# **Environmental Monitoring Report**

1st Semiannual Report (November 2017 to January 2018) March 2018

Regional: Greater Mekong Subregion: Livelihood Support for Corridor Towns – Lao PDR Component

Prepared by the Lao-ASIE Consultant Group (Project Safeguard Team) for the Asian Development Bank.

### NOTE

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

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# Environment Safeguard Monitoring Report

(November 2017 to January 2018)

Greater Mekong Sub region: Livelihood Support for Corridor Towns Project (ADB/JFPR No. G. 9173)

SAVAN NIGHT MARKET IMPROVEMENT PROJECT

Prepared by: The Project Safeguard Team

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### ACRONYMS

ADB Asian Development Bank

Construction Supervision Services CS

CEMMP Contractor's Environmental Management and Monitoring Plan

DED

Detailed Engineering Design
 District office for Natural Resources and Environment

DoNRE : District office for Natural Resource
JFPR : Japan Fund for Poverty Reduction LFNC Lao Front for National Construction LPDR Lao People's Democratic Republic

M&E Monitoring & Evaluation : Microfinance Institute MFI

: Market Management Committee MMC : Memorandum of Agreement MOA MVA Market Vendors Association

MM Night Market

VMV Night Market Vendor Project Management Unit PMU

PONRE Provincial Office for Natural Resources and Environment

 Provincial Public Works and Transport PPWT SED Social and Environment Department

: Social Safeguards SSG

TNA Training Needs Assessment VRC : Village Redress Committee

### I. INTRODUCTION

### 1.1 Background

- 1. Kaisone Phomvihan District is the biggest District and being the Capital City of Svannakhet Province with the population of 84,000 people (2015 statistic). Savannakhet Province is one of the 3 poorest Districts in the region including Savannakhe in Lao PDR, Phatarbonge District and Dongha in Vietnam. As being the central city of the transportation routes of Vietnam, Lao PDR and Thailand Savannakhet having the strong point and a great opportunity for people, especially local sellers of Savannakhet to be benefitted from the project to increase their household income.
- The main aims of the project are to rehabilitate the existing infrastructure and improve market facility to increase livelihood development supports to the local community. Especially women to increase their income and well-being through selling of food and related services in the heart of the town.
- The Night Market improvement project is under financial supporting by Japan Fund for Poverty Reduction (JFPR) Grant No. 9173 Lao PDR GMS Livelihood Support for Corridor Towns. The Project owner is the Department of Road and Transport (DPWT) of Savannakhet Province. The Project contract has been awarded to "Nalux Construction Co., Ltd" for implementation with LAO-ASIE Consultant Group as Consultant to the project.

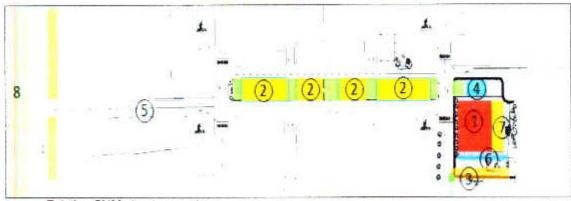
### 1.2 Project Description

- 4. The project site is an existing Savan Night Market located in front of the Christian Church at Xayaphoum Village, Kaisone Phomvihan District Savannakhet Province. The place is usually provided food and sweets for sale mostly during the night and even late night in town.
- The project rehabilitation components are included:
  - Construction of Market Management Office (Market Office & Ware House under the supervision of the Environmental Social Division (ESD) of DONRE/PONRE
  - 2) Improve/rehabilitate of Night Market stalls sites and yards
  - Rehabilitate of toilets, water supply and drainage system for waste Water from the Night Market including temporary storage tank of water use by workers in temporary camp.

Figure 1: Project Location



Figure 2: Illustration of existing Night Market infrastructure



Existing SNM structure system

- 1. Clothes shop Zone
- 2. Food & Juice Shops Zone
- 3. Parking Area
- 4. Play Ground Walking Street
- 5. Office stores & Toilet
- 6. Water Fall
- Future Plan

### 1.3 Purposes of the Report

- Environmental Safeguard Monitoring Report presents the results of the regular field monitoring activities conducted by project site supervision during the period of December 2017 to January 2018.
- 7. The main purposes of this environmental safeguard monitoring report is (i) to comply with ADB requirement (ii) to inform the compliance status of the EMP implementation progress, whether any adverse impacts have been solved properly and unsolved issues have been planned for further solution in the next period.

### 1.4 Report Preparation

8. The report was prepared by Senior Environmental safeguard officer of the Lao-ASIE Consultant Group, the contractor for the project. The report is based on the collection of weekly field reporting by the site supervision consultant, who perform day to day field supervision for construction works including safeguard monitoring and the results of recent safeguard monitoring team from Lao-ASIE Consultant Group conducted in the first week of December 2017. This report has been reviewed by senior Environmental Specialist of Lao-ASIE Consultants Group prior for submission to ADB.

### II. PROJECT PROGRESS

### 2.1 Project implementation progress

### 2.1.1 Project component progress

- The contract awards for Nalux Construction Co., Ltd. have been taken place in early November 2017 prior for implementation of physical construction activities in the middle of November 2017. The contract period is 5 months started from 15 November 2017 to 28 March 2018.
- 10. The project component comprises of the following activities:
  - Construction of Market Management Office (Market Office & Ware House under the supervision of the Environmental Social Division (ESD) of DONRE/PONRE
  - 2). Improve/rehabilitate of Night Market stalls sites and yards
  - 3) Rehabilitate of toilets, water supply and drainage system for waste Water from the

Night Market including temporary storage tank of water use by workers in temporary camp.

11. Project Progress in the period of 1 month (Mid December 2017 to Mid January 2018). The project progress can be summarized as follows

### Market Office and ware house

- Completed masonry work for Office wall and warehouse
- Completed Installation of frames for doors and windows
- Completed top concrete (NM yard on large yard)
- Completed concrete pavement for Office floor

### Electrical work

Switch board installation for each stall

### Market ground construction and landscaping works

- Completed removal of old structures
- Completed Sand filling, watering and compacting
- Completed Concrete Basement 85%
- Completed grass landscaping
- Completed tree planting work

Construction Activities	[10] [10] [10] [10] [10] [10] [10] [10]		Actual Comple	tion	Compare to Plan
Night Market Improvement	(LAK)	%	(LAK)	%	%
	2,343,256,107.50	35	1,181,704,055.01	50.43	15.43
Total	2,343,256,107.50	35	1,181,704,055.01	50.43	15.43

- 12. Plan for the next month: target at 15.00% achievement
  - Concrete work construction for each stall
  - Completion of Electrical network and installation of switch boards for each stall
  - Complete top concrete structure
  - · Plastering wall for office and warehouse
  - · Complete roofing structure for office and warehouse
  - Doors and windows installation

### Updated Implement schedule 2.2

The Schedule for completion may be shorter as compare to current progress.

# Environmental safeguard monitoring report

# III. IMPLEMENTATION OF EMP AND MONITORING PLAN

# 3.4 14. Under the obligations of contractor's for EMP, the safeguard performance monitoring required to conduct for both construction and operation phases. This environmental safeguard monitoring activity is to comply with the EMP and its performance status of current conditions and further issues to be solved in the next monitoring period as described below: **EMP and Monitoring Plan Objectives**

Table 1: Project EMP

Construction						Pre- construction	phase
Initiate Contractor's EMP		S removal	Consultation/ Disclosure, & community	Obtaining approval		Dotall designs	activities
Prevent and minimize impacts	Engagement of environmentally-irresponsible contractors for civil works.	Injured worker or public	grievances	Overall environmental concerns/impacts of the Project	Damage to existing structures	Ineffectiveness of service of completed works due to inadequate consideration during design of (any one or combination of) the following     Climate change:     Vulnerability to other natural hazard:     Relevant feedback from stakeholders	Environmental
Contractor to submit Contractor's Environmental Management Plan (CEMP) for approval, addressing at a minimum the bid document EMP	EMP included as part of bidding documents.  EMP to be appended to the contract for basis for compliance.  Contract to require contractor's submission of monthly EM Report.	Obtain the appropriate GoL certification on UXO (certificate of UXO clearance or no UXO clearance needed)	Pre-construction consultation with affected people, including dissemination of project level Grievance Redress Mechanism (GRM)	IEE submitted to EA/IA for approval and endorsement to ADB. IEE submitted to DoNRE for Approval.	The design should maximize benefits or avoid/minimize impacts on assets	besign to incorporate relevant issuerns, and experience of lo etholders pertaining to the Project are ng with climate change events, as raising consultations.	
Construction	applicable	Construction site	sita	applicable	applicable	applicable	
Constructi on running cost	cost	Project	10,000	cost	Design	Design	cost
Contractor	T NAC	PMC	DMC	PMC	consultant	Design consultant	Responsibilities Implement S
/DoNRE	ADH	92	AD8		B PMU/AD	BMU/AD	Supervis

	hauling of construction materials	Consultation/ Disclosure, & community engagement	Baseline monitoring
Noise/ vibration	Physical/chemical environment Dust/suspended particles generation from - Earthworks - Stockpile of fine aggregates, sand, cement - Transport of aggregates, cement for disposal, and wastes - Movements of construction vehicles/equipment	Community grievances	monitor against
Schedule construction activities to minimize disturbances: Avoid construction in the evening when the market is open (17:00-22:00) Prohibit construction in the night (10:00 pm-6:00 am) to avoid disturbance to residences. Select quiet equipment and working methods as much as possible. Provide prior notification to the local community on schedule of construction activities. Implement noise monitoring as recommended in monitoring plan.	Strictly implement dust control measures such as periodical water spray.  The contractor shall maintain construction equipment in adequate working condition.  The driver of construction vehicles must comply with speed limits to minimize road dust.  Prepare and strictly implement a traffic management plan around construction site,	Ongoing consultations and management of Grievance Redress Mechanism (GRM).	Establish noise baseline as recommended in monitoring plan Establish water quality baseline as recommend in monitoring plan
In construction site	In construction site	Construction site	site
Construction on mobilization cost	Constructi on running cost	Project managem ent cost	on running cost
Contractor	Contractor	PMU/GPP	Contractor
DoNRE	/Doure	ADB	/DoNRE

Traffic management			
Traffic nuisance	Wastes	Soil pollution	water pollution and management of storm water and wastewater
Plan construction-related activities to reduce impacts on businesses to the extent possible. For example construction machinery and site works related equipment to avoid blocking access to the Market as well as shops in the evening.  Schedule construction vehicle activity during	Prepare and strictly implement a proper waste management plan.  The waste management plan should be approved by the local authority in advance of construction works.  The contractor shall provide such as portable toilets and garbage bins to ensure that domestic wastes generated by construction personnel are well managed.  Office building for the contractor shall be provided with toilets and septic tanks to handle domestic sewage temporary sanitation facilities	Diesel and waste oil shall be handled and stored carefully to prevent leakages or spills. Waste oil shall be collected and stored in drums, and disposed of at a site approved by the local authority, and raised off the ground, and covered to keep rain out and surrounded by a bund to contain spills and simplify cleanup operations.	Wastewater from workers must be collected and treated before being discharged into the environment. The wastewater septic tank facility in the workers' camp shall be properly maintained.  Waste water produced must be collected, separating oil and solid matters before being discharged into the environment Regular cleaning up the site, limiting contaminants dissolved in rainwater. Implement water quality monitoring as recommended in monitoring plan.
construction site	In construction site	In construction site	construction site
Constructi on mobilizatio n cost	Constructi on mobilizatio n cost	Construction mobilization rost	n cost
Contractor	Contractor	Contractor	Contractor
DONRE	DONRE	DONRE	DoNRE

management	Utility disruption management	
II dino i nuscino	Loss or disruption of utilities such as water supply and electricity	Management of health safety and sanitation, protection from fire and explosion
impacts on businesses to the extent possible. For example construction machinery and site works related equipment to avoid blocking access to the Market as well as shops in the evening.  Schedule construction vehicle activity during light traffic periods.  Create adequate traffic detours, and sufficient signage & warning lights.  Enforce speed limits, and create dedicated construction vehicle roads or lanes. Inform community of location of construction traffic areas, and provide them with directions. Establish pedestrian crossings away from construction areas.	Establish agreement with Electricite' Du Lao (EDL). Savannakhet Branch to execute the removal or relocation of electricity works. Develop carefully a plan of days and locations where outages in utilities and services will occur, or are expected. Contact local utilities and services with schedule, and identify possible contingency back-up plans for outages. Contact affected community to inform them of planned outages.  Try to schedule all outages during low use time.	The contractor shall establish Health and Safety Management Plan and comply with it during implementation to provide safe working conditions.  Site selection for construction camps for workers installation of water supply pipelines, sewerage systems, solid waste management, and storm water drainage Selection of toilet facilities for camps
construction site	construction site	in construction site
on mobilizatio n cost	Constructi on mobilizatio n cost	Constructi on mobilizatio n cost
Connacion	Contractor	Contractor
DONRE	DONRE	Donre

	Operation
	Daily operation
Noise	Solid waste
Market operations will generate noise. Noise The market level monitoring should be conducted to meet site national standards.  13.2 In case the noise level is higher than the standard limit, find ways in consultation with relevant stakeholders to minimize such issues.	Prepare and strictly implement a proper waste The management plan.  The waste management plan should be approved by the local authority in advance of market operation.
site	The site
market	market
ı	r
/MMC	Vendors /MMC
/Donne	UDAA

### 3.2 Roles and Responsibility for EMP and Monitoring Implementation

- 15. The project has a site supervision consultant who is dealing with both daily Engineering supervision and on-site environmental monitoring. His responsibility is monthly report to in charge persons at Contractors' Consultant office, which is "Lao-ASIE Consultant Group". The safeguard officer at the Lao-ASIE Consultant Group having the roles and responsibility to compile all monthly monitoring report for reporting of environmental safeguard monitoring report and the senior Environmental Safeguard Specialist of the Lao-ASIE Consultant Group will review the report prior for submission to ADB.
- 16. In case of an Emergencies such as accident or incidents cases the site supervision must immediately take action for solution and report to Contractor and safeguard officers at the Contractor's Consultant for further support and solutions.
- 17. The site supervision consultant is holding Engineering supervision as the main roles, and he has been assigned as onsite safeguard monitoring as an additional assignment. The field safeguard monitoring forms has been provided with sufficient training by the safeguard officer of Lao-ASIE Consultant Group.

Table 2: Roles and Responsibilities of the in charge persons

# Greater Mekong Subregion: Livelihood Support for Corridor Towns Project Work Schedule for 2017-2018 (Svan Nigh Market)

			Name of	Year-	2017		ear-201	.8	Remarks	
No.	Activity	Actor	Person	Nov	Dec	Jan	Feb	Mar	Keniorks	
î	Review of Work Schedule and Diganization leevew of civil work constructio's work schedule and plan for equipment, materials, manpower, methods used, and compliance with EMP and GAP measures?	LAC	Mr Rounpasong Sinterwong						Structure /Civil Engineer	
1.1	Environmental Saleguard Monitoring Planning	LAC	Mr. Chaothip, Mr. Phanthong						Safeguard Monitoring officer Environmental Specialist	
2	Supervision and Monitoring (checking and measuring the quality of completed and ongoing works, monitoring progress, compliance with environmental measures, worker health and safety payments and financial management, monthly and midterm progress reports)	LAC	Mr. Thongkhao Koulabsavanh						Gvl) Engineer	
2.1	Daily on site supervision, progress monitoring and reporting to support monthly progress reporting	LAC	Mr. Chormea Tongxong						Site supervision Consultant	
	On site supervision and management, monitoring and reporting to contractor	Nalux	Mr. Pay						Contractor's site supervision	
7.2	Environmental Sateguard Monitoring and Reporting	UAC	Mr. Chanthip, Mr. Phanthong						Safeguard Monitoring officer Environmental Specialist	
3	Certification and Completion Report (final inspection and "nanding over" certificate, interim and final completion reports)	LAC		THE COLUMN	100				eks of completion of works. The final shifty period (see below).	
4:	AFD/ANO Procurement of Access Track (Batch- 3)	SARI	PAFO/DAFD/NPCO /AFD							
5	Defencts Liability Inspection and Training Inspection of project works and assist in training of project beneficiaries)	LAC		103.7XXX	tabley perio	d will cover	12 months a	der completi	on of project works unless otherwise	

### 3.3 EMP implementation

18. The Environment Management Plan above had been implemented by sub-contractor under supervision of the site supervision from Lao ASIE Consultant and one of the Contractor's site management officers. The construction works is in a good progress without any serious issues in regards to adverse impacts to the local community. For workers all are supplied with necessary PPE for the purposes of safety, the temporary camp is located on site with existing toilet facility, no waste water discharged, all construction solid waste was collected by concerned authority. no solid waste was improper treated on-site and no complaints from community for the adverse impact. The only thing that they wish is when the market will complete and they are awaiting to use such improve facilities.

### 3.4 Environmental Management and Monitoring Record and Reporting

19. Since the physical project activities have been started in the middle of November 2017, the line agency reporting has been done by the site supervision, which is based on site for both engineering and safeguard issues to concerned Engineers and safeguard officer at the Contractor's Consultant office in Vientiane. The written records, photos and necessary reporting material have been collected till Mid January 2018 to support this monthly environmental safeguard monitoring report.

### 3.5 EMP and Monitoring Implementation Progress

Table 3: EMP and its Compliance status

EMMP Requirement	Compliance Status (Yes, No, Partial)	Comment or reasons for Non-Compliance	Issues for further action			
CONSTRUCTION PHASE						
Prevent and minimize impacts	Yes	Being comply with				
Environmental baseline on Noise and water quality	Partial	Not establish yet but some on Noise and water quality data has been collected	Still not yet established by contractor under supervisions of PMU/DONRE			
Community grievances	Yes	Grievances can be lodged through Village Authority who acted as Village Redress Committee	No issues raised so far			

EMMP Requirement	Compliance Status (Yes, No, Partial)	Comment or reasons for Non-Compliance	Issues for further action
Physical/chemical environment dust/suspended particles generation from - Earthworks - Stockpile of fine aggre- gates, sand, cement - Transport of aggregates, cement for disposal, and wastes - Movements of construction vehicles/equipment	Partial	Minor dust generation and noise from transport vehicles movement	Regular monitoring and advise by site supervision consultant is needed
Noise/ vibration	Yes	Being comply with	
Water pollution and management of storm water and wastewater	Yes	Being comply with	
Soil pollution	Yes	Being comply with	to and a second
Wastes	Yes	Being comply with	
Traffic nuisance	Yes	Being comply with	
Loss or disruption of utilities such as water supply and electricity	Partial	Conflict from Simultaneous use of Electricity between contractor and community	Agreement with EDL and Nampapa(wat er supply) Savannakhet,     Well inform community as Existing Vendors
Management of health safety and sanitation, protection from fire and explosion	Yes	Being comply with	
Emergency Responses	Yes	Being comply with	
OPERATION PHASE			
Solid waste	To be planned i	n the next stage	
Noise	To be planned i	n the next stage	

### 3.6 Public Consultation and Disclosure and Grievance Redress Mechanism

- Number of discussions and meetings were organized with community, DPWT, PMU for the plan implementation during the second month of project implementation.
- 21. Coordination meeting with PMU officers for team introduction and arrangement for on-site stakeholders meeting participated by the Contractor's site supervision Engineers, Safeguard officers from Lao-ASIE Consultants Group, village authority and the vendors concerned. The consultation also includes the meeting with female groups to hear and understand the facts from them through verbal approach and interview forms.
- 22. The grievance Redress Mechanism has been informed the participants, especially the local villagers and venders if any. The complainants can inform the village authority at the first place prior for the discussion and solution. If the results of the solution is not satisfy affected household they can proposed for further step, which is District or Provincial levels.
- The Chart for Grievance Redress Mechanism has been attached in the first month report (Figure 3: Grievance Redress Mechanism).

### IV. CONCLUSION AND RECOMMENDATIONS

### 4.1 Compliance with EMP Requirement

In general, the project is in good performance regarding EMP compliance due to the project has been well prepared in regards to EMP implementation. In addition, the nature of the project activities is improvement of existing facilities, no heavy machines are necessary. Therefore, project adverse impacts to locality is less and manageable.

### 4.2 Corrective Actions

Continuous inspection of the site Supervision Engineer is necessary for quality control as well as to conduct regular monitoring purposes.

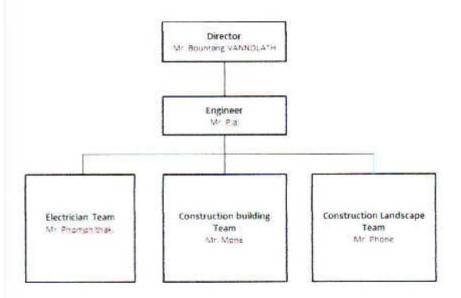
### 4.3 Recommendations

Regular join inspection and on time solution for project activities between project owner, contractor and the consultant is crucial important and necessary to continue to ensure quality of the works.

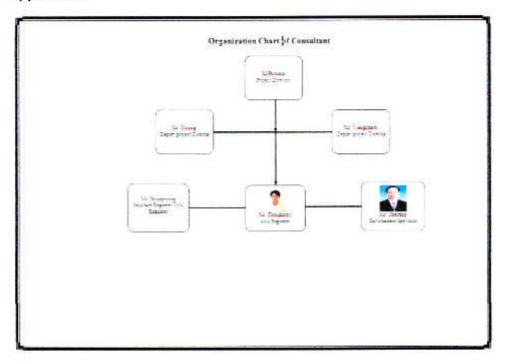
### V. APPENDICES

### Appendix 1:

## Organization Chart of Contractor



### Appendix 2:



### Appendix 3: Overall plan of the Contractor





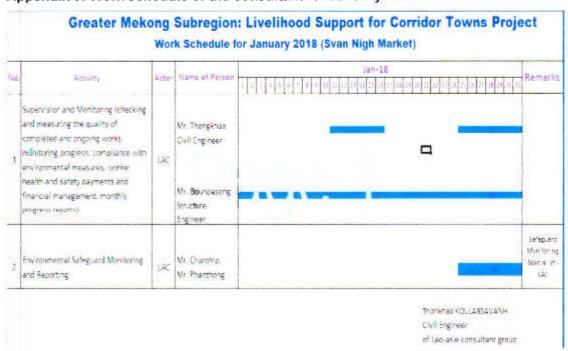
Appendix 4: Plan for activities implementation in January 2018

### Schedule Works for January 2018

	Discipsion	1		January																										
		I	1 1		. 5	1	-	B	4	17	12	17	13	44	.5	15	17	8 1	9 23	1::	=	23	24	5	3 :	7 25	23	50 3		
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rete Sta	amp work			T		Т	Т								Cer		-													
net wor	rk		-		1	-	-		H						-	-		-	+	+	+					+	٠	+		-
fing Offi	lice				1	+			l										1							1	1	t		
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II Roofs	structure v	(CIT)																								I				
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ill frame	e door and	window w	/oris	1	+	-	+		H	-	-					1		1	-	+	+	-			+	+	+	+		

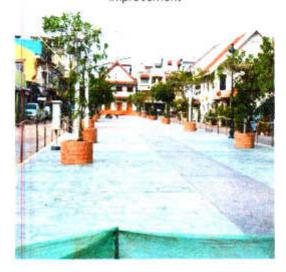
Slabors ...

Appendix 5: Work schedule of the consultant for January 2018



### Appendix 6: Photographic Documentation

Picture 1: New view NM yard/new yard improvement



Picture 3: Visit of CS/Social safeguard team



Picture 4: MMC office/ware house construction



Picture 5: workers are working as new pavement NM yard in front of church



Picture 6: sign board for attention/slowly and cleanup of t 2 sides of NM yard



