged from bunded areas used to contain fuels, lubricants, chemicals and hazardous substances must pass through an oil trap. e. A spill kit must be kept on site. f. Employees and contractors must be trained on how to use the spill kit. g. Littering, including the dumping of waste, is prohibited. h. Waste must be put and stored in sealed bins. i. Waste must be disposed of at the nearest landfill or controlled waste dump. j. Where the site on which the road works are located does not have a landfill or controlled waste dump, waste must be disposed of at a location and in a manner determined by the relevant designated waste management operator. k. The surfaces of structures and trees adjacent to an area being treated with bitumen must be protected in such a manner as to prevent their being spattered or marred. l. Bitumen spraying during winds over 50km/hr is prohibited. m. All fill or materials being replaced must be free from contamination (e.g., weeds, seeds, oils, chemicals and other contaminants).
	 Hazardous Waste Management a. Burning of any plastics or other persistent organic pollutant is prohibited. b. All soils contaminated by fuels, lubricants, chemicals and hazardous substances must be treated as hazardous waste. c. Hazardous waste, including waste oil, must be collected and disposed of at a location approved by the Department.
Small bridges	 <u>Erosion protection:</u> The main method of slope and erosion protection is the construction of gabions (gravity walls that support embankments or slopes which have a potential to slip) and ordinary stone pitching. (a) Gabions. The slope of gabions should be in the ratio of at least 1 vertical: 2 horizontal. Flatter slopes may be adopted depending on the site terrain. The filling of the gabions should be from strong and competent rock which is laid very closely packed to maximize the weight. Bracing wire should be used to prevent the gabion bulging out. The bracing wire should be placed at each third of the gabion height. The gabions should be firmly anchored into the ground by founding the gabions below the expected scour depth level. In cases where stone pitching is not provided, the top layer should be covered by soil to encourage the growth of grass and the stabilization of the slopes (b) Stone pitching may be provided as the only erosion protection measure in those cases where the erosion potential is deemed minimal. Stone pitching is not very resistant to strong water current and is mainly used as the top finish on gabion walls.
Culverts	 (a) Place large stones at the outlet of the culvert to prevent erosion. (b) Keep the culvert inlets free from sand and gravel – the water must flow through the culvert. (c) Ensure that the water of the adjacent road sections can flow freely into the roadside ditch. (d) Where a culvert is placed within a watercourse, the: culvert must be aligned with the channel of the watercourse; opening under the carriageway must be placed as close to the centre of the channel as practical; invert of the culvert must be placed at or below bed level; and (e) The use of culverts with the following is prohibited: For a pipe culvert, a pipe diameter of less than 600mm; and For a box culvert, a box area of less than 600mm x 600mm.

3. Water Supply

Sub-Projects	Environmental Prevention/Mitigation Measures
Wells (deep/shallow)	 a. Should be equipped with slab around the well for easier drainage, a crossbeam and a pulley to support the use of only one rope and bucket for collecting water. One rope and bucket are more hygienic for the well and water. b. Steel rungs (placed inside wall of a deep well) are essential for maintenance of a well or in case of an emergency. c. A groundwater well usually has a wide-open water area. It is necessary to provide a cover/roof/wire mesh on top to protect this area from falling leaves or debris.

	 d. Wells should always be located upstream of the septic tank soak-away. Minimum 10 m distance from septic tank is recommended as it can influence the quality of the drinking water when it is too close (health risk). e. Before using a new water source, take samples for testing; minimum key parameters for water testing: total coliform, pH, Arsenic, Nitrate, color, turbidity, and temperature.
Rainwater harvesting	 a. Rainwater storage reservoir should be intact, connected to roof gutter system, with all faucets and piping intact. b. If distribution pipes are attached into the storage reservoir, install the distribution pipes 10cm above the storage/tank bottom for better use of the storage capacity. c. Cover must be fitted tightly onto the top of the storage reservoir to avoid overheating and growth of algae (from direct sunlight), and to prevent insects, solid debris and leaves from entering the storage tank. d. A ventilation pipe with fly screen should be placed in the cover to help aerate the tank/reservoir which is necessary for good water quality. e. Roof gutters need to be cleared regularly, as bird and animal faces and leaf litter on roofs or guttering can pose a health risk if they are washed into the reservoir tank. f. Reservoir tanks need an overflow so that in time of really heavy rain, the excess water can drain away. The overflow should be designed to prevent backflow and stop vermin/rodents/insects entering the system. A good design will allow the main storage tank to overflow at least twice a year to remove buildup of floating sediment on the top of the stored water and maintain good water quality.
Springwater	 (a) Every spring capture should be equipped with a filter and a sand trap. Add a wall between the inflow and the outlet pipe to create chamber for settling out sand; build the wall with a notch (lowered section) for controlled flow. Sand must be cleaned out periodically (O&M). (b) Collection basin for spring capture needs to have a perforated PVC pipe (holes diameter 2mm) to be used as a screen for the water intake. Alternatively, a short pipe with wire mesh (screen) around the open end should be provided. (c) Collection basin needs to have a fence to protect the spring from public access and risk of contamination; and a roof/cover over the spring to prevent leaves or other debris from entering the basin.
Pipelines from water sources	 Preventing contamination at water sources: a. Build a structure with roof over the water source to prevent leaves or other debris from entering into the basin. b. A fence is needed to protect the water sources (springs particularly) from public access and risk of contamination. c. The sand/gravel filter traps sediment before the spring flow enters the collection chamber and has to be changed during periodical maintenance. Pipe Laying: a. PVC water transmission and distribution piping need to be buried underground (coverage 50cm minimum) to prevent pipe against external damage (e.g. passing vehicles, solar UV radiation, etc.). b. Exposing PVC pipe to UV radiation causes the plasticizer in the PVC pipe to evaporate resulting in loss of integrity and becoming brittle. c. Pipe shall be laid in a straight line, over a constantly falling slope. d. When conditions do not allow piping to be buried (i.e. pipe is used above ground), then metal pipe must be used, and supported/braced as excessive movement may lead to leaks and breaks. e. Outlet pipes and fittings from water storage/basin shall not be PVC pipe due to exposure to solar UV/sunlight. Metal piping and fittings are preferred.

4. Small-scale Irrigation

Sub-Projects	Environmental Prevention/Mitigation Measures	
Small-scale irrigation	 a. Masonry walls (along the road) or stone riprap should be built to prevent erosion on a sloped bank. b. May use bamboo as bank protection along the rice fields as the loads are low. c. A bar screen (vertical bars; about 20mm diam. With an approximate 10 cm clear distance for easy maintenance) is essential in front of any inlet structure (upstream) to prevent large objects and debris blocking the irrigation canal. The angle between the bottom of the canal and the screen shall be between 45 to 80 degrees. 	

5. Sanitation Facility: Rehabilitation or Minor Extension of Sanitation Facilities

Sub-Projects Environmental Prevention/Mitigation Measures			
Public latrines/toilets	 a. All toilets must have a septic tank to provide primary treatment of faucal waste. b. PVC pipe used to connect pour-flush toilet to a septic tank must be buried underground or covered over (with cement) for protection and to prevent exposure to sunlight. c. Metal pipe is a preferred choice to be used as the gas vent pipe on septic tanks. <u>Never</u> use PVC pipe as it is unable to withstand long-term exposure to sunlight. d. Septic tanks must have a vent pipe to prevent the buildup of gas inside the chamber and shall have a 'manhole' that provides access inside the tank if needed. e. A toilet should be at least 20 meters from water sources (well, spring, river). 		
Septic Tank	 a. Septic tanks must have a vent pipe to prevent the build-up of gas inside the chamber and shall have a 'manhole' that provides access inside the tank if needed. b. Ensure that the septic tanks have two chambers: first chamber is for settling of sludge, and the second chamber is for aerobic treatment. These chambers will generally treat wastewater better. Partially treated septic tank effluent can pollute groundwater and surface water. c. Do not discharge septic tank effluent to an open drain or other surface water. The effluents need to be treated before final disposal. This may be achieved through: (i) an underground leach field, (ii) a vegetated leach field, or (iii) a pit for soaking away. d. Septic tanks must be inspected periodically, and the accumulated sludge must be emptied (by pumped out) every few years for the tank to continue to function properly. 		

ECoP #2. Agriculture and Livelihood Development

1. Farming Activities

Environmental Prevention/Mitigation Measures		
a. Avoid introduction of invasive species.		
b. Use sustainable agricultural practices / approaches / technologies (e.g., Agroforestry		
Practices, Polycultures and Crop rotation, Integrated Pest Management (encouraging the predators of crop-eating pest insects such as birds and bats), etc.)		
c. Reduce top-soil losses from erosion and the reduction in soil fertility (Cover Crops and		
Mulches (Establishing leguminous ground cover and applying plant residues), Grass Barriers (planting grass in strips along the contour lines), etc.)		
d. Induce conservation and efficient use of water.		
e. Reduce misuse of agrochemicals, contributing to a reduction of toxic substances in soil and water.		
f. Reduce usage of pesticides and promote integrated pest management approaches recommended by the national regulations.		
g. Reduce, recycle and reuse the agricultural waste (natural, animal, plant waste)		

2. Husbandry

Sub-Projects	Environmental Prevention/Mitigation Measure		
Sub-Projects Livestock Breeding	 a. Fence off water bodies from gazing animals. b. Increase the carbon to nitrogen ratio in feeds to reduce methane and nitrous oxide production c. Promote efficient storage, handling and use of feed by maintaining records of feed purchases and livestock feed use. d. Use covered or protected feeders to prevent feed from exposure to rain and wind. e. Consider mixing of waste feed with other recyclable materials destined for use as fertilizer, or else consider incineration or land disposal options f. Grind feed to increase utilization efficiency by the animals, allowing the use of less feed and thereby reducing the amount of manure generated (as well as increasing the production efficiency) g. Ensure production and manure storage facilities are constructed to prevent urine and 		
	efficiency)		

h.	Control the temperature, humidity, and other environmental factors of manure storage to
11.	reduce methane and nitrous oxide emissions. This may involve use of closed storage tanks,
	or maintaining the integrity of the crust on open manure storage ponds / lagoons
i.	Keep waste as dry as possible by scraping wastes instead of, or in addition, to flushing with
	water to remove waste;
j.	Locate manure stacks and urine away from household area, water bodies, floodplains,
	wellhead fields; or other sensitive habitats
k.	Regularly collect and store manure for composting and later application to fields to reduce
	noxious odor and to limit spread of pathogens.
1.	Conduct manure spread only as part of well-planned strategy that considers potential risks
	to health and the environmental due to the presence of chemical and biological agents as
	well as nutrient balance in an agricultural setting. Ensure that manure is applied to
	agricultural land only during periods that are appropriate for its use as plant nutrient
	(generally just before the start of the growing season)
m.	Regular cleaning of livestock sheds and feeding pens.
n.	Reduce the amount of water used during cleaning (e.g. by using high-pressure, low-flow
	nozzles)
0.	Improve the productivity and efficiency of livestock production (thus lowering the methane
0.	
	emissions per unit of livestock) through improvements in nutrition and genetics, use
	mechanical controls (e.g. traps, barriers, light, and sound) to kill, relocate, or repel pests
p.	Consider covering manure piles with geotextiles (which allow water to enter the pile and
	maintain composting activity) to reduce fly populations
q.	Use predators to control pests. Protect natural enemies of pests by providing a favorable
	habitat (e.g. bushes for nesting sites and other indigenous vegetation) that can house pest
	predators
r.	Reduce mortalities through proper animal care and disease prevention
s.	Any sick or injured animals should be treated or cared for to alleviate pain and distress as
	soon as practically possible, including being isolated or humanely destroyed if necessary.
t.	Animals should be confirmed dead before disposal, and any still alive should be euthanized
	immediately. Dead animals should be removed promptly and disposed of appropriately.
u.	Identify and contain sick animals and develop containment and cully procedures for
	adequate removal and disposal of dead animals in accordance with the guidance from the
	national regulation.

APPENDIX 8. POTENTIAL NEGATIVE ENVIRONMENTAL IMPACTS AND MEASURES					
Project typologies	Potential Impacts	Mitigation Measures	Instruments	ESSs	
	1.1. Impact on biodiversity to sensitive locations ('hotspots') through inclusion within SLC/ICLT boundaries	 SLC sites. implement LASED's well- established spatial planning procedure. It includes identification of biodiversity hotspots¹³ and exclude from land allocation, taking into consideration the environmental carrying capacity and agro-ecosystem analysis; establishing buffer zone between project sites and biodiversity hotspots in any case where the hotspots are adjacent to SLC land. ICLT sites. Implement three-phase process for IPs to obtain collective land titles. This includes elements similar to the ones applied under new SLC (i.e. site level screening, EA, location-specific ESMP, sub-projects level screening process). Based on environmental screening at each ICLT site, the project will be able to identify local natural resources and significant conservation areas. Once identified, the project will facilitate discussion with mandated authority to agree on the role for IP in management of these areas. 	 A. Screening process; using the following tools: 1. Provincial level: (a) satellite imagery and aerial photography (b) IBAT (c) GIS (d) Maps from Forestry and Env ministries (and other line ministries) 2. District level: (a) Technical Guidance notes to validate mapping (b) Agro-ecosystem analysis (c) Environmental carrying capacity 3. Other measures include: An independent environmental audit to review the final LUP WB env specialists to conduct a due diligence through a random site check prior to finalizing of the LUP process. 	ESS1 ESS6 ESS10	
	1.2. Induced negative impact from development: Damage to hotspots that are outside or excluded from the SLC land, but that suffer increased exploitation as a result of easier access after SLC and / or is established	Enhance risks management of significant conservation areas and support the affected communities in sustainably managing their natural resources and/ significant conservation areas. The risks management are to: 1. Identify local NR / significant Conservation Areas through LUP screening 2. Establish buffer zone and biodiversity corridor 3. Awareness raising for conservation of biodiversity 4. Planting trees in common areas 5. Included in the Commune Development Plan 6. Provide mechanism and supports to help the affected communities in sustainably managed their natural resources.	 Screening Location-specific ESMP that accommodates the risk management measures 	ESS1 ESS6 ESS10	
	1.3. Air pollution from burning, water pollution and land pollution resulting from inadequate solid waste management at SLC residential sites	Develop and Implement effective solid waste management system at each site	Location-specific ESMP	ESS1 ESS3 ESS10	

¹³ Such as legally protected areas, Wildlife Reserve, Community forests, remnant forests or habitats for protection and conservation, biodiversity corridors, and natural streams.

	1.4. Health impacts of water supplies contaminated by upstream activities or natural occurring arsenic	Site screening, water supply testing	Location-specific ESMP	ESS1 ESS4 ESS10
	1.5. Injuries resulting from ERW	Risk Assessment per site by consultation with CMAA / CMAC	 Screening Location-specific ESMP 	ESS1 ESS4 ESS10
	1.6. Infection by water- borne and vector-borne diseases due to settlement	Awareness raising, WASH activities	Location-specific ESMP	ESS1 ESS4 ESS10
	1.7. Flood damage from failure of larger dams upstream of project sites	Site screening	Screening	ESS1 ESS4 ESS10
	1.8. Exposure of project beneficiaries to climate risk (floods and droughts)	Site screening	 Screening Location-specific ESMP 	ESS1 ESS4 ESS10
2. Community Infrastructure Development	2.1. Construction-related impacts such as noise, dust, sedimentation, erosion, waste disposal, management of storm water, community and workers health and safety	Environmental risk management instruments that are integrated into EHS specification in tender docs	1. LWCP 2. ESHSS that includes in all works contract documents 3. Subproject ESMP that includes ECoPs and OHSP	ESS1 ESS2 ESS3 ESS4
	2.2. Health and safety of project personnel travelling to remote sites	Adopt and implement OHS that is integrated into tender docs	1. LWCP 2. OHSP	ESS1 ESS2
	2.3. Depletion of groundwater surface water sources by inefficient or unsustainable exploitation	Water resource assessment for each project location, no irrigation development without confirming that will not have negative impacts on existing users and / or ecosystem services	Location-specific ESMP (prepared at the site level risk management)	ESS1 ESS3 ESS10
	2.4. The cultural spaces may include forests, spiritual forest-land, residential and agricultural lands	Mapping of known cultural heritage, Implementation of the Forest Law in regard to the recognition of the traditional use and practice of the local communities as protected forest serving cultural purposes (religious and / or spirit forest)	1. CHPF 2. Location-specific ESMP	ESS1 ESS8 ESS10
	2.5. Flood damage from failure of project supported irrigation or small dams	Ensure safe design	 Screening Location-specific ESMP 	ESS1 ESS4 ESS10
	2.6. Health impacts of non- drinking water standard water supplies due to (1) natural arsenic; (2)	All water sources to be laboratory tested. In case of arsenic or chemical contamination, MRD ¹⁴ protocols to be applied and alternative drinking water sources provided	Location specific ESMP (surface water sources to be tested during site screening) Sub-project ESMP	ESS4

¹⁴ Aligning with MRD's national standards, the following measures would be applied:

⁻ new water supply sub-project conduct water testing including Arsenic and compare against National standards;

⁻ communicate water quality testing results to the villagers and inform them whether the water is suitable for drinking;

<sup>provide advice on basic treatment options in case parameter/s exceed standards limit; Some village may choose to implement drinking water treatment sub-project in the sub-sequent cycle.
In case Arsenic is higher than the standards limit, treatment to remove Arsenic is not recommended due to high installation costs, and</sup>

⁻ In case Arsenic is higher than the standards limit, treatment to remove Arsenic is not recommended due to high installation costs, and high maintenance requirements as well as lack of capacity to operate and maintain the system. Instead, substitution of alternative low-arsenic sources of drinking water such as rainwater or spring water, surface water where available and appropriate would be more situatable solution. Alternative water supplies such as surface water should be tested to ensure compliance with drinking water standards

	chemical pollution; (3) biological contamination	In case of biological contamination, wells to be disinfected and re-tested		
3. Agriculture & Livelihood Development	3.1. Impact ¹⁵ on health and safety of project-affected communities, particularly in regard to the safe use and handling of pesticides and chemical fertilizers	Implement ESMF including MAFF's GAP Guideline and Awareness raising to Farmers on safe use and handling of agriculture chemicals.	 Location-specific ESMP ECoP provisions (if not already covered by CamGAP) and OHSP that are integrated into the contractor's tender documents 	ESS1 ESS3 ESS4 ESS10
	3.2. Water contamination from inappropriate use of agriculture chemicals	Implement ESMF including Awareness raising	 Location-specific ESMP ECoP/CamGAP (whichever is stricter) 	ESS1 ESS3 ESS10
	3.3. Environmental pollution from non- biodegradable solid waste from agriculture activities	Implement ESMF including Awareness raising, SWM measures	Location-specific ESMP, ECoP/EMP	ESS1 ESS3 ESS10

¹⁵ The project will not finance these hazardous materials; however, transformation of land ownership may potentially introduce new famers to the materials.