PREPARED FOR

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東埔寨機場投資有限公司
Cambodia Airport Investment Co., Ltd

Cambodia Airport Investment Co., Ltd.

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ESIA Addendum

Social Impact Assessment

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ESIA Addendum

Social Impact Assessment

0730380

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1. SOCIAL IMPACT ASSESSMENT

The assessment of potential social impacts associated with the Project is outlined in the following sections and is based on the methodology provided in ***Section 1.1 Impact Assessment and Methodology***.

1.1 SCOPE OF SOCIAL IMPACT ASSESSMENT

Scoping determines which impacts are likely to arise as a result of a Project and establishes the focus areas for the impact assessment. The scoping outcomes informed the establishment of the Social Area of Influence[1] (SAoI) (***Figure 1.1***).

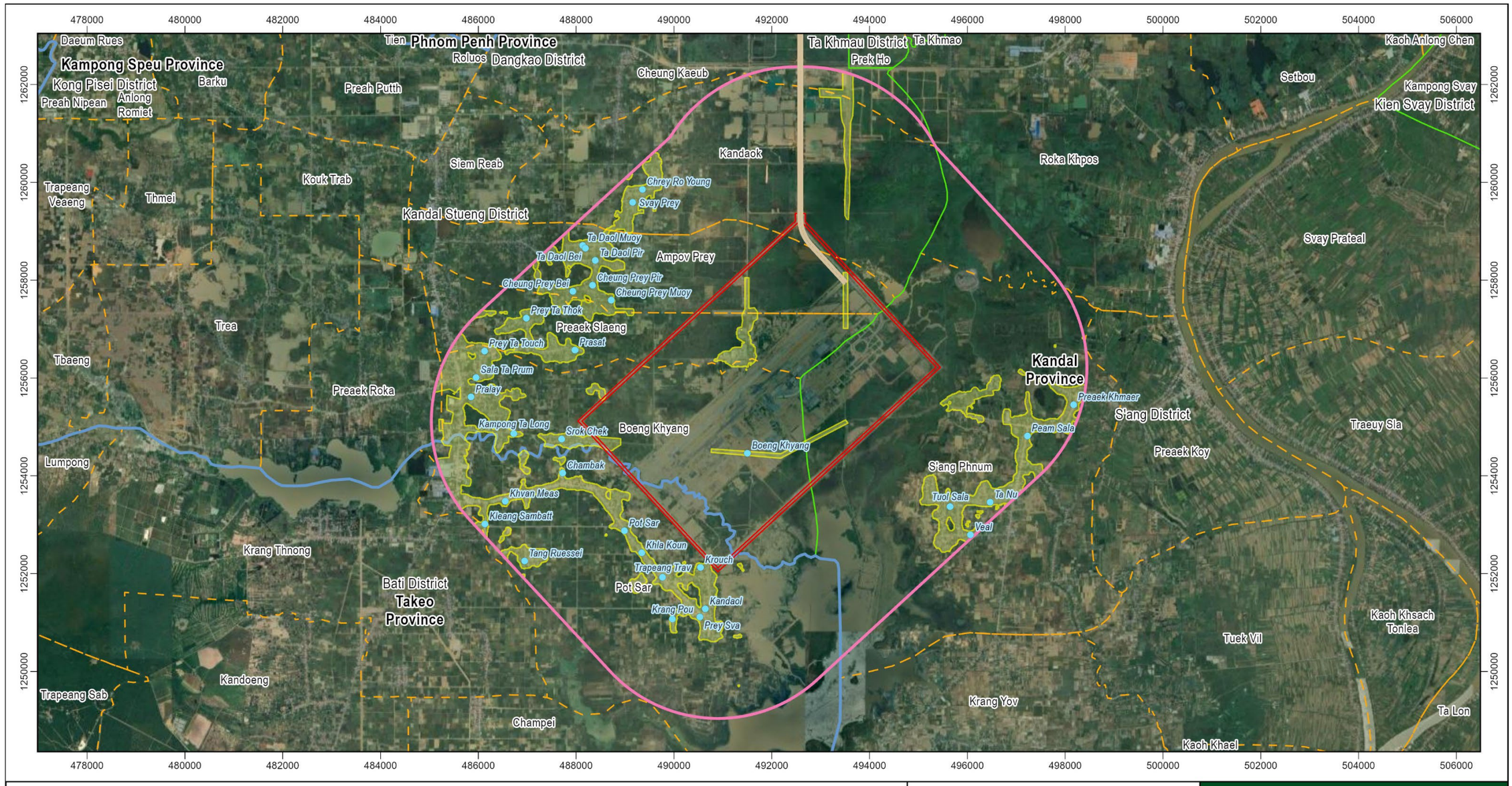
Table 1.1 presents potential social impacts per Project activity.

TABLE 1.1 PROJECT ACTIVITIES AND POTENTIAL SOCIAL IMPACTS SUMMARY

Project Activities	Project Phase	Potential Social Impacts	Receptors
Land acquisition	Pre-construction Construction	**Land Use and Livelihood** *Potential to impact current use of land, livelihoods and result in both physical and economic displacement, e.g. through loss of houses, loss of agricultural land, grazing area loss, loss of temporary shelters for grazing, loss of wetlands for fishing, loss of small businesses etc.*	People living within the Project site. People living within the SAoI who owned agricultural land on the Project site. Informal users who depended on the land in the Project site for their livelihoods.
Vehicle Movements	Construction Operation	**Traffic and Transport** *Potential to impact traffic and transport due to Project related traffic movements*	Population within the SAoI
Construction and Operation of the Project	Construction Operation	**Economic Opportunities** *Potential to provide local economic opportunities through employment, training, and the use of local services*	Population within the SAoI
Construction of the Project	Construction	**Worker Influx** *Potential impact on community through influx, e.g. through transactional diseases, or on community dynamics, and Gender-Based Violence*	Population within the SAoI

[1] The Social Area of Influence is the geographic area in which impacts are likely to arise, in this instance social impacts. The SAoI for this Project is limited to 3 km from the Project site, as the impacts are not expected to extend past 3 km.

Project Activities	Project Phase	Potential Social Impacts	Receptors
Operation of the Project	Operation	**Amenity, Infrastructure and Public Services** *Potential to impact amenity through pressure on access to public infrastructure and/or resources*	Population within the SAoI
Construction and Operation of the Project	Construction Operation	**Working Conditions and Occupational Health and Safety** *Potential to impact labor and working conditions of laborers. This includes contractor and supply chain management*	Workforce
Construction and Operation of the Project	Construction Operation	**Community Health, Safety and Security** *Potential to impact community health, safety and security through e.g. security issues, improper waste management, being struck by machinery etc.*	Population within the SAoI



Legend

- Village
- ***Project Component***
- BO Main Road
- Airport Boundary
- Airside Building Area 3km Radius
- Province Boundary
- District Boundary
- Community Boundary
- Residential Area

0 2 4 km

Scale: 1:82,000

N

Coordinate System: WGS 1984 UTM Zone 48N

Service Credit: © OpenStreetMap (and) contributors, CC-BY-SA, Esri, NASA, NGA, USGS

Social Area of Influence (SAoI) and Residential Area

0730380 Phnom Penh Airport
Client: Cambodia Airport Investment Co., Ltd.
Date: 04/09/2024
Drawn By: NS
Review By: AW

ERM

FIGURE 1.1 SOCIAL AREA OF INFLUENCE

1.2 ASSESSMENT APPROACH AND CRITERIA

To further contextualize the definitions of *magnitude* and *sensitivity* as used in the assessment of potential social impacts, refer to ***Table 1.2*** and ***Table 1.3*** below.

TABLE 1.2 DEFINITION OF MAGNITUDE CRITERIA

Magnitude	Definition
Negligible	▪ Change remains within the range commonly experienced within the household or community.
Small	▪ Perceptible difference from baseline conditions. Tendency is that the impact is local, rare and affects a small proportion of receptors and is of a short duration.
Medium	▪ Clearly evident difference from baseline conditions. Tendency is that the impact affects a substantial area or number of people and/or is of medium duration. Frequency may be occasional, and the impact may potentially be regional in scale.
Large	▪ Change dominates over baseline conditions. Affects the majority of the area or population in the SAoI and/or persists over many years. The impact may be experienced over a regional or national area.
Positive	▪ In the case of positive impacts, it is generally recommended that no magnitude be assigned, unless there is ample data to support a more robust characterisation. It is usually sufficient to indicate that there will be a positive impact, without characterising the exact degree of positive change likely to occur.

TABLE 1.3 DEFINITION OF SENSITIVITY CRITERIA

Sensitivity	Definition
Low	• Minimal vulnerability; consequently with a high ability to adapt to changes brought by the Project and opportunities associated with it.
Medium	• Some but few areas of vulnerability; but still retaining an ability to at least in part adapt to change brought by the Project.
High	• Profound or multiple levels of vulnerability that undermine the ability to adapt to changes brought by the Project.

1.3 IMPACT ON LAND ACQUISITION AND LIVELIHOODS

The Project requires the acquisition of land for various Project components. At this point in time, a full land acquisition screening to identify impacts to landowners and land users who are affected by the acquisition of land for the Project has not yet been completed. Current understanding on the nature of impact, impacted groups, and fair estimate of the impact magnitude are presented in this Section. This data will be further validated with additional studies which will be developed and implemented after the disclosure of the ESIA.

Displacement is defined by the IFC as:

"Displaced persons may be classified as persons (i) who have formal legal rights to the land or assets they occupy or use; (ii) who do not have formal legal rights to land or assets, but have a claim to land that is recognized or recognizable under national law; 19 or (iii) who have no

recognizable legal right or claim to the land or assets they occupy or use. The census will establish the status of the displaced persons."

Economic displacement and impact on livelihoods are inextricably linked concepts. Economic displacement is defined by the IFC as, *"…loss of assets or access to assets that leads to loss of income sources or other means of livelihood."* (IFC, 2012), and by the ADB as, *"Loss of land, assets, access to assets, income sources, or means of livelihood as a result of (i) involuntary acquisition of land, or (ii) involuntary restrictions on land use or on access to legally designated parks and protected areas."* (ADB, 2012). Potential economic displacement and impacts to livelihoods associated with the Project are described in the following subsections.

1.3.1 SCOPE

The scope of this analysis is a desk-based review of the land acquisition related documents provided by the Sponsor.

Table 1.4 presents a list of key documents provided for ERM's review:

TABLE 1.4 LIST OF KEY DOCUMENTS

Items	Date	Notes
The Environment and Social Impact Assessment (ESIA)	Approved on 23 March 2018	Desktop Review
Land Acquisition Map	15 May 2024	Reviewed at client office
Total Compensation Paid to Physically Displaced Households with Hard Land Titles	15 May 2024	Reviewed at client office
Contracts with Economically Displaced Households with Hard and Soft Titles	15 May 2024	Reviewed at client office
Project key components kmz file	N/A	Desktop Review

ERM also conducted a desktop review of secondary data including news articles, research papers and relevant laws.

1.3.2 LIMITATIONS

- ERM was not able to meet with government representatives or the Land Committee responsible for determining the compensation amounts, due to the Sponsor's preference.
- ERM was not able to obtain information on how the compensation amount was determined, or the detailed land acquisition process.
- ERM was not provided any information on land acquisition for associated facilities other than the access road. As a result, only the land acquisition process for the Project site was assessed while land acquisition for drainage or other associated facilities was not able to be assessed.
- ERM did not conduct any stakeholder consultations due to the sensitive nature of the Project and the community sentiments surrounding it. Only secondary sources were used to assess

the impacts and it was not possible to verify/compliment the information through primary data collection.

- ERM has not been able to verify the complaints and concerns from affected communities, however there is a level of consistency in them being brought forward. Although we have not been able to ground truth these concerns, they have been considered within the context of the mitigation strategies moving forwards

1.3.3 LEGAL FRAMEWORK

This section presents the national and international regulatory framework the Gap Analysis was conducted against.

1.3.3.1 CAMBODIAN REGULATORY LEGISLATION

Cambodia has had a turbulent past, with the impacts of the Khmer Rouge and years of civil war still evident in various aspects, notably in the real estate market. Between 1975 and 1979, the Khmer Rouge abolished private property ownership and destroyed all official property records. At that time, all land belonged to the state and not to individuals. After the collapse of the Khmer Rouge regime in 1979, land tenure fell into confusion, with land and buildings left vacant and of uncertain ownership. People started to move back into the capital and occupy empty land and buildings on a 'first-come, first-served' basis without clear support of legal documentation. Cambodia continued to implement collective ownership until 1989, when the government started to reform and reprivatize land.

The current legal framework for land acquisition is governed by the 2001 Land Law, which established a land registration system, allowing individuals to register their land within a legal framework and obtain recognition at the national government level. However, registering land in Cambodia is a complex and challenging task, especially when many property ownership documents have been destroyed or are insufficient. As a result, a multi-tiered system has developed, where different types of property rights represent different levels, mainly determined by the level of government where the land/property is registered.

Relevant land acquisition legislation is outlined below:

- Land Law (2001);
- Law on Expropriation (2010);
- Royal Decree No. 339 (2006) 'Provisional Guidelines and Principles Regarding the Reclassification of the State Public Properties and of Public Entities';
- Sub-Decree on the Rules and Procedures on Reclassification of State Public Properties and Public Entities (2006);
- Sub-Decree on River Basin Management (2015);
- Sub-Decree on the Promulgation of the Standard Operating Procedures for Land Acquisition and Involuntary Resettlement for Externally Financed Projects in Cambodia (2018);
- Sub-decree No 118 on State Land Management (2005);
- Sub-decree No 72 on Environmental Impact Assessment Process (1999); and

- Circular on Resolution on Temporary Settlements on Land Which Has Been Illegally Occupied in The Capital, Municipal and Urban Areas (2010) ("Circular 03").

1.3.3.2 SIGNIFICANT DEFINITIONS

State Public Land:

According to Article 15 of the 2001 Land Law state public property is any property held by the state on behalf of the people of Cambodia because of its 'public interest use'.

"*The following property falls within the public property of the State and public legal entities:*

- *Any property that has a natural origin, such as forests, courses of navigable or floatable water, natural lakes, banks of navigable and floatable rivers and seashores:*
- *Any property that is specially developed for general use, such as quays of harbors, railways, railway stations and airports;*
- *Any property that is made available, either in its natural state or after development, for public use, such as roads, tracks, oxcart ways, pathways, gardens and public parks, and reserved land;*
- *Any property that is allocated to render a public service, such as public schools or educational institutions, administrative buildings and all public hospitals;*
- *Any property that constitutes a natural reserve protected by the law;*
- *Archaeological, cultural and historical patrimonies; and*
- *Immovable properties being royal properties that are not the private properties of the royal family. The reigning King manages royal immovable properties."*

State Private Property:

According to Article 16 of the 2001 Land Law the sale of state public properties to private individuals and corporations is legal where the property in question has lost its 'public interest use'. State public property that loses its 'public interest use' can be transferred to state private property, after which it can be sold.

"*State public property is inalienable and ownership of those properties is not subject to prescription…When State public properties lose their public interest use, they can be listed as private properties of the State by law on transferring of state public property to state private property."*

Hard Land Title:

A Hard Land Title refers to a property ownership certificate issued by the Ministry of Land Management, Urban Planning, and Construction (MoLMUP) in Cambodia. The land details are certified at the national level. The transfer of "Hard Title" requires a 4% transfer tax and typically takes about 4 to 6 weeks to process.

Soft Land Title:

A Soft Land Title is obtained from the local district/county office and is not at the national level, but is still considered a form of property ownership. Soft Land Titles are widespread in Cambodia, with around 70% of properties in major cities having this type of ownership, and the number

goes up to 80% in rural areas.[2] The process of obtaining a Soft Land Title is relatively quick, usually taking only about 10 working days.

1.3.3.3 IFC PERFORMANCE STANDARDS

Based on lender requirements, the Project will need to comply with the IPC Performance Standards (PS), specifically IFC PS 5. The standards are set to complement and reinforce national legislation and ensure the land acquisition process for the Project is compliant with the requirements for resettlement and rehabilitation of PAPs, which includes minimizing risks, impacts, and ensures compliance and fair practices.

The key IFC PS 5 objectives related to resettlement have been summarized below, which are applicable to this Project:

- Avoid, and when avoidance is not possible, minimize displacement by exploring alternative project designs;
- Avoid forced eviction;
- Anticipate and avoid, or where avoidance is not possible, minimize adverse social and economic impacts from land acquisition or restrictions on land use by (i) providing compensation for loss of assets at replacement cost and (ii) ensuring that resettlement activities are implemented with appropriate disclosure of information, consultation, and the informed participation of those affected;
- Improve, or restore, the livelihoods and standards of living of displaced persons; and
- Improve living conditions among physically displaced persons through the provision of adequate housing with security of tenure at resettlement sites.

According to IFC PS 5: Land Acquisition and Involuntary Resettlement (2012), involuntary resettlement refers both to physical displacement (relocation or loss of shelter) and to economic displacement (loss of assets or access to assets that leads to loss of income sources or means of livelihood) because of Project-related land acquisition. Resettlement is considered involuntary when affected individuals or communities do not have the right to refuse land acquisition that results in displacement. This occurs in cases of: (i) lawful expropriation or restrictions on land use based on eminent domain; and (ii) negotiated settlements in which the buyer can resort to expropriation or impose legal restrictions on land use if negotiations with the seller fail.

Three types of displaced people are entitled to compensation and assistance under IFC PS, including persons (i) who have formal legal rights to the land or assets they occupy or use; (ii) who do not have formal legal rights to land or assets, but have a claim to land that is recognized or recognizable under national law; (iii) who have no recognized legal right or claim to the land or assets they occupy or use.

An overview of the relevant portions of IFC PS 5 is presented below:

- **Project Design**: The client will consider feasible alternative Project designs to avoid or minimize physical and/or economic displacement, while balancing environmental, social, and financial costs and benefits, paying particular attention to impacts on the poor and vulnerable;

[2] What is the difference between Hard Titles and Soft Titles in Cambodia? (realestate.com.kh)

- **Compensation and Benefits for Displaced Persons**: When displacement cannot be avoided, the client will offer displaced persons and communities, compensation for loss of assets at full replacement cost and other assistance to help them improve or at least restore their standards of living or livelihoods;
- **Community Engagement**: The client will engage with affected communities, including host communities, through the process of stakeholder engagement described in Performance Standard 1. Decision-making processes related to resettlement and livelihood restoration should include options and alternatives, where applicable;
- **Grievance Mechanism**: The client will establish a grievance mechanism as early as possible in the Project development phase. This will allow the client to receive and address specific concerns about compensation and relocation raised by displaced persons or members of host communities in a timely fashion, including a recourse mechanism designed to resolve disputes in an impartial manner;
- **Resettlement and Livelihood Restoration Planning and Implementation**: Where involuntary resettlement is unavoidable, the client will carry out a census with appropriate socio-economic baseline data to identify the persons who will be displaced by the Project, to determine who will be eligible for compensation and assistance, and to discourage inflow of people who are ineligible for these benefits. Implementation of a Resettlement Action Plan or Livelihood Restoration Plan will be considered completed when the adverse impacts of resettlement have been addressed in a manner that is consistent with the relevant plan as well as the objectives of this Performance Standard; and
- **Private Sector Responsibilities Under Government-Managed Resettlement**: Where land acquisition and resettlement are the responsibility of the government, the client will collaborate with the responsible government agency, to the extent permitted by the agency, to achieve outcomes that are consistent with this Performance Standard. In addition, where government capacity is limited, the client will play an active role during resettlement planning, implementation, and monitoring.

Further clarification of relevant PS and their objectives are presented in table below:

TABLE 1.5 RELEVANT IFC PS AND OBJECTIVES

Performance Standard	Description	Objectives
Performance Standard 1 – Assessment and Management of Environmental and Social Risks and Impacts	Underscores the importance of managing social and environmental performance throughout the life of a Project (any business activity that is subject to assessment and management).	▪ Impact identification and assessment. To identify and assess the social and environmental impacts, both adverse and beneficial, in the Project's area of influence. ▪ To avoid, or where avoidance is not possible, minimise, mitigate, or compensate for adverse impacts on workers, affected communities, and the environment. ▪ Stakeholder engagement. ▪ To ensure that affected communities are appropriately engaged on issues that could potentially affect them. ▪ Effective management. ▪ To promote improved social and environment performance of companies

Performance Standard	Description	Objectives
		through the effective use of management systems.
Performance Standard 5 – Land Acquisition and Involuntary Resettlement	Outlines that involuntary resettlement refers both to physical displacement (relocation or loss of shelter) and to economic displacement (loss of assets or access to assets that leads to loss of income sources or means of livelihood) as a result of Project-related land acquisition	▪ To avoid, and when avoidance is not possible, minimize displacement by exploring alternative Project designs. ▪ To avoid forced eviction. ▪ To anticipate and avoid, or where avoidance is not possible, minimise adverse social and economic impacts from land acquisition or restrictions on land use by (i) providing compensation for loss of assets at replacement cost and (ii) ensuring that resettlement activities are implemented with appropriate disclosure of information, consultation, and the informed participation of those affected. ▪ To improve, or restore, the livelihoods and standards of living of displaced persons. ▪ To improve living conditions among physically displaced persons through the provision of adequate housing with security of tenure at resettlement sites.

1.3.4 BASELINE CONDITIONS

The land acquisition process for the Project site has resulted in both physical and/ or economic displacement. Based on secondary data collected, the process has led to violence, threats, and concerns over unfair compensation for the surrounding communities.[3]

The main Project site is being developed on primarily agricultural and residential land consisting of 2,700 hectares and 2,854 plots.

Table 1.6 provides information on the size and dimensions of the land area per Project Component that are expected to be subject to land acquisition and presents an overview of the currently expected number of landowners and land users who may experience physical and economic displacement. The total number of landowners adds up to a total of around 1,636 (including 12 companies), noting that some landowners own two or more plots.

[3] Stiftung Asienhaus Study. 2024. A Kingdom for an Airport. Stiftung_Asienhaus_Study_A_Kingdom_for_an_airport_web.pdf

TABLE 1.6 LAND USE PER COMPONENT AND ANTICIPATED IMPACTED LANDOWNERS AND USERS

Project Component	Location	Clearing Area (ha)	Current Land Cover and Land Use	Expected Land Acquisition and rationale	Estimation No. of Landowners and Land Users	Impacts on Land Users	
						Estimation of duration of impact[4]	Partial or full acquisition of land plots expected
Airport site	Kandal Stung District, Kandal Province	2,700	Majority of the cleared land is agricultural land and wetlands. The remaining land is a village with residential properties, which has been entirely consumed by the Project. The land was used for rice cultivation, cattle grazing and fishing, Many of the houses in the village also had small businesses attached to their homes.	Land is private and government land.	**Hard Land Titles:** 1,262 landowners with hard titles were impacted. **Soft Land Titles:** 193 landowners with soft land titles were impacted. **No Land Titles:** 181 households with no land titles were impacted (all households were physically displaced). **Informal Land Users:** No information on how many informal land users will be impacted including fishermen, cattle grazers, renters, farmers, or employees of small businesses.	Permanent	Full
Access Road	Multiple Districts, Kandal and Takeo Provinces	Information was not provided.	Agricultural and residential land. People are currently living on portions of the land. The remaining land is used for rice cultivation, cattle grazing, and small businesses.	Land is private and government land.	No information on number of affected landowners or land users was provided. There is expected to be physical and economic displacement. Fishermen, cattle grazers, renters, farmers, and employees of small businesses are expected to be impacted.	Permanent	Full and Partial
Drainage and Reservoir	Bati District, Takeo Province	Information was not provided.	Agricultural and residential land. People are currently living on portions of the land. The remaining land is used for rice cultivation, cattle grazing, and small businesses.	Land is private and government land.	No information on number of affected landowners or land users was provided. There is expected to be physical and economic displacement. Desktop review of reports and media articles has identified concerns from local communities related to land acquisition 5 to 7 km away from the Project site. The community of Sa Ang Phnom which is comprised of over 50 families who have resided in the area for a decade or more, have received an informal directive from local authorities instructing them not to undertake any more construction. The ongoing construction of a new irrigation canal for the airport is causing concern. They have not	Permanent	Partial

[4] 'Permanent' refers to the impact which is expected to last at least for the full duration of the Project lifetime, due to land acquisition.

Project Component	Location	Clearing Area (ha)	Current Land Cover and Land Use	Expected Land Acquisition and rationale	Estimation No. of Landowners and Land Users	Impacts on Land Users	
						Estimation of duration of impact[4]	Partial or full acquisition of land plots expected
					been informed about the duration of the construction or how it might impact their housing situation.[5] Fishermen, cattle grazers, renters, farmers, and employees of small businesses are expected to be impacted.		

[5] Stiftung Asienhaus Study. 2024. A Kingdom for an Airport. Stiftung_Asienhaus_Study_A_Kingdom_for_an_airport_web.pdf

Table 1.7 provides an overview of anticipated impacts on landowners and land users for the Project site. Information on land acquisition impacts of the access road, reservoir and other associated/ancillary facilities was not available at the time of writing this ESIA Addendum.

TABLE 1.7 LAND IMPACT

District	Physical Displacement		Economic Displacement				Informal Land Users	
	Affected HHs (No.)		Affected Area (ha)		Affected HHs (No.)		Affected HHs (No.)	
	Per.	Temp.	Per.	Temp.	Per.	Temp.	Per.	Temp.
Kandal Stung District Bati District	245	0	1,454	No information available	1,560	No information available	No information available	No information available
Total	**245**		**1,454**		**1,560**		**No information available**	

A total of 1,636 households (including 12 companies) and 2,854 land parcels will be impacted by land acquisition for the Project site. The affected households fall under 6 categories:

1) Physically and Economically Displaced (With No Land Titles)

2) Physically Displaced (With Hard Land Titles)

3) Economically Displaced (With Hard Land Titles)

4) Economically Displaced (With Soft Land Titles)

5) Informal Land Users

6) Private Companies

The land acquisition process utilized differed for each of the 6 groups. The breakdown of number of households, compensation provided and the process which was followed is outlined below.

1. Physically and Economically Displaced (With No Land Titles)

TABLE 1.8 PHYSICALLY AND ECONOMICALLY DISPLACED HOUSEHOLDS (WITH NO LAND TITLES)

Location	No. of Households	No. of Plots	Area (ha)	Status	Compensation	Livelihood Restoration Measures
Boueng Khyang Village, Boueng Khyang Commune, Kandal Stung District, Kandal Province	181	181	Unavailable	Acquired	**Option 1:** 1) A plot of land equivalent to 0.01 ha (5 m x 20 m) in a compound located in Kampong Talong Village, Boueng Khyang Commune, Kandal Stung District, Kandal Province. a. Hard land title for the land plot. 2) A 5 m x 8 m single story house with a tin roof. a. The compound has been connected to the electricity grid and water supply. b. Drainage and roads constructed. c. Kindergarten for children built. **Option 2:** Lump sum payment of $2000 USD.	Prioritized for jobs at the airport, mostly as construction workers and security guards. Informed through Village Chief.

Land Acquisition Process

The land acquisition process for the physically displaced households with no land titles was started in August 2019. CAIC established a committee to gather data and identify the houses. Once the number of houses was confirmed, the resettlement compound was constructed with 181 houses. CAIC then informed the households they would be displaced as a result of the Project. Of the 181 households, 171 households chose the plot of land (Option 1), while 10 households chose the cash compensation (Option 2). According to CAIC, since the households were living on Public State Land they were not entitled to compensation. The 171 households received their houses on 21 May 2021 and their hard land titles on 25 August 2022. CAIC provided trucks to move the households and their belongings to the new compound. Of the 181 households, 45 people have been employed by CAIC to date; with 40 people having joined the Machinery Department and 5 people joining the Site Formation Department.

FIGURE 1.2 PHYSICALLY DISPLACED HOUSEHOLDS (WITH NO LAND TITLES) – PREVIOUS HOUSES

FIGURE 1.3 PHYSICALLY DISPLACED HOUSEHOLDS (WITH NO LAND TITLES) – RESETTLEMENT SITE

2. Physically Displaced (With Hard Land Titles)

TABLE 1.9 PHYSICALLY DISPLACED HOUSEHOLDS (WITH HARD LAND TITLES)

Location	No. of Households	No. of Plots	Area (ha)	Status	Compensation
Kampong Talong Village, Boueng Khyang Commune, Kandal Stung District, Kandal Province	64	51	4.57	Acquired	1) Land for land exchange. a. A plot of land the same size as the existing land was offered in Cherng Prey 2 Village, Ampov Prey Commune, Kandal Stung District, Kandal Province. b. The new plots have been leveled and connected to the electricity grid. Water connection was also provided. 2) Compensation for other assets provided based on valuation.

Land Acquisition Process

The land acquisition process for the physically displaced households with hard land titles was started at the end of 2022. CAIC identified the houses using satellite imagery, then started discussions with the households. A team from CAIC and the Village Chief went to each house and conducted an assessment to determine the value of the house and any other assets on the property. The engineering team from CAIC identified each asset including the type and quantity of crops and trees. They then determined the unit value of each asset based on their professional judgement and estimated the total compensation.[6] All documents including the total proposed compensation was brought to a committee at the Ministry of Land Management, Urban Planning and Construction (MoLMUP) for approval. The committee included representatives from the MoLMUP, the Provincial Land Department and local authorities. Once the approval on the proposed compensation was approved by the committee, CAIC approached each household with an offer. A negotiation process was then undertaken between CAIC and the households - with oversight from the local authorities - until an agreement was reached. All of the households agreed to the compensation and were paid compensation in late 2023. They are in the process of receiving the hard land titles for their new plots of land. Their current houses will be dismantled once the new houses are constructed.

[6] The total compensation ranged from approximately $4,065.24 for a 6 m x 25.30 m house to $39,714.21 for two houses on the same plot sized 4.6 m x 6.65 m & 5.5m x 17 m.

3. Economically Displaced (With Hard Land Titles)

TABLE 1.10 ECONOMICALLY DISPLACED HOUSEHOLDS (WITH HARD LAND TITLES)

Location	No. of Households	No. of Plots	Area (ha)	Status	Compensation
Kandal Stung District, Kandal Province	1098	2,019	1,331.80	Acquired	**Option 1:** $8 USD/ sq m of land **Option 2:** Plot of agricultural land, the same size as the existing land, near the airport area.
	88	134	53.30	In Progress	
Total	**1,186**	**2,153**	**1385.10**		

Note: An additional 71 plots of land (284.34 ha) were given to CAIC by the government.

Land Acquisition Process

The land acquisition process for the economically displaced households with hard land titles was started in 2019. The government led the process for the identification of the landowners and determined the compensation amount. On 18 February 2019, the Committee for Land Resolution was formed which included representatives from various ministries including the Ministry of Land Management, Urban Planning and Construction (MoLMUP), Ministry of Environment, Ministry of Water Resources and the Ministry of Planning, as well as representatives from the army and the police. A representative from the MoLMUP served as the Chairman of the Committee. The Committee decided on a compensation of $8 per square meter for all households and companies with hard land titles and provided CAIC with a database of all affected households. CAIC then contacted each affected landowner who was listed on the land title and informed them of the impact and the compensation they are entitled to.

Majority of the households eventually agreed to take the monetary compensation, while 23.45 hectares of land was provided as compensation. Its unclear how many households chose to accept land instead of monetary compensation.

There are currently 142 plots of agricultural land within the airport site which have not yet been acquired. CAIC is in discussion with the households to accept the compensation established by the government.

Economically Displaced (With Soft Land Titles)

TABLE 1.11 ECONOMICALLY DISPLACED HOUSEHOLDS (WITH SOFT LAND TITLES)

Location	No. of Households	No. of Plots	Area (ha)	Status	Compensation
Kandal Stung District, Kandal Province	193	193	69.7	Acquired	$3 USD/ sq m of land

Land Acquisition Process

The land acquisition process for the economically displaced households with soft land titles was started in 2019. The government led the process for the identification of the landowners and determined the compensation amount. On 18 February 2019, the Committee for Land Resolution was formed which included representatives from various ministries including the Ministry of Land Management, Urban Planning and Construction (MoLMUP), Ministry of Environment, Ministry of Water Resources and the Ministry of Planning, as well as representatives from the army and the police. A representative from the MoLMUP served as the Chairman of the Committee. The Committee decided on a compensation of $3 per square meter for all households with soft land titles. CAIC then approached the Village Heads of all the affected villages and obtained the names and contact information for the affected households. CAIC contacted each affected landowner and informed them of the impact and the compensation they are entitled to.

5) Informal Land Users

No data on informal land users.

6) Private Company Land

Other groups which was impacted by the land acquisition for the Project are private companies. The below table provides a breakdown of the names of the companies and the total area. The land acquisition process which was followed is identical to that of the economically displaced households with hard titles.

TABLE 1.12 PRIVATE COMPANY LAND

Location	Names of Companies	No. of Plots	Area (ha)	Status	Compensation
Kandal Stung District, Kandal Province	Ying Che San Hi Land Investment Suni SDZ Inve Angkor Rich International Rich Prof Min Yu Cool Foundation	164	245.43	Acquired	**Option 1:** $8 USD/ sq m of land **Option 2:** Plot of agricultural land, the same size as the existing land, near the airport area.
	Landscape City Del. Great Drangon Real Estate Development Dongang Sanhi Land De Discovery Estate Khmer Wonderland Light Peter Yubok Yang Ly Thing	246	682.94	In Progress	
Total		**410**	**928.37**		

Livelihoods

The main types of occupation in the SAoI are farmers, poultry farmers, vendors, repairers, factory-workers, civil servants, transportation workers, construction workers, fishermen, NGO staff and agricultural labourers. Majority of the people in the SAoI are farmers (25%) and vendors (19%). Although households in the study area have other main occupations, many of them still undertake farming as their secondary occupation[7].

The stakeholder consultations conducted by E&A validated the data collected from secondary sources and confirmed that the main forms of livelihood are farming, fishing and running small businesses. Majority of the interviewees (both community members and local authorities) expressed hope that the Project would offer opportunities for local people to work in the airport and provide additional or necessary training.

The average annual income of households in the SAoI is 2,381,024 riels ($595.25 USD) per month while the average monthly expenditure is 1,379,160 riels ($344.75 USD).

Irrigation sources are important for agriculture. The rice production in the wet season uses rain water, while in dry season water for irrigation is sourced from the Tonle Bati and Stung Prek Tnot rivers for farmers in Kandal Steung District, while farmers in Potsor Commune use water from the Hun Sen Potsar irrigation system, which originates from the Tonle Bati River.

The SAoI encompasses several lakes, Boueng Cheung Loung is considered the largest lake with fishing potential. 6% of the households in the SAoI are fishermen. All fishing activities in the study area are small-scale and comprise of either subsistence-commercial fishing or subsistence fishing. Subsistence-commercial fishing is conducted throughout the year by villages living close to Boueng Rean and Boueng Cheung Loung. Fishermen use plastic boats and wooden boats with small engines. The average daily catch is between 10 and 15 kg per day of diversified fish which are sold to a middleman or to commercial fish sellers who distribute fish in the local markets and in Phnom Penh.

Subsistence fishing activities are spread across the area, but on a smaller scale. The majority of fishermen who carry out subsistence fishing are from fishery communities located in the southern part of Boueng Cheung Loung Lake. The study conducted by E&A found that the main fishing season is between March and April. During this period, fishermen can catch between 2 to 3 kg per day. The average fish price ranges from 11,600 riels ($2.90 USD) per kilogram in the rainy season to 17,400 riels ($4.35 USD) per kilogram in the dry season. Some types of fish such as the Thicklip Barb, Dusky Sleeper, Climbing Perch and the Eyespot Spiny Eel are more expensive, and can go up to 40,000 riels ($10 USD) per kilogram in the rainy season and up to 50,000 riels ($12.50 USD) per kilogram in the dry season.

[7] Commune data, 2018

1.3.5 IMPACT ASSESSMENT

1.3.5.1 MEDIA REVIEW

A media review was conducted to understand stakeholder perceptions regarding the Project and to identify any concerns or complaints which have been raised through a public platform. The following articles were reviewed:

- Villagers protest Kandal airport development | Phnom Penh Post;
- 2,600 Hectares Made Private Land for Airport Company's Development (vodenglish.news);
- Mega airport project leaves hundreds of affected families struggling livelihood | CamboJA News;
- Hundreds of people block road as airport project damages rice crops | CamboJA News;
- Villagers protest farmland clearing for Phnom Penh airport project | Phnom Penh Post;
- Residents Affected by Airport Development Project Protest Again (vodenglish.news);
- Airport Protesters Vow to Block Road Next Week as Governor Refuses to Budge (vodenglish.news);
- Negotiations fail in land dispute linked to new Phnom Penh airport | CamboJA News;
- Land dispute at mega-airport project leads to protest, scuffle at access road | CamboJA News;
- Villagers Protest Armed Destruction of Road at New Airport Development (vodenglish.news);
- Airport Protesters, 100 Officers in Standoff on National Road 2 (vodenglish.news);
- Despite lack of resolution in dispute, authorities block roads, let OCIC begin clearing residents' farmland for mega airport project | CamboJA News;
- Two people detained for visiting farmland being cleared for Kandal airport | CamboJA News;
- Violence, Around 30 Arrests at New Phnom Penh Airport Development (vodenglish.news);
- Cambodian Villagers Arrested Over Airport Land Dispute — Radio Free Asia (rfa.org);
- Dozens detained after Kandal airport protest turns violent | CamboJA News;
- Thirty Arrested as Airport Land Protest Turns Violent | Cambodianess;
- Authorities prepare to compensate airport-affected families for their homes while farmland disputes remain unresolved | CamboJA News;
- As Airport Project Set to Swallow Village, Protesters Petition Hun Sen (vodenglish.news);
- 66 villagers seek PM's help in land dispute - Khmer Times (khmertimeskh.com);
- Airport land dispute complaint taken by 200 to National Assembly - Khmer Times (khmertimeskh.com);

- Families affected by mega-airport urge CPP's top leaders for help | CamboJA News;
- Their dispute entering its fourth year, families affected by mega-airport fight to keep hope | CamboJA News;
- Kandal Airport Protesters Continue to Raise Grievances (vodenglish.news);
- Villagers' lands cleared for mega-airport project despite ongoing disputes | CamboJA News;
- Development of mega-airport continues, despite opposition by locals | CamboJA News;
- Bulldozers Hit Airport Protesters' Farms as Senate Steps In (vodenglish.news);
- New airport developer begins clearing farmland, though compensation hasn't been finalized | CamboJA News;
- Techo Airport Dispute, Gun Fire and Land Clearings Fuel Electoral Discontent (vodenglish.news);
- Deputy PM Intervenes in Techo Airport Dispute (vodenglish.news);
- Families affected by Kandal airport demand clarity on compensation | CamboJA News;
- Airport Disputants Petition for Heir Apparent Hun Manet's Intervention (vodenglish.news);
- Nine villagers who protested against new airport to be tried | CamboJA News;
- CSOs request gov't intervention in land row at new int'l airport | Phnom Penh Post;
- Hundreds From Three Provinces Urge Government to Speed Up Land Dispute Resolutions (vodenglish.news);
- Families Seek Clarity After Displacement Rumors Related to the Kandal Stung Mega-Airport Project | CamboJA News;
- Kandal Families Slated for Eviction from Airport Site Renew Requests for Land Titles | CamboJA News;
- New Phnom Penh Airport land dispute enters fifth year | (antiaero.org);
- Kandal Airport Developer Begins Direct Negotiations with Households Seeking Better Compensation | CamboJA News;
- 500 Kandal Families Petition Authorities to Halt Evictions for Airport Development | CamboJA News;
- Kandal Residents Protest New Land Filling Near Airport Development | CamboJA News;
- Kandal Villagers Halt Airport Project's Fence Construction But Fears Remain | CamboJA News;
- Takeo Farmers Begrudge $1 Per Square Meter Land Compensation by Phnom Penh Airport Developer | CamboJA News;
- Kandal Residents Near New Airport Asked to Take Down Structures (vodenglish.news);
- Residents Near New Phnom Penh Airport Site Protest Land Settlement | CamboJA News;
- Ampov Prey Residents Protest Against New Phnom Penh Airport Project For Erecting Poles Again | CamboJA News;
- Canal 94 Residents Fear Flooding From Sand Filling, Four Villages Submit Petition | CamboJA News; and

- Some 200 Canal 94 Residents Submit Petition to Land Management Ministry, Seek Own Land Titles | CamboJA News.

Table 1.13 provides a summary of the complaints/concerns raised by various stakeholders related to land acquisition and livelihoods.

TABLE 1.13MEDIA REVIEW SUMMARY

Stakeholder Allegations and Concerns	PS 5 Requirements
Forced Eviction	Forced evictions will not be carried out except in accordance with law and the requirements of this Performance Standard.
Assets seized	The Performance Standard requires that non-land assets be retained, compensated for, or replaced for people who do not have rights over the land they occupy. Relocation to take place with security of tenure. Lost livelihoods to be restored.
Clearing of land prior to the land acquisition process being resolved	Forced evictions will not be carried out except in accordance with law and the requirements of this Performance Standard.
Loss of livelihoods	In cases where land acquisition or restrictions on land use affect commercial structures, affected business owners will be compensated for the cost of reestablishing commercial activities elsewhere, for lost net income during the period of transition, and for the costs of the transfer and reinstallation of the plant, machinery, or other equipment. For persons whose livelihoods are land-based, replacement land that has a combination of productive potential, locational advantages, and other factors at least equivalent to that being lost should be offered as a matter of priority.
Loss of income	When displacement cannot be avoided, the client will offer displaced communities and individuals' compensation for loss of assets at full replacement costs and other assistance to help them improve or restore their standards of living or livelihoods, as provided in this PS. Compensation standards will be transparent and applied consistently to all communities affected by the displacement.
Inadequate land compensation/inability to purchase land nearby	In cases affecting persons with legal rights or claims to land which are recognized or recognizable under national law (see paragraph 17 (i) and (ii)), replacement property (e.g., agricultural or commercial sites) of equal or greater value will be provided, or, where appropriate, cash compensation at full replacement cost. If circumstances prevent the client from providing land or similar resources as described above, alternative income earning opportunities may be provided, such as credit facilities, training, cash, or employment opportunities. Cash compensation alone, however, is frequently insufficient to restore livelihoods.

Stakeholder Allegations and Concerns	PS 5 Requirements
Replacement land is too far from the village and sources of livelihood	In cases where affected persons reject compensation offers that meet the requirements of this Performance Standard and, as a result, expropriation or other legal procedures are initiated, the client will explore opportunities to collaborate with the responsible government agency, and, if permitted by the agency, play an active role in resettlement planning, implementation, and monitoring (see paragraphs 30–32).
Do not want to relocate	Forced evictions will not be carried out except in accordance with law and the requirements of this Performance Standard.
Clearing of structures with no compensation	The Performance Standard requires that non-land assets be retained, compensated for, or replaced for people who do not have rights over the land they occupy. Relocation to take place with security of tenure. Lost livelihoods to be restored.
Loss of access to water resources	For persons whose livelihoods are natural resource-based and where project-related restrictions on access envisaged in paragraph 5 apply, implementation of measures will be made to either allow continued access to affected resources or provide access to alternative resources with equivalent livelihood-earning potential and accessibility. Where appropriate, benefits and compensation associated with natural resource usage may be collective in nature rather than directly oriented towards individuals or households.
Compensation for crop damage	When displacement cannot be avoided, the client will offer displaced communities and individuals' compensation for loss of assets at full replacement costs and other assistance to help them improve or restore their standards of living or livelihoods, as provided in this PS. Compensation standards will be transparent and applied consistently to all communities affected by the displacement.
Lack of consultations with affected groups	The client will engage with Affected Communities through the process of stakeholder engagement described in PS1. IFC PS1 states that when affected communities are identified as being at risk and having adverse impacts from a Project, the client will go through a process of consultation to provide those affected with opportunities to express their views on Project impacts, risks, and mitigation measures. Effective consultation is a two-way process that should be based on prior disclosure and dissemination of transparent, relevant, objective, meaningful and easily accessible information; it also should enable meaningful participation.
Lack of adequate information	Disclosure of relevant information and participation of the affected communities and people are to be done throughout the planning, implementation, monitoring, and evaluation of compensation payments, resettlement, and livelihood restoration activities to produce results that align with the objectives of PS5.
Loss of access to farmland	Forced evictions will not be carried out except in accordance with law and the requirements of this Performance Standard.

Stakeholder Allegations and Concerns	PS 5 Requirements
Loss of access to homes	Forced evictions will not be carried out except in accordance with law and the requirements of this Performance Standard.
Loss of housing	When displacement cannot be avoided, the client will offer displaced communities and individuals' compensation for loss of assets at full replacement costs and other assistance to help them improve or restore their standards of living or livelihoods, as provided in this PS. Compensation standards will be transparent and applied consistently to all communities affected by the displacement.
Concerned about flooding	Not specific to PS5 - gaps fall under PS3
Concerned about health and safety of their children	Not specific to PS5 - gaps fall under PS3
Request land titles	In cases where affected persons reject compensation offers that meet the requirements of this Performance Standard and, as a result, expropriation or other legal procedures are initiated, the client will explore opportunities to collaborate with the responsible government agency, and, if permitted by the agency, play an active role in resettlement planning, implementation, and monitoring (see paragraphs 30–32).
Physical threats and arrests	Forced evictions will not be carried out except in accordance with law and the requirements of this Performance Standard.
Violation of verbal agreement	Forced evictions will not be carried out except in accordance with law and the requirements of this Performance Standard.
Employment in the airport has low pay	In addition to compensation for lost assets, if any, as required under paragraph 27, economically displaced persons whose livelihoods or income levels are adversely affected will also be provided opportunities to improve, or at least restore, their means of income-earning capacity, production levels, and standards of living.

1.3.5.2 GAP ASSESSMENT

Based on the media review and the information provided by CAIC, a detailed gap assessment was conducted against Cambodian regulations and IFC PS 5.

TABLE 1.14 GAP ASSESSMENT AGAINST PS 5

Category	Cambodian Regulations	IFC PS 5	Gap
Project Design	Cambodian regulations do not explicitly mandate considering alternative Project designs to avoid or minimize physical and/or economic displacement.	The client will consider feasible alternative Project designs to avoid or minimize physical and/or economic displacement, while balancing environmental, social, and financial costs and benefits.	No alternative Project designs were considered to avoid or minimize physical and/or economic displacement or to minimize risk and impact related to land acquisition and resettlement.
Census	Article 16 (Expropriation Law) states that "Prior to making any expropriation Project proposal, the Expropriation Committee shall conduct a public survey by recording of a detailed description of all entitlements of the owners of and/or of the holder of real right to immovable property and other properties subject to compensation as well as recording of all relevant issues;… the Expropriation Committee shall produce a report with recommendations and submit it to the Royal Government for approval."	A census is to be carried out when involuntary resettlement is unavoidable to collect socio-economic baseline data to identify the displaced people, determine who is eligible for assistance and compensation, and discourage those ineligibles, from claiming any benefits.	No census was carried out to collect socio-economic baseline data or to identify the displaced people and determine who is eligible for compensation.
Eligibility	The 2007 CIRCULAR No. 02 S.R related to illegal occupation of State land states that persons who have no recognizable legal right or claim to the land are ineligible for compensation. Article 23 (Expropriation Law) clarifies that the owner of and/or holder of real right to the immovable property shall be entitled to compensation for any actual damage to the immovable property incurred from the date of the issuance of the declaration on the expropriation Project, which is the cut-off date for being entitled to the fair and just compensation.	Displaced persons may be classified as persons (i) who have formal legal rights to the land or assets they occupy or use; (ii) who do not have formal legal rights to land or assets but have a claim to land that is recognized or recognizable under national law; or (iii) who have no recognizable legal right or claim to the land or assets they occupy or use.	Informal land users were not identified or provided with any form of compensation.

Category	Cambodian Regulations	IFC PS 5	Gap
Compensation and Benefits for Displaced Persons	Article 23 (Expropriation Law) clarifies that the owner of and/or holder of real right to the immovable property shall be entitled to compensation for any actual damage to the immovable property incurred from the date of the issuance of the declaration on the expropriation Project, which is the cut-off date for being entitled to the fair and just compensation. Article 22: The amount of compensation shall depend on the market price or replacement cost as of the date of the issuance of the declaration on the expropriation Project. The market price or the replacement cost shall be determined by an independent committee or agent appointed by the Expropriation Committee. There is no clear requirement for providing assistance to help the affected people to restore their standards of living or livelihoods.	When displacement cannot be avoided, the client will offer displaced communities and individuals' compensation for loss of assets at full replacement costs and other assistance to help them improve or restore their standards of living or livelihoods, as provided in this PS. Compensation standards will be transparent and applied consistently to all communities affected by the displacement.	Physically and economically displaced households with no land titles were not provided with compensation for loss of assets at full replacement costs or any other assistance to help them improve their standards of living. Physically displaced households with land titles were provided with compensation but the valuation of their assets was conducted by CAIC instead of by a third party and the method for the valuation is unclear. Compensation for loss of assets was not provided at replacement cost. It is unclear how the government determined the compensation per square meter for economically displaced households with hard and soft land titles.
Compensation for non-title holders	The 2007 CIRCULAR No. 02 S.R related to illegal occupation of State land states that persons who have no recognizable legal right or claim to the land are ineligible for compensation. There is no clear requirement for providing assistance to help the affected people to restore their standards of living or livelihoods.	The Performance Standard requires that non-land assets be retained, compensated for, or replaced for people who do not have rights over the land they occupy. Relocation to take place with security of tenure. Lost livelihoods to be restored.	Non-land assets were not compensated for, or replaced for people who do not have rights over the land they occupy. Lost livelihoods were not restored. No compensation for crops was provided.

Category	Cambodian Regulations	IFC PS 5	Gap
Cut-Off date	Article 17 (Expropriation Law) states that "… the Expropriation Committee shall issue a Declaration on the expropriation Project [cut-off date] informing clearly the owner of and/or holder of real right to the immovable property about the immovable property subject to expropriation…" Article 30 (Expropriation Law) states that "From the date of the declaration of the expropriation Project [cut-off date], the owner of and/or holder of real right to the immovable property shall not sell or transfer the immovable property to other persons. Any document and procedure contradictory to this provision are deemed to be null and void; … there shall not be any additional construction on the land. For any activity contradictory to this provision, the owner of and/or holder of real right to the immovable property shall not be entitled to any compensation for such additional construction."	Where the host country lacks the procedures, the client will establish a cut-off date for eligibility. The information should be well documented and disseminated throughout the Project area. It is not a requirement to compensate or assist those who have occupied the area after the cult-off date once the date has been clearly established and made public.	No cut-off date was established.
Community Engagement	Article 16 of the Expropriation Law requires the Expropriation Committee to organize public consultations at the Capital, Municipal, Provincial, and District authority levels with Commune/ Sangkat councils and village or community representatives to be affected by the expropriation to provide specific and concise information and collect inputs from all stakeholders regarding the proposed basic public infrastructure Project.	The client will engage with Affected Communities through the process of stakeholder engagement described in PS1. IFC PS1 states that when affected communities are identified as being at risk and having adverse impacts from a Project, the client will go through a process of consultation to provide those affected with opportunities to express their views on Project impacts, risks, and mitigation measures. Effective consultation is a two-way process that should be based on prior disclosure and dissemination of transparent, relevant, objective, meaningful and easily accessible information; it also should enable meaningful participation.	No minutes of meeting available. Unclear how many rounds of stakeholder consultations were conducted. No Stakeholder Engagement Plan was developed.

Category	Cambodian Regulations	IFC PS 5	Gap
Information Disclosure	There is no clear requirement for information disclosure.	Disclosure of relevant information and participation of the affected communities and people are to be done throughout the planning, implementation, monitoring, and evaluation of compensation payments, resettlement, and livelihood restoration activities to produce results that align with the objectives of PS5.	It is unclear how information was disclosed and disseminated to affected communities.
Grievance Mechanism	Article 14 (Expropriation Law) states that a Grievance Redress Committee shall be established and led by a representative from the Ministry of Land Management, Urban Planning and Construction, and composed of representatives from relevant ministries/institutions. The owner and/or the rightful owner who do not agree with a decision by the Expropriation Committee can bring their complaints to the Grievance Redress Committee (GRC) (Article 33 of Expropriation Law). If the decision of the GRC is not accepted by the complainants, they can bring their complaint to the competent court (Article 34 of Expropriation Law). Article 32 (Expropriation Law) states that the Expropriation Committee and the Grievance Redress Committee shall have the competence to review and resolve the complaint.	A grievance mechanism consistent with PS1 is to be established by the Project owner as early as possible in the Project development phase. This is to ensure that specific concerns about compensation and relocation are addressed in a timely fashion. A recourse mechanism design is included to resolve disputes in an impartial manner.	An informal grievance mechanism was developed which entails affected individuals submitting their complaints to the local authorities. No formal grievance mechanism was established. According to CAIC no grievances have been filed.

Category	Cambodian Regulations	IFC PS 5	Gap
Resettlement and Livelihood Restoration planning and Implementation	Article 16 (Expropriation Law) states that "Prior to making any expropriation Project proposal, the Expropriation Committee shall conduct a public survey by recording of a detailed description of all entitlements of the owners of and/or of the holder of real right to immovable property and other properties subject to compensation as well as recording of all relevant issues;… the Expropriation Committee shall produce a report with recommendations and submit it to the Royal Government for approval."	Where involuntary resettlement is unavoidable, a census will be carried out to collect appropriate socio-economic baseline data to identify the persons who will be displaced by the Project, determine who will be eligible for compensation and assistance.	No census was conducted to collect appropriate socio-economic baseline data, or to identify the persons who will be displaced by the Project.
	There is no clear requirement for monitoring and assessing resettlement outcomes.	The client will establish procedures to monitor and evaluate the implementation of a Resettlement Action plan or Livelihood Restoration Plan and take corrective action as necessary.	No Resettlement Action Plan or Livelihood Restoration Plan was developed.
Displacement	No definition of displaced persons in the Cambodian regulations.	Displaced persons can be identified as follows 1. who have formal legal rights to the land or assets they occupy or use. 2. who do not have formal legal rights to land or assets but have a claim to land that is recognized or recognizable under national law. 3. who have no recognizable legal right or claim to the land or assets they occupy or use. The census will establish the status of the displaced persons. Project-related land acquisition and/or restrictions on land use may result in the physical displacement of people as well as their economic displacement.	Both physical and economic displacement occurred as a result of the Project.

Category	Cambodian Regulations	IFC PS 5	Gap
Forced Eviction	Not stipulated in Cambodian regulations.	Forced evictions will not be carried out except in accordance with law and the requirements of this Performance Standard.	According to the media review, there were reports of forced evictions being carried out, as there were allegations of people being removed against their will from their homes and their lands which they occupied without the provision of, and access to, appropriate forms of legal and other protection. Numerous community members were detained and arrested. Affected people were cut off access from their lands and homes prior to the land acquisition process being completed.
Monitoring and evaluation	There is no clear requirement for monitoring and assessing resettlement outcomes.	Procedures to monitor and evaluate implementation of the LARAP or Livelihood Restoration Plan (LRP) will be established by the Project owner. The extent of monitoring activities will be commensurate with the Project's impacts and risks. Once the agreed monitoring period is concluded, the completion audit can be taken place by competent resettlement professionals. Project owners will play an active role in monitoring.	No LARAP or LRP was developed.
Private Sector Responsibilities.	Not stipulated in Cambodian regulations.	The Project will collaborate with the responsible government agency, to the extent permitted by the agency where land acquisition and resettlement are the responsibility of the government. In the case of acquisition of land rights or access to land through compulsory means or negotiated settlements involving physical displacement, the client will identify and describe government resettlement measures. In case there is economic displacement	There was no information provided on how the government determined the compensation amounts for each category of people affected by land acquisition.

Category	Cambodian Regulations	IFC PS 5	Gap
		involved, the Project compensates affected stakeholders.	

1.3.5.3 SOURCE OF IMPACT

The source of impact is linked to the acquisition of land and for construction and operation of the Project.

The following Project activities can present impacts to existing land uses and land-based livelihoods, during different phases of the Project:

- Construction:
  - Land preparation, such as site clearance, excavation and levelling, fencing, and civil works.
  - Construction of the Project site infrastructure, access road and reservoir/drainage.
- Operation:
  - Operation of the airport.

Majority of the land for the Project site has already been acquired to date. The Project design has not been optimised to avoid physical displacement and, where possible, minimise economic displacement and/or disruptions in accessing particular land. As a result, both physical and economic displacement will occur as a result of the Project.

No information on the access road, reservoir/drainage or other ancillary/associated facilities was provided.

1.3.5.4 SIGNIFICANCE OF IMPACTS

As part of the assessment, it was considered whether these populations (particularly the first three) could potentially be vulnerable. Vulnerability was found at all villages in the SAoI, especially for the households who were physically and economically displaced and have no land titles.

Land

Numerous stakeholders, both community members and government representatives raised concerns related to displacement during the consultations conducted as part of the EIA. The concerns were primarily related to land grabs and developers purchasing land below market values. In addition, given Cambodia's history with de-privatization of land, many households do not have hard land titles for their land, making them vulnerable to physical and economic displacement with inadequate compensation. Without these titles, families are vulnerable to both physical and economic displacement without fair compensation.

Losing land and housing often results in families losing their livelihoods and income, which in turn impacts their physical and mental health. Displacement is widely acknowledged to be an incredibly stressful and traumatic event, which significantly impacts the mental health of those affected. The loss of income resulting from eviction, leads to urban poor families placing themselves in precarious situations for money, including migration for work or taking out loans with money lenders. When displacement occurs, social networks are scattered and close-knit communities which used to derive emotional and physical support from their neighbors, become disrupted. Communities and individuals may experience diminished social cohesion and cultural identity due to displacement. Resettlement has the potential to disturb currently cohesive communities. Additionally, through the process of resettlement, relocated people are separated, either temporarily or permanently, from spaces that hold community and cultural significance. These separations can diminish social cohesiveness as well as connection to

cultural identity. With changes in community membership that result from resettlement activities, existing social safety nets may be weakened or lost. Social safety nets include informal but established patterns of caring for elders, impoverished or otherwise socioeconomically vulnerable individuals who may not have the means to meet their basic needs independent of community support. Vulnerable households without land ownership often rely on someone else's land for livelihood (land users). Losing land access will potentially result in increased vulnerability for such households. The "sense of place" concept is interactional and psychological, which makes it very difficult to move away from a place that one consider home. Land acquisition resulting in physical displacement is one of the most critical impacts to communities' sense of place. In addition, given the limited availability of replacement land and the increased prices of land in the area, the likelihood of having to move to a different community is higher which adds to the impact.

Livelihoods

Infrastructure development often impact a multitude of place related values including land, traditional forms of livelihood and access to water bodies amongst others, which will be impacted by the Project. Numerous stakeholders, both community members and government representatives raised concerns related to loss of agricultural land and livelihoods during the consultations conducted as part of the EIA conducted by E&A. The concerns ranged from direct impacts such as losing their farmland to indirect impacts such as losing access to water bodies which the community depend on to irrigate their paddy fields.

The immediate impact of land acquisition is the displacement of farmers from their fields. For many, farming is not just a source of income but a way of life that has been passed down through generations. The loss of farmland means the loss of a primary income source, and for smallholder farmers, this can lead to financial instability. The transition from farming to other forms of employment is not straightforward, as many farmers may lack the skills or opportunities to move into different sectors.

Since the Project has been announced the land prices in the surrounding areas have increases drastically. Numerous private companies have already started to purchase or acquire farmland to establish businesses. Land prices are expected to continue to increase when the airport becomes operational, pricing out community members who have lost their land and making it unaffordable for them to purchase land in the surrounding areas. Majority of the people impacted will need to transition out of agriculture-based livelihoods into labor jobs or move to different provinces where agricultural land is more affordable. This comes with impacts on their "sense of place" - a concept which is an interactional and psychological which makes it very difficult to move away from a place that one consider home. Affected people will likely transition into labor jobs, however, this transition poses several challenges. Many farmers have limited education and skills suited to other sectors. Transitioning to jobs in urban centers or different industries may require training and education, which can be time-consuming and costly. The available jobs for unskilled laborers are often low-paying and precarious. These positions may not offer the same level of financial stability or job security as farming, leading to a decrease in the overall quality of life for these individuals. In search of employment, many might migrate to urban areas or other provinces. This migration can disrupt family structures and community ties, leading to social fragmentation and loss of cultural heritage. The migration of some men to urban centers and abroad will increase the number of women in agriculture, as well as contribute to an increase in female-headed households. However, women are more unlikely to

have land registered in their name or obtain documentation to prove entitlement – which further magnifies the impact of land acquisition from future development Projects.

As the Project has resulted in public scrutiny, and there is not widespread public consent, social tensions may arise between Project opponents and proponents. These divisions may occur along the lines of stakeholders or community members who perceive themselves to be beneficiaries of Project development (employment opportunities, supply opportunities, or other economic benefits or compensation for losses which are considered fair and advantageous), and those who do not. Differences in lifestyle and levels of development present within the Project area may increase as certain members of communities secure work or supply opportunities with the Project, while others do not; this can also contribute to tension and intra-community divisions.

Fishing is a crucial source of livelihood for many of the communities surrounding the Project. The Project could significantly affect fishing activities, with far-reaching implications for local fishers and their families. Infrastructure development could disrupt local water bodies, altering water flow patterns, reducing water quality, and degrading aquatic habitats, which are essential for sustaining fish populations. Construction activities can lead to increased sedimentation and pollution, adversely affecting the breeding grounds and health of fish species. Infrastructure development can also lead to restricted access to traditional fishing areas. The new access road can limit the movement of fishers to key fishing spots. Additionally, security zones around the Project will limit or prohibit access to nearby water bodies, especially Beoung Cheung Loung Lake, further constraining fishing activities.

Multiple stakeholders, both community members and government representatives raised concerns related to loss of livelihoods due to impacts on fisheries during the consultations conducted as part of the EIA. The primary concern was that the Project would likely endanger the fisheries due to the infilling of water bodies.

The community members in particular requested that Beoung Chueng Loung lake be left intact. Their requests ranged from not infilling the lake to not prohibiting people from fishing on the lake to allowing people to access fishing areas. There were also requests to not close the waterway flowing from Tonle Bati to Beoung Chueng Loung because it is the main water source for the lake. If the waterway is filled in, the lake will lack water and fish stocks will reduce. The Project has necessitated the infilling of a proportion of the lake and other waterways, impacting fishermen.

Based on a report published by Stiftung Asienhaus on the impacts of land acquisition for the Project site, majority of the airport communities have observed a downturn in work opportunities, attributing this to the encroachment upon and depletion of local water bodies like rivers, lakes, and canals as a result of the Project.[8]

Since the Project started construction, there have been reports of the daily catch of fishermen dwindling due to the infilling of water bodies. The cumulative impact of pollution, habitat destruction, and restricted access can lead to a decline in fish stocks. Reduced fish populations can diminish catches, directly impacting the income and food security of fishing households. Over time, the decreased availability of fish can lead to increased competition and conflict

[8] Stiftung Asienhaus Study. 2024. A Kingdom for an Airport. Stiftung_Asienhaus_Study_A_Kingdom_for_an_airport_web.pdf

among fishers. There have already been reports of fishers taking jobs as construction workers, but some could not work as construction workers due to health problems preventing them from doing the dangerous manual labor. The reduced viability of fishing as a livelihood may force fishers to seek alternative sources of income. Similar to displaced farmers, fishers may face challenges in transitioning to new forms of employment. Many fishers have specialized skills and knowledge unique to their trade, making it difficult to find equivalent work in other sectors. The transition from fishing to other forms of employment is not straightforward, as many fishers may lack the skills or opportunities to move into different sectors.

Women play a significant role in fishing communities, often engaging in post-harvest activities such as processing and selling fish. The decline in fishing activities can disproportionately affect women, who may lose their livelihoods and face increased economic hardship. Vulnerable groups, including the elderly and children, also depend on the fishing industry for sustenance and support.

For many, fishing is not just a source of income but a way of life that has been passed down through generations. It is also a supplementary source of livelihood for people, complementing other existing income and nutrition sources. The loss of fishing grounds means the loss of a primary income source and can lead to financial instability. The decline of fishing as a viable livelihood can disrupt community cohesion. Long-established social networks and support systems may weaken as families and individuals face economic pressures and potential displacement. Social tensions may arise between those who can adapt to new opportunities and those who struggle to transition.

The degradation of aquatic ecosystems due to construction and pollution can lead to a loss of biodiversity. The decline in fish species and other aquatic life can have cascading effects on the broader ecosystem, further reducing the resilience and sustainability of local water bodies.

Another concern raised by stakeholders is that the Project will need to build transportation routes which will impact their farmland.

Based on the above, receptor sensitivity is considered *High*. The magnitude of impacts is expected to be local, but to affect a large proportion of receptors. In addition, there are expected to be additional impacts associated with the access road, reservoir/drainage and other ancillary/associated facilities. The magnitude is considered to be *High*. The impact significance is therefore designated as **Major**.

1.3.5.5 MITIGATION MANAGEMENT, AND MONITORING PROCEDURES

Due to expected physical and economic displacement, the Project triggers IFC Performance Standard 5 on Land Acquisition and Resettlement. CAIC has committed to **ceasing all land acquisition related to the Project until adequate measures are developed to fill the existing gaps and comply with international lenders' requirements.**

The following measures will be implemented to mitigate the impacts on the physical and economic displacement and livelihoods of local communities as a result of the Project.

Develop and Implement a Stakeholder Engagement Plan: As part of SEP development and implementation, CAIC will communicate with the local community to inform on Project construction status, activities performed during the construction and operation phases of the Project and expected impacts in a transparent manner. Communication with local stakeholders

on the progress of the construction phase will occur frequently and policies on the Grievance Redress Mechanism (GRM) will be properly implemented to ensure that effective communication channels with local stakeholders are put in place to address any issues which might arise during the Project operation phase. CAIC will ensure all the affected communities will be involved during consultation, including women, elderly, youth, people with disabilities. CAIC will recruit an independent third-party consultant to develop the SEP, while implementation and monitoring will be conducted by CAIC.

Develop and Implement a Grievance Redress Mechanism: A GRM will be developed and implemented to receive and respond to any/all community and worker grievances. The GRM, as well as channels to raise grievances will be communicated to all workers and villages in the SAoI. The GRM will include the payment of the compensation, access, restriction, as well as Gender-based Violence and Harassment (GBVH) related issues (related to construction workforce, security personnel etc.) or any other concerns associated with the Project. CAIC will ensure all the affected communities are able to access and submit complaints; acknowledge receipt of the grievance (if contact details are provided); review the concern; internally investigate the basis for the concern; determine actions to address the concern, if required; provide a response to the concerned party and maintain records of the whole process. All grievances will be recorded and maintained including follow-up actions, as required. CAIC will recruit an independent third-party consultant to develop the GRM, while implementation and monitoring will be conducted by CAIC.

Develop and implement a Resettlement Action Plan (RAP): A RAP will be developed and implemented which outlines the full land acquisition strategy. The RAP will provide a clear overview of the persons entitled to compensation, principles of compensation, methods of valuing affected assets, resettlement process and tools, grievance process, institutional arrangement for resettlement planning and implementation. The RAP will need to provide the entitlement matrix analysis containing eligibility analysis and type of compensation proposed by the Project. Entitlement analysis should be performed according to census data and consultation with the affected communities to measure the comprising compensation, assistance, income and livelihood restoration. As part of the RAP process, at least the following actions will be undertaken:

- Confirm land use and tenure by conducting a census;
- Assess and document the process to confirm that land acquisition is on a wiling buyer-willing seller basis (as per IFC PS requirement) by reviewing land acquisition information and conducting stakeholder consultations;
- Implementation and further improvement of the functioning of the SEP and GRM. This includes promotion and awareness on how to raise grievances. Additionally, it should be assessed whether all grievances received (particularly the ones related to land acquisition, compensation and RAP implementation) are resolved and documented;
- Conduct vulnerability analysis (including gender, poverty, disability and other forms of vulnerabilities as described in the SEP).

At a minimum, the following principles will guide the development of the RAP in relation to physical and economic displacement:

- Provide a set of clear and transparent standards for compensation that will be applied consistently to all affected villagers;

- Compensation will be provided for loss of assets at full replacement cost (i.e. market value plus transaction costs (for instance registration and taxes)), and provide assistance to help affected villagers to improve, or at least restore their livelihoods;
- Activities are planned and implemented with meaningful consultation, and the informed participation of those affected;
- All payments including compensation for loss of land, assets, structures, trees, etc. will be made to affected households *prior* to displacement;
- Lack of formal legal rights to assets lost will not deprive affected villagers from receiving compensation and payments for non-land assets and entitlements;
- Implementation of the GRM will be improved to manage issues and grievances related to land in a timely, effective, and accessible manner.

As part of the RAP, CAIC has committed to providing further clarification on:

- Legal owners of the parcels and legal status of land within common use (such as roads, rivers, wetlands, etc);
- Protocol for considering eligibility of landowners with legal claims over land but lacking evidence and compensation as per the entitlement matrix;
- Validation of existing information by conducting a census survey and engagement on informal land users, particularly in relation to:
    - Grazing activities performed by the local communities which could potentially result in income losses for informal users;
    - Potential income losses of fishermen, due to the loss of wetlands;
    - Income losses due to loss of agricultural land and crops.

CAIC will recruit an independent third party consultant to develop the RAP, while implementation and monitoring will be conducted by CAIC.

Develop and implement a Livelihood Restoration Plan (LRP): An LRP will be developed and implemented to ensure that livelihoods of all displaced persons are improved or restored in real terms relative to pre-Project levels; and the standards of living of the displaced poor and other vulnerable groups are improved to at least national minimum standards. Livelihood programs should provide special assistance to vulnerable groups who may be disadvantaged in securing alternative livelihoods. The purpose of the LRP is to ensure that individuals and communities impacted by development Projects or other disruptions to their traditional means of income and sustenance are provided with the necessary resources, support, and opportunities to restore, and where possible, improve their livelihoods. The objective of the LRP is to mitigate adverse effects by offering targeted assistance that enables affected populations to regain self-sufficiency, maintain their standard of living, and foster long-term economic resilience. This is achieved through a combination of skill development, financial aid, access to new employment opportunities, and community-based initiatives, tailored to the specific needs of those impacted. Specifically, the LRP should:

- Clarify resettlement principles, procedures, organizational arrangements, schedule of activities, and design criteria to be applied to all physical and economic displacements required for the Project;
- Put in place a process to improve or at least restore the livelihoods of all Project Affected People (PAPs) to their pre-Project levels prior to land acquisition for the Project and improve the standards of living of affected poor and other vulnerable groups;

- Provide strategies for effective, inclusive and continuous engagement and information disclosure with Project-affected parties and other interested parties on land acquisition, compensation and livelihood matters, as reflected in the SEP;
- Provide a plan for monitoring and evaluation to ensure resettlement principles and objectives are met;
- Clarify roles and responsibilities for different Project activities with a description of institutional arrangements and coordination mechanisms; and
- Present a schedule showing the sequence of livelihood restoration activities and programs.

Develop and implement a Compensation Policy: Develop a retroactive compensation policy and a robust framework which determines which grievances related to compensation will be compensated retroactively. The purpose of the Compensation is to provide fair and equitable financial redress to individuals and communities who have experienced economic or social loss due to land acquisition that occurred without prior adequate compensation. The objective of this policy is to ensure that those affected by past land acquisition processes are compensated for their losses in a manner that acknowledges their rights and contributes to restoring their livelihoods. This includes calculating appropriate compensation based on current values, addressing any ongoing impacts, and promoting justice and fairness by rectifying past oversights or inequities in the compensation process. The policy should include the process through which they intend to evaluate claims from affected people i.e. what type of evidence or data is required to be eligible for compensation payment. Evidence could include the following:

- Letter from local authority proving they lived on the land for x amount of years;
- Fishing log books; and
- Crop log books.

CAIC will recruit an independent third-party consultant to develop the Compensation Policy, while implementation and monitoring will be conducted by CAIC.

1.3.5.6 RESIDUAL IMPACTS

After implementation of the mitigation measures, receptor sensitivity will remain *high,* whilst magnitude of the impact will be reduced to *medium*. The impact significance will remain **Major** until monitoring of the mitigation measures determines that allegations surrounding land acquisition have been adequately resolved.

1.3.5.7 IMPACTS OVERVIEW

The below table presents an overview of the impacts as described in this section:

TABLE 1.15 IMPACTS ON LAND USE AND LIVELIHOOD

Impact Significance			
Project Phase	**Pre-Construction**	**Construction**	**Operation**
	Land acquisition will occur during pre-construction and construction with other impacts likely to occur during operation.		
	Negative	Positive	Neutral

Impact Significance					
Impact Nature	The change in land use will result in physical and economic displacement and impact on livelihoods.				
Impact Type	**Direct**	Indirect	Induced		
	The impact results from a direct interaction between the Project and receptors as the impacts on population within the SAoI are through resettlement, impacts on their use of land, economic displacement and/or change of livelihood they may experience, due to occupation of land plots by the Project.				
Impact Duration	Temporary	Short-term	Long-term	**Permanent**	
	Impact is expected to be permanent. The removal of houses, wetlands and agricultural land has permanent implications.				
Impact Extent	**Local**	Regional	International		
	Impact will be limited to the population within the SAoI.				
Frequency	The impact will occur once (i.e. Permanent acquisition of land and infilling of wetlands will only occur once for the area required).				
Impact Magnitude	Positive	Negligible	Small	**Medium**	Large
	Based on current estimates, the impact is local and expected to affect a significant number of people (i.e. those connected to the land to be acquired).				
Receptor Sensitivity	Low	Medium	**High**		
	High is selected as the vulnerability of receptors has been considered as part of their 'sensitivity'.				
Impact Significance	Negligible	Minor	Moderate	**Major**	
	Impact significance is **major**, however this may change if all mitigation measures proposed are implemented and monitoring of the mitigation measures determines that allegations surrounding land acquisition have been adequately resolved.				

1.4 IMPACTS ON TRAFFIC AND TRANSPORT

The increased movement of heavy machinery and materials for construction or maintenance and personnel during construction and operation phases of the Project can result in road congestion, damage to roads, and increased accidents.

1.4.1 BASELINE CONDITIONS

Transportation of equipment and materials can lead to a higher volume of road traffic and damage to the road surface due to heavy trucks. The traffic study conducted by E&A which was conducted on Monday, 06 May 2019 (weekday) and Sunday, 05 May 2019 (weekend) identified motorcycles as being the primary form of transportation at the intersection of National Road 2 and Samdech Hun Sen Street 60 m. At the time the traffic study was conducted, the access road to the Project site had not yet been constructed. The weekday count totaled 10,189 motorcycles, 1,552 tuk tuks, 3,294 cars, 60 buses and 1,609 trucks (including light trucks, heavy trucks and lorries). The weekend count totaled 11,547 motorcycles, 1,757 tuk tuks, 4,847 cars and almost twice the number of trucks - 2,115 light trucks, heavy trucks and lorries. ***Table 1.16*** shows the traffic flow breakdown based on the type of vehicle and ***Table 1.17*** shows the overall traffic flow.

TABLE 1.16TRAFFIC COUNT BASED ON TYPE OF VEHICLE

Type of Vehicle	Weekday	Weekend
Motorbike	10,189	11,547
Tuk tuk	1,552	1,757
Sedan	3,080	4,618
Van	214	229
Bus (16-44 seats)	60	16
Light truck	518	731
Heavy truck	992	1,332
Lorry	99	52

TABLE 1.17TRAFFIC FLOW

Description	Weekday	Weekend
Average hourly traffic flows	839	1,148
Hourly maximum traffic flow	1,062 (7:00 am-9:00 am)	1,244 (4:00 pm-5:00 pm)
Road capacity per hour	2,000	2,000
Highest ratio of traffic flow and road carrying capacity	0.53	0.62

The results of the traffic ratio calculations showed moderate traffic flow conditions. Deliveries of equipment and materials is utilizing existing community roads and the new access road. Construction has increased the number of vehicle and truck movements, with the average number of movements from the Project being approximately 360 trips/day or 15 trips/hour. An access road has been constructed for the Project, but no details were provided on the access road.

It was found that there are 5 schools, 14 pagodas, 3 churches and 2 hospitals within a 3 km radius from the Project site. Community activities were observed along majority of the road segments of the transportation route, including schools, shops and temples.

1.4.2 IMPACT ASSESSMENT

1.4.2.1 SOURCE OF IMPACT

Land preparation and groundwork require the use of heavy machinery that will move along existing roads to reach the construction sites. Similarly, the transport of equipment and materials during construction will require trucks making multiple trips per day.

General traffic concerns in relation to the Project that were found during stakeholder consultations conducted by E&A in 2019, in relation to roads and infrastructure, were related to traffic congestion, accidents (specifically between school children and trucks), increased dust, and potential road damage. It is expected that construction would place additional strain on the local roads as there will be a range of Project-related vehicles movements, including vehicles delivering materials and workers to and from the Project site. Workers and local communities may be exposed to health and safety risks as a result of increased vehicle movements and increased potential for accidents. These movements have the potential to contribute to or be the root cause of accidents, particularly given there will be a higher number of heavy vehicles in the area. Specifically, the Project will undertake the delivery of workers and materials over a 3-year period involving a maximum total of 360 trips/day or approximately 15 trips/hour. The transportation of raw material and heavy equipment of large volume can also cause potential road deterioration along the transportation routes.

There are already a significant amount of trucks on the main road based on the results of the traffic study, additional 360 trucks/day during the construction phase could lead to a higher likelihood of traffic collisions between trucks and motorcycles or with children as they are entering/exiting the schools. Children as young as 13 years old drive motorcycles in Cambodia and the increase in trucks could result in a higher likelihood of collisions. The additional cars and trucks could also contribute to congestion at peak times.

Increased traffic through construction related vehicles may disturb the communities along the transportation route. Based on the traffic study, the traffic along the main road is currently moderate already.

While potential health and safety impacts associated with transport movements will be primarily associated with the construction phase, the operation of the airport will also increase traffic. The number of trucks is expected to decrease as materials will no longer need to be transported but the number of cars carrying passengers to and from the airport will increase. There are expected to be 3,455 persons flying in peak hours, by 2023, resulting in hundreds and potentially thousands of additional cars and tuk tuks travelling along the transportation route as a result of

the operation of the airport. In addition, an airport requires a substantial amount of workers who will either use cars, tuk tuks or motorcycles to commute to and from work. The additional traffic during operations could lead to increased likelihood of collisions, congestion or disturbance of communities along the transportation route. Wet/dark conditions, driver distraction, fatigue, other dangerous drivers, variable road conditions are all factors which could lead to increased collisions, especially since the area is primarily comprised of agricultural land.

Additionally, in Cambodia, the road is closed off for government officials and foreign dignitaries. As there is only one road leading to the airport, any time VIP guests fly in and out of the country, the road will be closed off for an indeterminate amount of time, impacting other community members' ability to commute.

1.4.2.2 SIGNIFICANCE OF IMPACTS

As local communities will be exposed to health and safety risks associated with traffic and transport related to the Project during construction and operation, receptor sensitivity is considered *medium.* The magnitude of impacts is generally of medium concern but could be large in case of traffic deaths due to the changing character and volume of vehicles on the road. Magnitude is therefore considered *large*, resulting in a **major** significance.

1.4.2.3 MITIGATION MANAGEMENT, AND MONITORING PROCEDURES

In order to manage the potential impacts on the communities along the transportation route, as a result of the traffic and transport arrangements for the Project during the construction and operation phases, the following measures are to be put in place:

- HSE plan including traffic risk assessment, and safety practices;
- Display traffic signs on key spots such as entrance gates, road curves, and install road marking;
- Notify the Project's drivers to slow down when arriving sensitive spots such as schools, temples, health centers and hospitals;
- Prohibit overweight trucks;
- Implement the Traffic Management Plan;
- Compliance with Cambodian Law on working conditions and Occupational Safety and Health and include relevant chapters on health and safety in the induction training for construction workers;
- Schedule construction deliveries and employee shift changes to minimize traffic congestion and delay;
- Develop and implement a Grievance Redress Mechanism for workers and community members; and
- Adopt and implement health and safety controls and prevention policies, procedures and management measures.

It is understood that the Project Proponent will design these measures and will impose them on the contractor through contractual requirements.

1.4.2.4 RESIDUAL IMPACTS

Through the additional mitigation measures proposed, the residual impact magnitude is reduced to *medium*, with a corresponding reduction in the residual impact significance to **Moderate.**

1.4.2.5 IMPACTS OVERVIEW

The below table presents an overview of the impacts as described in this section:

TABLE 1.18 IMPACTS ON TRAFFIC AND TRANSPORT

Impact Significance					
Project Phase	Pre-construction	**Construction**	**Operation**		
Impact Nature	**Negative**	Positive	Neutral		
	The impact will be **negative**.				
Impact Type	**Direct**	Indirect	Induced		
	The impacts relate to increased transport movements directly linked to the Project.				
Impact Duration	Temporary	Short-term	Long-term	**Permanent**	
	The impacts will be **permanent** (at least for the duration of the Project). Impacts due to increased trucks during construction and due to increased cars and motorcycles during operation.				
Impact Extent	**Local**	Regional	International		
	The impact will be localized, mainly impacting the communities around the transportation route of the Project.				
Frequency	The Project will undertake the delivery of workers and materials over a 3-year period involving a maximum total of 360 trips/day or approximately 15 trips/hour. Number of vehicles expected during operations is unavailable at this time.				
Impact Magnitude	Positive	Negligible	Small	**Medium**	**Large**
	The magnitude is medium as the intensity of change can be large if not managed well. The impact will be of perceptible difference from baseline condition but will generally be short in duration.				
Receptor Sensitivity	Low	**Medium**	High		
	Receptors will be exposed to health and safety risks associated with traffic and transport related to the Project during construction and operation				
Impact Significance	Negligible	Minor	**Moderate**	Major	
	Due to mitigation management measures that will be in place, impact significance is considered moderate.				

1.5 IMPACTS ON ECONOMIC OPPORTUNITIES

The development of a large-scale Project has the potential to generate economic opportunities for the local community. Potential economic opportunities for the villages in the SAoI are outlined in the following sections.

1.5.1 BASELINE CONDITIONS

The main types of occupation in the SAoI are farmers, poultry farmers, vendors, repairers, factory-workers, civil servants, transportation workers, construction workers, fishermen, NGO staff and agricultural laborers. Majority of the people in the SAoI are farmers (25%) and vendors (19%). Although households in the study area have other main occupations, many of them still undertake farming as their secondary occupation[9].

The stakeholder consultations conducted by E&A validated the data collected from secondary sources and confirmed that the main forms of livelihood are farming, fishing and running small businesses. Majority of the interviewees (both community members and local authorities) expressed hope that the Project would offer opportunities for local people to work in the airport and provide additional or necessary training.

The average annual income of households in the SAoI is 2,381,024 riels ($595.25 USD) per month while the average monthly expenditure is 1,379,160 riels ($344.75 USD).

Irrigation sources are important for agriculture. The rice production in the wet season uses rainwater, while in dry season water for irrigation is sourced from the Tonle Bati and Stung Prek Tnot rivers for farmers in Kandal Steung District, while farmers in Potsor Commune use water from the Hun Sen Potsar irrigation system, which originates from the Tonle Bati River.

The SAoI encompasses several lakes, Boueng Cheung Loung is considered the largest lake with fishing potential. 6% of the households in the SAoI are fishermen. All fishing activities in the study area are small-scale and comprise of either subsistence-commercial fishing or subsistence fishing. Subsistence-commercial fishing is conducted throughout the year by villages living close to Boueng Rean and Boueng Cheung Loung. Fishermen use plastic boats and wooden boats with small engines. The average daily catch is between 10 and 15 kg per day of diversified fish which are sold to a middleman or to commercial fish sellers who distribute fish in the local markets and in Phnom Penh.

Subsistence fishing activities are spread across the area, but on a smaller scale. The majority of fishermen who carry out subsistence fishing are from fishery communities located in the southern part of Boueng Cheung Loung Lake. The study conducted by E&A found that the main fishing season is between March and April. During this period, fishermen can catch between 2 to 3 kg per day. The average fish price ranges from 11,600 riels ($2.90 USD) per kilogram in the rainy season to 17,400 riels ($4.35 USD) per kilogram in the dry season. Some types of fish such as the Thicklip Barb, Dusky Sleeper, Climbing Perch and the Eyespot Spiny Eel are more expensive, and can go up to 40,000 riels ($10 USD) per kilogram in the rainy season and up to 50,000 riels ($12.50 USD) per kilogram in the dry season.

Fishing is a crucial source of livelihood for many of the communities surrounding the Project. The Project could significantly affect fishing activities, with far-reaching implications for local fishers and their families. Infrastructure development could disrupt local water bodies, altering

[9] Commune data, 2018

water flow patterns, reducing water quality, and degrading aquatic habitats, which are essential for sustaining fish populations. Construction activities can lead to increased sedimentation and pollution, adversely affecting the breeding grounds and health of fish species. Infrastructure development can also lead to restricted access to traditional fishing areas. The new access road can limit the movement of fishers to key fishing spots. Additionally, security zones around the Project will limit or prohibit access to nearby water bodies, especially Beoung Cheung Loung Lake, further constraining fishing activities.

Multiple stakeholders, both community members and government representatives raised concerns related to loss of livelihoods due to impacts on fisheries during the consultations conducted as part of the EIA. The primary concern was that the Project would likely endanger the fisheries due to the infilling of water bodies.

The community members in particular requested that Beoung Chueng Loung lake be left intact. Their requests ranged from not infilling the lake to not prohibiting people from fishing on the lake to allowing people to access fishing areas. There were also requests to not close the waterway flowing from Tonle Bati to Beoung Chueng Loung because it is the main water source for the lake. If the waterway is filled in, the lake will lack water and fish stocks will reduce. The Project has necessitated the infilling of a proportion of the lake and other waterways, impacting fishermen.

Since the Project started construction, there have been reports of the daily catch of fishermen dwindling due to the infilling of water bodies. The cumulative impact of pollution, habitat destruction, and restricted access can lead to a decline in fish stocks. Reduced fish populations can diminish catches, directly impacting the income and food security of fishing households. Over time, the decreased availability of fish can lead to increased competition and conflict among fishers. There have already been reports of fishers taking jobs as construction workers but some could not work as construction workers due to health problems preventing them from doing the dangerous manual labor. The reduced viability of fishing as a livelihood may force fishers to seek alternative sources of income. Similar to displaced farmers, fishers may face challenges in transitioning to new forms of employment. Many fishers have specialized skills and knowledge unique to their trade, making it difficult to find equivalent work in other sectors. The transition from fishing to other forms of employment is not straightforward, as many fishers may lack the skills or opportunities to move into different sectors.

Women play a significant role in fishing communities, often engaging in post-harvest activities such as processing and selling fish. The decline in fishing activities can disproportionately affect women, who may lose their livelihoods and face increased economic hardship. Vulnerable groups, including the elderly and children, also depend on the fishing industry for sustenance and support.

For many, fishing is not just a source of income but a way of life that has been passed down through generations. It is also a supplementary source of livelihood for people, complementing other existing income and nutrition sources. The loss of fishing grounds means the loss of a primary income source and can lead to financial instability. The decline of fishing as a viable livelihood can disrupt community cohesion. Long-established social networks and support systems may weaken as families and individuals face economic pressures and potential displacement. Social tensions may arise between those who can adapt to new opportunities and those who struggle to transition.

The degradation of aquatic ecosystems due to construction and pollution can lead to a loss of biodiversity. The decline in fish species and other aquatic life can have cascading effects on the broader ecosystem, further reducing the resilience and sustainability of local water bodies.

1.5.2 IMPACT ASSESSMENT

1.5.2.1 SOURCE OF IMPACT

The Project has potential to create direct and indirect job opportunities for local communities during the construction and operation phases of the Project. Airports are catalysts for economic development of an area. The significance of airports extends beyond their primary function of air travel; they act as hubs of economic activity, generating employment, and attracting investment. The development of an airport can lead to the transformation of its surroundings into an economic center. Airports require a vast array of personnel for their operations, ranging from air traffic controllers, security staff, and ground handlers to retail and hospitality workers. The economic impact of airports extends beyond their immediate operations, creating substantial indirect contributions through what is known as the multiplier effect. This effect occurs when money spent by the airport and its employees circulates through the local economy, generating additional economic activity. For example, the wages paid to airport employees are spent in the local community, benefiting other businesses and contributing to the overall economic health of the region. Moreover, the presence of an airport boosts businesses and industries in its vicinity. Airports provide critical connectivity and accessibility, making nearby areas attractive locations for businesses. This proximity advantage is particularly beneficial for industries reliant on quick transportation, such as logistics, manufacturing, and e-commerce. A notable example of this indirect economic benefit is seen in the hospitality and tourism sectors. Furthermore, airports are instrumental in enabling local businesses to access global markets. They provide the necessary infrastructure for the transport of goods, allowing companies to expand their reach beyond local markets. This capability is particularly beneficial for industries that rely on the speedy delivery of products, such as pharmaceuticals, perishable commodities, and high-tech equipment. Businesses often consider the proximity to a major airport as a critical factor when deciding on locations for their operations, as it ensures efficient logistics and easy access to global markets.

In particular, the following activities have the potential to provide economic opportunities to the local community:

- Construction
  - Workforce mobilization and presence;
  - Equipment and material transportation and supply;
- Operation
  - Presence of workforce including maintenance, security, baggage handling, cleaning, airline staff, kiosk vendors, cargo, etc; and
  - Jobs created in the surrounding areas as part of the value chain such as catering, hotels, restaurants, tourism, transport and logistics.

During the construction phase, the peak workforce requirement is estimated at 17,000 workers. At the time of writing this ESIA Addendum it was unclear how many of the positions were filled by workers from surrounding villages.

It was also unclear how many workers will be required for the operations phase, but for an airport of this size, there are expected to be at least 500 to 800 workers.

It is expected that there is capacity for people within the SAoI to be employed in unskilled work, and potentially some semi-skilled work, for the Project. In addition to direct employment, there may be indirect employment opportunities for communities within the SAoI. For instance, the Project or workers may require short-term accommodation, or the purchase of goods and services from local businesses. The increased demand may result in an associated increase in employment. In addition, the presence of the airport will increase demand for other businesses such as hotels and restaurants, providing opportunities for the communities to either build or work in these establishments.

1.5.2.2 SIGNIFICANCE OF IMPACTS

Recruitment and training of local workers can provide economic opportunities and improve the economic well-being of the community. The level of workforce employed during the construction phase is only expected to provide a positive impact, which means that no magnitude designation (aside from 'positive') is assigned.

Construction of the Project will require approximately 17,000 construction workers at its peak. This workforce will consist of project managers, engineers, laborers and skilled workers, technical advisors and maintenance personnel. Some of the construction work activities are manual and may not require specialized workers while other activities may require skills that have been acquired by the available local workforce during experience or training programs offered by the other local industries.

For this reason, a portion of the workforce can be recruited from the local communities within the SAoI, including residents of the villages surrounding the Project. It is likely that the Project will indirectly generate employment and extra incomes for others (e.g. increased income for local shop owners due to employee-related purchases). It is also expected that job opportunities will increase during the operation phase, comparative to the construction phase, as the airport of this scale will require a large number of workers.

In addition to employment opportunities, the Project will also require goods and services for its construction activities such as construction materials, equipment, cleaning, catering and other hospitality services. Therefore, the above-mentioned opportunities will probably provide additional markets for the existing small and medium local businesses in the villages closest to the Project site. The airport expects to receive at least 13 million passengers and 30 million passengers in 2030 and 2050, respectively. These passengers will contribute to the national economy through airport tax payment and other expenditures during their travel and stay in Cambodia.

Based on the above analysis, the Project is expected to have an overall **positive** impact in terms of employment, procurement and induced job opportunities, and increase the economic conditions of the local population.

1.5.2.3 MITIGATION MANAGEMENT, AND MONITORING PROCEDURES

In order to enhance the potential positive economic opportunities for communities within the SAoI, the following additional measures are to be put in place:

- Recruitment Policy: A Recruitment Policy focused on the local community, will be developed in alignment with the relevant legislation and policies related to ensuring fair and equal recruitment of workers regardless of age, education, ethnicity, experience, religion, etc.;
- Cooperation with relevant local and domestic labor sources (universities, technical and vocational centers, labor market, etc.) where possible on recruitment of local workers and training of specialists.
- Local Content and Influx Management Plan: The Local Content and Influx Management Plan will be developed in order to maximize the local employment and training opportunities afforded to people within the SAoI. The plan will be implemented by the nominated EPC Contractor, and will include:
  - The responsibilities and management practices associated with the management of labor during construction and operation of the Project.
  - A hiring policy that reinforces the Project's preference to employ local workers and undertake procurement from local businesses, where possible.
  - The number of job positions that need to be filled, the level of skills required and which positions may be allocated to local community members.
- Wherever possible, residents of the local villages, particularly those displaced or directly affected by the Project, will be prioritized for employment. With respect to unskilled labor, after preference has been given to people directly affected by the Project, these opportunities will be evenly distributed between the affected villages.
- A training program targeting skills required for people in the SAoI to participate in unskilled, and potentially semi-skilled work for the Project.
- A requirement to notify people in the SAoI of employment and procurement opportunities in advance. This will enable people and businesses to be prepare for the application process (e.g. contracting requirements, assistance with application, etc.)
- Develop a skills register and coordinate with local Labor Agency.
- Employment targets shall aim to reflect an even distribution of demographic characteristics in the villages.
- Include the Employment and Recruitment Plan as a condition of Contractor's contracts.
- Establish a Recruitment Committee comprising representatives from each of the villages and contractors, with the aim of identifying and employing locals for available employment opportunities.
- The criteria (skills and experience) for available jobs will be documented and made available to the Recruitment Committee and through local and national media, where appropriate.

1.5.2.4 RESIDUAL IMPACTS

The Project will provide various economic opportunities, particularly in the form of employment. Not only will there be direct employment, but there will be indirect employment in businesses that support the Project and its workers. Accordingly, with the additional measures in place, the residual Project impact to economic opportunities will remain **Positive**.

1.5.2.5 IMPACTS OVERVIEW

The below table presents an overview of the impacts as described in this section:

TABLE 1.19IMPACTS ON ECONOMIC OPPORTUNITIES

Impact Significance					
Project Phase	Pre-construction	**Construction**	**Operation**		
Impact Nature	Negative	**Positive**	Neutral		
	The impact will be **positive,** as this includes opportunities for employment and other economic benefits from the Project.				
Impact Type	**Direct**	**Indirect**	Induced		
	The impacts relate to direct and indirect employment and procurement opportunities as a result of the Project.				
Impact Duration	Temporary	Short-term	**Long-term**	Permanent	
	The impacts will be **long-term** over the construction and operation phases.				
Impact Extent	Local	**Regional**	International		
	Given the nature of airports, the impact will be regional and will span from the communities near the Project site to the population of Cambodia as a whole.				
Frequency	Continuous over the construction and operation phases.				
Impact Magnitude	**Positive**	Negligible	Small	Medium	Large
	The impact magnitude is positive as economic opportunities allow people in the SAoI to improve their livelihoods.				
Receptor Sensitivity	Low	Medium	High		
	N/A				
Impact Significance	Negligible	Minor	Moderate	Major	
	N/A				

1.6 IMPACTS ON OCCUPATIONAL, HEALTH AND SAFETY

There are a number of fundamental principles and rights at work that apply to all workers, and these are reflected in international standards (e.g. the International Labor Organization (ILO) Declaration on Fundamental Principles[10] and Rights at Work and the Universal Declaration of Human Rights[11]). Without appropriate safeguards in place, a range of potential impacts can arise, including discrimination within the workplace, mistreatment of migrant labor or other vulnerable groups, and the use of forced labor[12] (including bonded labor[13]), or child labor[14].

Workers mistreatment may also extend to:

- Poor condition of workers' accommodation (e.g. poor hygiene standards, lack of privacy, etc.). The Project does not plan on workers accommodation and would thus have limited control on workers' living conditions; and/or
- Undue exposure to occupational health and safety risks that lead to or increase the risk of serious injury or death (e.g. lack of training/qualification, inadequate personal protective equipment (PPE), etc.).

It should be noted that reference to 'workers' in this section to refer to fixed workers, contracted workers, as well as to workers in the supply chain.

1.6.1 BASELINE CONDITIONS

The national policy framework on labor cover:

- Law on Labor and the law on amendment of the law on Labor (new Article 139 and 144); and
- Law on Social Security Schemes for Persons Defined by the Provisions of Labor Law (2002).

1.6.2 IMPACT ASSESSMENT

1.6.2.1 SOURCE OF IMPACT

The following activities can have impacts to working conditions and occupational health and safety during different phases of the Project:

- Construction
  - Workforce mobilization and presence (including vehicle movements and security);
  - Land preparation (site clearance, excavation and levelling), fencing, and civil works;
  - Construction of all Project facilities;
  - Construction of runway and civil works;
  - Digging of dike around the site;
  - Clearing of unexploded ordinances;
  - Construction of internal drainage and sumps within the site area;
  - Wastes, emissions and discharge generation, handling and disposal during construction;

[10] ILO. ILO Declaration on Fundamental Principles and Rights at Work and its Follow-up. 1998.
[11] United Nations. Universal Declaration of Human Rights. 1948
[12] Forced labor is defined as "all work or service which is exacted from any person under the menace of any penalty and for which the said person has not offered himself voluntarily"
[13] Bonded labor (or debt bondage) is a form of forced labor in which workers are forced to work in order to pay off their on debts or inherited debts (ibid.)
[14] The ILO (n.d.c) defines 'child labor' as the work that is mentally, physically, socially or morally dangerous and harmful to children, and/or interferes with their schooling.

- Equipment and material transportation and supply;

- Operation
  - Inspections;
  - Handling and maintenance of aircraft;
  - Air traffic control related activities;
  - Cargo handling;
  - Operation of fire and rescue brigade services;
  - Vehicle movement; and
  - Presence of workforce.

1.6.2.2 SIGNIFICANCE OF IMPACTS

The Project will employ approximately 17,000 workers for construction activities at its peak. Workers are at risk of health and safety incidents, which may be linked to the physical environment in which they operate, the procedures they must abide by or the on-site health and safety culture (including the ongoing and efficient reporting of accidents/incidents and near-misses and how workers are empowered to learn from them to prevent reoccurrence).

The following are key health and safety risks related to airports:

- Working at heights;
- Repetitive motion;
- Trips and slips;
- Strikes by objects;
- Confined spaces; and
- Lifting operations.

Workers may be exposed to physical hazards depending on their particular work functions. Injuries are typically associated with vehicle and cargo movement in ground operations, ergonomic issues in baggage handling (including handling by customer service staff at passenger check-in stations), and ergonomic issues of in-flight crew associated with baggage stowing assistance and catering functions.

Workers may be frequently exposed to hazardous chemicals, particularly insecticides used for aircraft disinfection to reduce the international spread of disease carrying insects or agricultural pests. Insecticides used may include phenothin (a pyrethroid) and permethrin. Insecticides can be applied in aerosol form with or without the presence of cabin crew and passengers, or sprayed on cabin surfaces while the aircraft is empty. Aircraft maintenance activities may also pose numerous physical and chemical hazards to workers, with the most significant hazards being related to the use of hazardous chemicals which may result in potential exposures to cadmium containing dust; organic solvents; hexavalent chromium; cyanides and cyanogen chloride; and isocyanates, mainly via inhalation and dermal contact routes.

Working at Heights

Working at heights occur frequently throughout all phases of construction. The main focus when managing working at height should be the prevention of a fall. Falls from height can be associated with working on elevated structures, ladders and scaffolding, work equipment and vehicles.

Repetitive Motion

Ergonomic injuries can result from repetitive motion, over exertion and manual handling. Manual lifting tasks with high loads or repetition that may induce musculoskeletal disorders (MSDs), e.g. lower back pain. In addition to MSDs, manual lifting tasks can also lead to accidents causing acute trauma such as cuts or fractures.

Trips and Slips

Slips and falls on the same levels can occur as a result of wet or uneven surfaces.

Strikes by Objects

Strikes by objects and ejection of materials from machinery can also cause injury. Objects could also fall during adverse weather conditions (wind speed, extreme temperatures, humidity, and precipitation/rain).

Confined Spaces

Working in confined spaces on aircrafts or within areas of the airport infrastructure must also be managed.

Lifting Operations

During the construction phase, components are generally assembled and transported to the site where assembly will take place. This involves using large, complex equipment to repeatedly lift loads of varying dimensions and weights. The hazards associated with the use of lifting equipment in construction are:

- Hazards related to the loads, e.g. crushing due to impact of moving objects or loads falling from vehicles;
- Hazards from moving vehicles or collapsing structures, i.e. cranes falling over because of improper fixation or strong wind, unsafe loads, loads exceeding the safe weight limits;
- Falling from lifting platforms or being crushed when the platform moves;
- Hazards related to poor environmental conditions that may interfere with communication between workers (e.g. poor mobile/internet signal), or adverse weather conditions resulting in sweaty/slippery objects; and
- Contact with overhead electrical cables.

In addition, concentration of several workers will create a point source of wastewater and domestic waste. Without proper management, this can result in impacts on the groundwater quality and unhygienic conditions for the workers.

Chemicals, fuels, de-icing and hazardous substances used on airport can also pose a risk to health and safety through, inhalation, contact or ingestion if not correctly stored and handled.

By implementing the mitigation measures, the impact magnitude is expected to be *medium*. The sensitivity of receptors is considered *high* as workers (including workers further up in the supply chain) can risk health and worker rights issues (even fatality) if no specific control measures are in place to regulate their working conditions. However, it is noted the workforce engaged for key activities (e.g. working at heights and lifting operations) are expected to be trained to perform the tasks and safety procedures should be applied. The significance of impacts to worker health and safety is therefore considered to be **Major.**

1.6.2.3 MITIGATION MANAGEMENT, AND MONITORING PROCEDURES

The following additional mitigation and management measures will be implemented to manage the potential impacts identified:

- The company will as part of the construction stage ESMS and O&M stage ESMS develop and implement a contractor management procedure in line with IFC's GPN on 'Managing Contractor's E&S Performance to incorporate E&S processes and requirements into contractor short-listing, procurement and bidding, proposal review, contract preparation, contractor oversight and performance evaluation.
- **Contractor Management Plans:** The Project must ensure that EPC Contractors develop and implement Contractor Management Plans in order to verify that contractors and sub-contractors engaged during the construction phase are compliant with IFC requirements with regards to occupational health and safety, labor conditions, environmental performance and community engagement. This should at a minimum include personal safety, equipment and machinery safety, safety inspection, fire prevention, and emergency plan amongst others. The plans are also to include procedures on supply chain management, including a supplier Code of Conduct, regular audit requirements, and sufficient tools for monitoring and evaluation.
- The EPC Contractor will be required by the Proponent to meet minimum labor standards, so as to ensure workers (including migrant workers) are treated fairly.
- Implement OHS management system along with the worker code of conduct including worker's access to a Grievance Mechanism for working conditions, Gender Based Violence and Harassment at work site, including worker accommodation (as applicable).
- Compliance with Cambodian Law on working conditions and Occupational Safety and Health and include relevant chapters on health and safety in the induction training for construction workers;
- Cooperate with the Labor Department at every labor inspection;
- Develop and implement internal/workers Grievance Redress Mechanism;
- Adopt and implement health and safety controls and prevention policies, procedures and management measures;
- Provide personal protective equipment (PPE) to all workers and employees during the construction phase and to relevant workers during the operation phase. Distribute protective equipment to workers and employees according to their type of work;
- Establish an on-site health facility providing first aid to workers during the construction phase;
- The construction site manager will oversee the work safety and security within the site;
- Provide training on work safety rules and machinery operation in the site;
- Inclusion of meaningful participation of employees in implementation and maintenance of procedures and processes;
- Planning, implementing and monitoring programs and systems required to ensure OHS at the workplace;
- Provide and maintain workplaces, plant, equipment, tools and machinery and organize work so as to eliminate or control hazardous ambient work factors;
- Record and report occupational injuries and illness;

- Ensure measures to manage the impact of aircraft noise on employees and contractors at the airport;
- Ensure contract specifications include demands for service providers, contractors, and sub-contractors to have or establish systems enabling them to meet the OHS requirements of the employer;
- Installations, equipment, tools and substances selected to be suitable for the intended airport operation should be selected to minimize dangers to safety and health when appropriately used;
- Equipment to be provided with adequate noise and vibration dumpers;
- Ergonomic risks and hazards shall be minimized by selecting appropriate tools and equipment for use;
- Equipment and installations requiring recurrent servicing and cleaning should have permanent means of access;
- Hand, knee and foot railings must be installed on stairs, fixed ladders, platforms, permanent and interim floor openings, loading bays ramps;
- Measures to prevent access to unauthorized areas must be in place;
- Hazardous and risky areas, installations materials, safety measures, emergency exits shall be properly marked;
- Signage shall be according to national and international standards, well known to, and easily understood by workers, visitors and general public;
- A list of hazardous materials will be reviewed for airport operations;
- Construction plans will define designated areas for design and storage of hazardous materials being used on the Project during airport operations;
- A Health and Safety Management Plan will be prepared by the operator and risk assessments will form part of this approach and will confirm the actual risk associated with specific activities being undertaken during construction;
- Operational management systems will be developed to control the storage and use of hazardous materials associated with airport operations in order to avoid, minimize and control potential health and safety impacts associated with use of materials;
- Strictly monitor any transfer of materials using cranes; and
- Use covers to protect objects or debris from falling on workers;

Although the significance of impacts is considered minor with existing control and mitigation measures, additional good practice (if relevant) measures are recommended. The following mitigation measures should be implemented:

Weather

Operators should train workers on the prevention of heat and cold stress, including the identification of early symptoms, and management techniques (e.g. hydration, rest). Workers should be provided with the necessary clothing and fluids to prevent weather related stress and apply other relevant recommendations for working environment temperature as presented in the General EHS Guidelines.

Child Labor:

- Embed age check procedures during recruitment such as recording age and requiring photo identification to avoid the potential for child labor. Implement an auditing program to check age throughout the lifecycle of the Project.

Working at Heights:

- Eliminate or reduce the requirement to work at heights;
- If working at height cannot be eliminated, use work equipment or other methods to prevent a fall from occurring;
- Ensure all structures are designed and built to the appropriate standards and have the appropriate means of working-at-height systems fitted;
- Suitable exclusion zones should be established and maintained underneath any working at height activities, where possible, to protect workers from falling objects;
- Ensure all employees working at height are trained and competent in the use of all working at height and rescue systems in place;
- Provide workers with a suitable work-positioning device; also ensure the connectors on positioning systems are compatible with the tower components to which they are attached;
- Ensure that hoisting equipment is properly rated and maintained and that hoist operators are properly trained;
- When working at heights, all tools and equipment should be fitted with a lanyard, where possible, and capture netting should be used if practicable;
- Signs and other obstructions should be removed from poles or structures prior to undertaking work;
- An approved tool bag should be used for raising or lowering tools or materials to workers on elevated structures;
- Avoid conducting tower installation or maintenance work during poor weather conditions and especially where there is a risk of lightning strikes; and
- An **Emergence Preparedness and Response Plan** (EPRP) should be in place detailing the methods to be used to rescue operatives should they become stranded or incapacitated while at height.

Lifting Operations:

- Ensure all relevant information is known about the load, e.g., the size, weight, method of slinging, and attachment points;
- Ensure all lifting equipment (including load attachment points) is suitable, capable of supporting the load, in good condition, and in receipt of any statutory inspections required;
- Ensure all supervisors, equipment operators, and slingers are trained and competent in the lifting equipment and intended lifting techniques;
- Where possible, exclusion zones are to be established and maintained in order to prevent any unauthorized access to lifting areas;
- When lifting large loads, ensure weather conditions are favourable for the task;
- Safe operating parameters of heavy lifting equipment should not be exceeded at any time;
- Use required truck to transport heavy loads; and

- A planning meeting between all parties involved in the lift should be carried out and should include: the details of the lift, the roles of each party involved in the lift, and the methods used to communicate instructions among the parties;
- Occupational Health and Safety Management Plan: Sets forth the agreed controls and mitigation measures to protect the health and safety of workers, including induction and training requirements.
- Emergency Preparedness and Response Plan: Outlines the measures to respond to unplanned events or emergencies that may result in injury or death.
- All workers involved in luggage and larger cargo handling, whether as a regular or incidental aspect of their work function, should be trained in the use of proper lifting, bending, and turning techniques to avoid injury to the back or extremities.
- Customer service stations and luggage conveyance systems should be designed based on the results of an ergonomics assessment, eliminating the need for customer service agents to lift or handle baggage, where possible.
- Operators should evaluate whether to implement individual luggage weight restrictions in coordination with airlines, applying weight limits on individual luggage packages according to local regulations or, in their absence, limiting the weight for individual luggage packages to 32 kilograms (70 pounds).
- All workers involved in luggage and cargo handling, whether as a regular or incidental aspect of their work function, should be trained in the use of proper lifting, bending, and turning techniques to avoid back injury or extremities. Particular attention should be placed on the handling of luggage and cargo in airplane holds which often do not have adequate standing height (requiring special lifting or pushing techniques) and which may present tripping and slipping hazards. Workers should be provided with appropriate Personal Protective Equipment (PPE), such as knee pads when accessing cargo holds.
- The frequency and duration of worker assignments to heavy lifting activities should be mitigated through rotations and rest periods.
- Operators should consider mechanizing cargo and luggage handling activities, such as the use of conveyors that extend into the cargo holds.

Biological Hazards:

- As part of the standard occupational hazard communication program, workers should be provided with updated information on disease outbreaks and appropriate methods of transmission prevention.
- Airline operators should institute a policy to manage passengers who have evidence of illnesses and who are departing or arriving from areas with a known disease outbreak.
- Operators should consider retrofitting aircraft cabin ventilation systems with High Efficiency Particulate Air (HEPA) filters or other methods for reducing the recirculation of contaminated air.

Chemical Hazards:

- Avoiding the use of pesticides that fall under the World Health Organization Recommended Classification of Pesticides by Hazard Classes 1a and 1b.
- Avoiding the use of pesticides that fall under the World Health Organization Recommended Classification of Pesticides by Hazard Class II except under conditions as noted in IFC's Performance Standard 3 — Pollution Prevention and Control.

- Using only pesticides that are manufactured under license and registered and approved by the appropriate authority and in accordance with the Food and Agriculture Organization's (FAO's) International Code of Conduct on the Distribution and Use of Pesticides.
- Using only pesticides that are labeled in accordance with international standards and norms, such as the FAO's Revised Guidelines for Good Labeling Practice for Pesticides.
- Store pesticides in their original packaging and in a dedicated location that can be locked and properly identified with signs, limiting access to authorized persons. No human or animal food should be stored in this location.
- Mixing and transfer of pesticides should be undertaken by trained personnel in ventilated and well lit areas, using containers designed and dedicated for this purpose.
- Used pesticide containers should not be used for any other purpose (e.g. drinking water) and should be managed as a hazardous waste as described in the General EHS Guidelines.
- Educating and training aviation crews in the risks and hazards of airplane disinfection.
- Ensuring sufficient ventilation of cabins after treatment with insecticides.
- Delaying entry of cabin crew to the aircraft after disinfection.
- Ground service providers may be exposed to chemical hazards, especially if their work entails direct contact with fuels or other chemicals, such as those used in deicing and anti-icing. Work with fuels may present a risk of exposure to volatile organic compounds via inhalation or skin contact during normal use or in the case of spills. It may also present a less frequent risk of fire and explosions. Recommended measures to prevent, minimize, and control the risk of exposure to chemicals hazards is provided in the General EHS Guidelines.

Moving Equipment:

- Operators should provide safety signs and pavement markings for ground support vehicle circulation and parking areas in ramps, taxiways, and any other areas with a risk of collision between ground vehicles and aircraft. Delineated safety areas should include high risk locations such as jet engine suction areas to protect aircraft service workers.
- Operators should train and certify all workers with access to airfield operations.
- Workers involved in the operation of aircraft support equipment should be familiar with safety procedures applicable to ramp and taxiway traffic, including communications with the air control tower.
- Safety features of ground support vehicles should be maintained, including back-up alarms, moving part guards, and emergency stop switches.

The operator of the airport should develop an operations phase OHS Management System which establishes a holistic treatment of OHS issues and brings the Project into material compliance with PS 2.

1.6.2.4 RESIDUAL IMPACTS

With the implementation of the above existing controls, as well as the above-recommended additional mitigation and management measures, it is expected that the residual impact significance would be reduced from major to **moderate** for all impacts related to working conditions and occupational health and safety.

1.6.2.5 IMPACTS OVERVIEW

The below table presents an overview of the impacts as described in this section:

TABLE 1.20 IMPACTS ON OCCUPATIONAL HEALTH AND SAFETY

Impact Significance					
Project Phase	Pre-construction	**Construction**	**Operation**		
Impact Nature	**Negative**	Positive	Neutral		
	The impact will be negative.				
Impact Type	**Direct**	Indirect	Induced		
	The impacts related to direct health and safety risks to which workers will be exposed while performing tasks for the Project.				
Impact Duration	Temporary	Short-term	**Long-term**	Permanent	
	The impacts will be long-term as it is relevant to the construction and operation phases of the Project.				
Impact Extent	**Local**	Regional	International		
	The impact will be localized across all Project Components.				
Frequency	Frequent over the 3-year construction period, and ongoing during operation.				
Impact Magnitude	Positive	Negligible	Small	**Medium**	Large
	Impact magnitude is **medium** as there will be a clear difference from baseline conditions, and it will affect all workers (including those in the supply chain).				
Receptor Sensitivity	Low	**Medium**	High		
	Receptor sensitivity is stated as **medium** considering the consequences and risk to which workers would be exposed in case no policies or plans are in place.				
Impact Significance	Negligible	Minor	**Moderate**	Major	
	Overall significance of impact is considered **moderate**.				

1.7 IMPACTS ON AMENITY, INFRASTRUCTURE AND PUBLIC SERVICES

For the purpose of this section, amenity is defined as a resource, either natural or man-made, that offers non-monetary benefits and enhances the quality of life. These benefits can range from improved well-being due to access to nature or clean environment to increased efficiency through convenient services.

This section also presents aspects of the Project that may result in disturbance to infrastructure and public services during operation and construction, including accessibility to markets, waste, and finance facilities, energy and water supplies. Some aspects of infrastructure and public services are not discussed in this section as they are assessed in other sections of this SIA. These include:

i) Receptors along the transportation route which may experience impacts on traffic and transport – discussed in ***Section 1.4***;

ii) Healthcare facilities which may experience impact through increased demand on local hospital and health care facilities:

   a. In relation to community health and safety risks due to the presence of hazards around e.g. construction sites and laydown areas – discussed in ***Section 1.9***;

   b. In relation to occupational health and safety risks – discussed in ***Section 1.6***.

1.7.1 BASELINE CONDITIONS

Amenity: The existing landscape is described as primarily agricultural, with villages in the SAoI surrounded by agricultural land.

Communities in the SAoI generally have good access to infrastructure and public services related to education, health and utilities. The baseline data indicates that each village has access to some kind of educational facility, although some villages have more options than others. Accessibility to educational facilities was found to meet the needs of the communities in all villages.

Waste: Household waste in the SAoI is managed by communities primarily through burning their garbage. The SAoI does not yet have a solid waste collection service.

There is also no sewage drainage infrastructure in the SAoI. Currently households drain grey water from the kitchen and bathroom into the wetlands and rivers. Toilets are generally connected to an underground septic tank which is drained approximately every two to three years.

Other: The main source of energy supply (electricity) for the villages in the SAoI comes from the Electricite du Cambodge (EDC) network. All communes in the SAoI are connected to the EDC network. Energy consumption per kWh costs 680 riels ($0.17 USD) to 720 riels ($0.18 USD) or even more depending on the amount of energy consumed. On average, households in the study villages spend between 20,000 riels ($5 USD) and 50,000 riels ($12.50 USD) per month for energy.

Sources of cooking energy in the SAoI were primarily gas (73.7%), coal (18%), and firewood (8.3%). Gas is the main source of energy for cooking because it is easier and faster to cook with, as opposed to wood or charcoal.

The household drinking water supply is either from collected rainwater (40.6%), open wells (29.7%), tube wells (9.4%), the lake (7.5%), or purchased bottled water (12.8%).

1.7.2 IMPACT ASSESSMENT

1.7.2.1 SOURCE OF IMPACT

Amenity: The Project has the potential to impact on the existing amenity experienced by the people located within the SAoI, as well as place increased pressure on public infrastructure and resources. Due to the scale of the Project, visual impacts are likely to be experienced by persons within the SAoI, and the presence of the Project will change the agricultural landscape.

During the stakeholder consultations, no concerns were identified regarding landscape and visual impacts.

Waste: Airport operations encounter various types of waste, including: Municipal Solid Waste (MSW); Construction and Demolition Debris (CDD); waste from aircraft flights (deplaned waste); compostable waste and hazardous and industrial waste. For MSW and CDD, airports have choices in how to manage collection, treatment, storage, and disposal.

Municipal solid waste (MSW) is made up of everyday items that are used and discarded, such as aluminum and steel cans, glass bottles and containers, plastic bottles and containers, packaging bags, paper products, and cardboard. Airport MSW will be from four primary sources 1) terminal waste – from public areas and airport administrative offices; 2) Tenant waste – from terminal retail and concessions; 3) Airline waste – from airplanes and airline offices; and 4) Cargo waste – from cargo operations.

Construction and demolition debris can come from land clearing, excavation, or as the name implies construction and demolition at the airport. CDD may include materials as concrete, wood, metals, soil, bricks and masonry material, asphalt, rock, stone, gravel, and sand, roofing materials, drywall, carpet, plastic, pipe, and others.

Waste from aircraft flights (deplaned waste) is a specific type of MSW that is removed from passenger aircraft. Deplaned waste includes “galley waste” materials typically collected by airline caterers as part of the de catering process, including compactor boxes, waste carts (bags), food carts, and bonded carts which may be subject to more rigorous disposal methods.

International waste is generally waste from international flights, but also can include the waste from the terminals that international flights service. When waste originates from countries with different policies and regulations, there is a risk of introduction of plant pests, diseases, and other contaminants. For these reasons, this waste is sometimes called quarantined waste (QW). Although international waste is often similar in material type to MSW, airports generally handle and process international waste separately from other waste types. In many cases international waste is incinerated on-site, or the airport arranges for it to be packaged and sent for disposal

Compostable and biodegradable waste can be composted, but airports are now developing other creative means of disposal. These types of wastes can also be categorized as MSW, although these often have different treatment options than MSW.

Hazardous and industrial waste consists of oils, solvents, and other chemical waste from activities such as aircraft and ground vehicle washing and cleaning, fueling operations, aircraft maintenance and repair including painting and metalwork, engine test cell operations, de/anti-

icing operations, ground vehicle maintenance, and abandoned aircraft. These types of wastes tend to be closely regulated by state law, and require special treatment, storage, and disposal, and therefore this document does not address hazardous and industrial waste management

Increased demand on local waste facilities, as well as other impacts and risks to the community and workers could be appropriately managed through the implementation of sound onsite waste management practices.

Water: The Project's preliminary water demand estimation during construction is expected to be approximately 2,000 m^3/day. Water is also expected to be sourced from the Phnom Penh Water Supply Authority (PPWSA).

Other: No noticeable impact is anticipated on people's access to telecom, banking facilities, or energy and water supply, as a result of the Project.

1.7.2.2 EXISTING CONTROLS

Waste: During construction, there are two types of solid waste expected to be generated by the Project activities; non-hazardous waste (mainly sand, gravel, plastic, wood chunks, cement, kitchen and demolishing waste) and hazardous waste (mainly lubricant, paint containers, batteries and accessories).

The amount of solid waste generated by daily activities of employees and workers is expected to be around 0.5 kg/person/day. There are expected to be 17,000 workers, so the amount of solid waste generated will be approximately 8,500 kg/day. In particular, the various solids that may arise from construction activities in the construction site include iron, demolished infrastructure, stone and wood. These residues will be handled through recycling (for scrap metal and wood) and compressed milling at the construction site (for sand, stone and gravel). Specific types of hazardous waste that may be generated during the construction phase includes batteries, storage tanks, lubricants, fuel residues and other chemicals used for the maintenance of vehicles and machinery. The amount of these hazardous wastes is expected to be small and these will be handled with proper packaging and storage facilities. The Project will work with the contractor to separate non-hazardous, hazardous, recyclable and non-recyclable waste. Food or organic waste will be composted for agricultural purposes. All collected waste will be temporarily stored on site before sending to a certified waste collector.

During the operation phase solid waste will be collected and transported within the airport premises to a central point. A reservation for a solid waste handling facility will be on the airport premises. From there, solid waste will be collected by a trash compactor truck and dumped in a designated area outside the airport in accordance with national regulations. The production of solid waste on an airport is based on the number of handled passengers on an average day. On average, the production rate per passenger is about 0.3 kg per passenger per day.

According to the Master Plan approximately 14,400 kg/day or 19 m^3/day of solid waste will be generated as of 2030. In order to effectively manage solid waste, the Project is planning to transport waste created on site to a designated and approved solid waste sorting plant (1,800 m^2). The vehicles to be used will be capable of carrying 12 m^3 of waste and making 2 trips/day.

Garbage bins will be installed in the passenger terminal and other key locations in the airport. The solid waste generated by the Project activities will be collected in the bins and stored in a

waste transfer station and then routed to the company's landfill. Solid waste will be disposed of by a certified waste collection agency.

In case of an increase the amount of waste, the company will add more trucks for transporting waste from the buildings to the temporary storage area. The waste will be collected daily and 3R measures will be implemented for activities that may have an impact on the environment.

1.7.2.3 SIGNIFICANCE OF IMPACTS

Waste: impacts are expected to be limited as the Project intends to put in place proper waste storage and management on site as explained above. In addition, the disposal will be handled through licensed disposal service.

This assessment looks at the ability of community members living in the SAoI to access public services such as markets, waste facilities, financial institutions, energy, water supply, and amenity. People within the SAoI are considered to have *medium* sensitivity, as it will be possible to adapt to the changes as brought by the Project. The impact magnitude is overall considered to be *small*, as a perceptible difference from baseline conditions will be evidenced but the intensity of change is predicted to be perceived as *small*. Impact significance is designated as **Minor**.

1.7.2.4 MITIGATION MANAGEMENT, AND MONITORING PROCEDURES

The following additional mitigation and management measures will be implemented to manage the potential impacts identified:

- Communicate amenity impacts and proposed mitigation measures to communities in the SAoI.
- Develop and implement a Waste Management Plan.
- Implement a comprehensive monitoring and evaluation system for the airport operator to properly assess progress towards meeting the targets in the Waste Management Plan. The foundation of a monitoring system could include but are not be limited to:
    - Circular supplies: fully recyclable materials that are used, for example in drinking cartons and coffee cups, are made from recycled material and can consequently be recycled again. This way input is from secondary resources and output is again an input for another product, replacing the single-lifetime input and thus reducing primary material use.
    - Dematerialization: reduce material use with new technologies, such as digital airline tickets that replace paper tickets.
    - The use of consistent waste signage (colors, icons and terms) helps the user to quickly identify and sort their recycling, which in turn, can assist with reducing contamination and increasing recycling rates. The color and general signage should be easily identifiable by airport passengers, other stakeholders and staff.
    - Resource recovery: food waste and other organic waste can be digested to biogas and the residue of the digestion can be used as fertilizer. Knowledge of the intrinsic properties of the material, including the physical, chemical, and leaching properties by airport Management.
    - Waste to be sorted at source and there should be no scattering of waste during transportation to the disposal site.

1.7.2.5 RESIDUAL IMPACTS

Through the additional mitigation measures proposed, the residual impact magnitude is reduced to *negligible*, with a corresponding reduction in the residual magnitude significance to **Negligible.**

1.7.2.6 IMPACTS OVERVIEW

The below table presents an overview of the impacts as described in this section:

TABLE 1.21IMPACTS ON AMENITY, INFRASTRUCTURE AND PUBLIC SERVICES

Impact Significance					
Project Phase	Pre-construction	**Construction**	**Operation**		
Impact Nature	**Negative**	Positive	Neutral		
	The construction and operation of the Project will result in **negative** impacts on visual amenity, infrastructure, and public services.				
Impact Type	**Direct**	Indirect	Induced		
	Direct impacts on services will be produced through additional pressure.				
Impact Duration	Temporary	Short-term	**Long-term**	Permanent	
	The impacts will be experienced throughout the lifetime of the Project.				
Impact Extent	**Local**	Regional	International		
	The impacts are expected to be limited to the SAoI.				
Frequency	The impacts will occur continuously, throughout the duration of the construction and operation of the Project.				
Impact Magnitude	Positive	**Negligible**	Small	Medium	Large
	There is a perceptible difference from baseline conditions, but this is further mitigated through management measures.				
Receptor Sensitivity	Low	**Medium**	High		
	The impact will be felt in some areas, but they are expected to be limited.				
Impact Significance	**Negligible**	Minor	Moderate	Major	
	Some people in the SAoI will experience a noticeable effect, but impact magnitude is mitigated through management measures.				

1.8 IMPACTS ON WORKER INFLUX

Influx or in-migration relates to the movement of people to a Project area in anticipation of, or in response to, economic opportunities associated with a Project. This includes direct employment by the Project (e.g. construction worker, supplier of materials, etc.) as well as indirect employment (e.g. restaurant operators who may experience higher patronage from the construction workforce requiring them to employ more people, etc.). In many cases, this influx is compounded by an influx of other people ("followers") who follow the incoming workforce with the aim of selling them goods and services, or in pursuit of job or business opportunities. The rapid migration to and settlement of workers and followers in the Project area is called labor influx, and under certain conditions, it can affect Project areas negatively in terms of public infrastructure, utilities, housing, sustainable resource management and social dynamics.

1.8.1 BASELINE CONDITIONS

The peak workforce requirement during construction is estimated at 17,000 workers. During this phase. At the time of writing this ESIA Addendum, it was unclear how many positions are expected to be filled by workers from surrounding villages. It was also unclear how many employed workers will move to villages in the SAoI during the construction phase as the Project does not plan to have a workers accommodation camp.

This influx may come with a number of negative impacts, such as increased risks to community health and safety, increased transboundary movements, and increased pressure on infrastructure and resources.

It was also unclear how many workers will be required for the operations phase, but for an airport of this size, there are expected to be at least 500 to 800 workers.

1.8.2 IMPACT ASSESSMENT

1.8.2.1 SOURCE OF IMPACT

The Project will employ a range of people during construction and operation. The influx of workers and followers can lead to adverse social and environmental impacts on local communities. Such adverse impacts may include increased demand and competition for local social and health services, as well as for goods and services, which can lead to price hikes and crowding out of local consumers, social conflicts within and between communities, increased risk of spread of communicable diseases, and increased rates of illicit behavior and crime. Such adverse impacts are usually amplified by local-level low capacity to manage and absorb the incoming labor force, and specifically when civil works are carried out in, or near, vulnerable communities and in other high-risk situations.

As workers from outside of the SAoI will be employed, there is potential for the workforce to introduce and/or increase the rate of spread of diseases in the SAoI and increase the burden on local health services. This may occur as a result of waste management practices, or from the spread of diseases brought in by workers (e.g. infectious diseases such as Covid-19). The influx of people may bring communicable diseases to the SAoI, including sexually transmitted diseases (STDs), or the incoming workers may be exposed to diseases to which they have low resistance. This can result in an additional burden on local health resources. The Project has the potential to impact on public infrastructure and resources, particularly placing increased demand on local hospital and health care facilities, considering that during the construction phase, there will be

a temporary increase in the local population from workers (estimated peak workforce of 17,000 people). Local health and rescue facilities may also be overwhelmed and/or ill-equipped to address the industrial accidents that can occur in a large construction site.

The influx of workers and service providers into communities may increase the rate of crimes and/or a perception of insecurity by the local community. Such illicit behavior or crimes can include theft, physical assaults, substance abuse, prostitution and human trafficking. Local law enforcement may not be sufficiently equipped to deal with the temporary increase in local population.

The presence of such a large construction workforce, typically made up of younger males. Those who are away from home on the construction job are typically separated from their family and act outside their normal sphere of social control. This can lead to inappropriate and criminal behavior, such as sexual harassment of women and girls, exploitative sexual relations, and illicit sexual relations with minors. As a result, with the influx of migrant workers and security personnel to the SAoI, there is a potential risk that Gender Based Violence and Harassment (GBVH) - that is, "harmful acts directed at an individual or a group of individuals based on their gender"[15] - may occur. GBVH can take many forms, including (but not limited to) domestic violence, sexual violence, and potentially human trafficking. A large influx of male labor may also lead to an increase in exploitative sexual relationships and human trafficking whereby women and girls are forced into sex work.

Increased opportunities for the host community to sell goods and services to the incoming workers can also lead to child labor to produce and deliver these goods and services, which in turn can lead to enhanced school dropout.

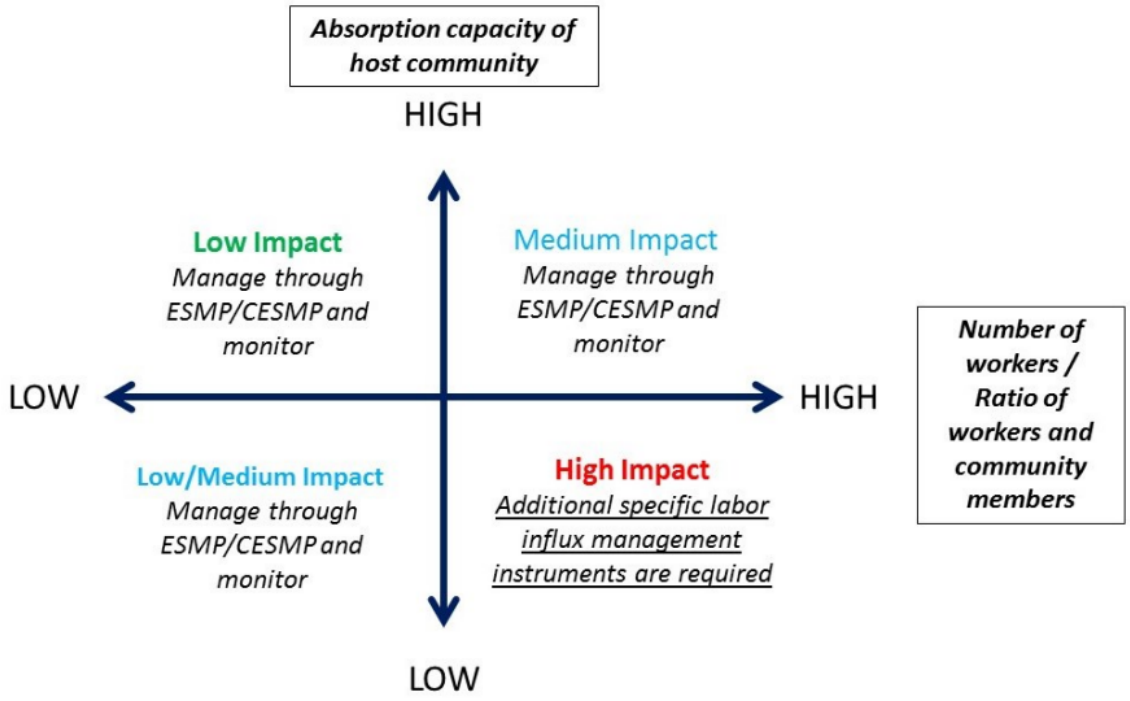
Conflicts may arise between the local community and the construction workers, which may be related to religious, cultural or ethnic differences, or based on competition for local resources. Tensions may also arise between different groups within the labor force, and pre-existing conflicts in the local community may be exacerbated. Ethnic and regional conflicts may be aggravated if workers from one group are moving into the territory of the other. Depending on the number of incoming workers and their engagement with the host community, the composition of the local community, and with it the community dynamics, may change significantly. Pre-existing social conflict may intensify as a result of such changes.

The presence of construction workers and service providers (and in some cases family members of either or both) can generate additional demand for the provision of public services, such as water, electricity, medical services, transport, education and social services. This could increase the burden on and competition for public service provision.

Conflicts could also occur as a result of local inflation of prices due to a significant increase in demand for goods and services. Depending on the level of inflation, locals could be priced out, leading to increased poverty.

[15] Types of violence against women and girls - UN Women Australia

1.8.2.2 SIGNIFICANCE OF IMPACTS



Source: World Bank ESS Guidance Note; Managing the Risks of Adverse Impacts on Communities from Temporary Project Induced Labor Influx

FIGURE 1.4 LABOR INFLUX RELATED RISK PROFILE AND RESULTING REQUIREMENTS

The ratio of workers to community members is 0.42[16] and therefore considered to be *medium*, while the absorption capacity of the host community is expected to be *low*, as the surrounding area is mostly agricultural land and healthcare facilities are inadequate to support the large influx of workers.

The magnitude of impact is *medium* due to the significant influx expected, people's sensitivity is precautionarily analyzed as *medium*, due to the limited ability of at least some parts of the population (e.g. women) to adapt to the change. This results in the significance of impact to be **Moderate**.

1.8.2.3 MITIGATION MANAGEMENT, AND MONITORING PROCEDURES

A number of additional policies and management plans will need to be implemented in response to impacts associated with worker influx, namely:

- Immediate monitoring to determine if there have been any issues during construction to date.
- **Local Content and Influx Management Plan -** The plan should:
  - Establish a formal recruitment process with clear hiring preferences to discourage people from outside of the SAoI coming to seek for employment opportunities with the Project.
  - Prioritize early communication of the recruitment process and positions available to locals so they have time to prepare, train (if necessary) and apply.

[16] No. of workers/number of people in SAoI = ratio; 17,000 workers/ 40,160 people = 0.42

- Provide training to locals to help transition them from agriculture-based livelihoods to labor jobs.
- Establish the responsibilities and management practices associated with the management of labor during construction and operation of the Project. This will include and/or reference the Workers Code of Conduct, which identifies behavioural standards and cultural awareness requirements for all workers (including security personnel) to comply with.
- Require training to be conducted that provides information as to the most common communicable diseases to all workers to raise awareness of the likely diseases, symptoms, preventative measures, transmission routes, and treatment.
- Require health check-ups of all workers employed by the Project, along with fit-to-work assessments.

- **Stakeholder Engagement Plan (SEP) –** Develop a comprehensive SEP including the methodology and timing of stakeholder communication, as well as a community environmental and safety awareness program.
- **Workers' Code of Conduct (CoC) -** Workforce behaviours should be bounded by a Workers' CoC, which among others will include access to policies and procedures related to GBVH and disciplinary measures in particular for GBVH related cases. The CoC will be included as part of the contractor agreement to be implemented by EPC and O&M contractor). The EPC and O&M contractors and the workers will need to sign the worker CoC and will be trained on the CoC provisions, including disciplinary measures in case of non-compliance especially in instances pertaining to GBVH related practices.
- **Grievance Redress Mechanism (GRM) –** Develop a GRM for both workers and community members to raise concerns.
- Provision of cultural sensitization training for workers regarding engagement with local community.
- Pay adequate salaries for workers to reduce incentive for theft and pay salaries into workers' bank accounts rather than in cash.
- Provision of substance abuse prevention and management program
- Mandatory and regular training for workers on required lawful conduct in host community and legal consequences for failure to comply with laws.
- Cooperate with law enforcement agencies investigating perpetrators of gender-based violence.
- Ensure that children and minors are not employed directly or indirectly on the Project.

1.8.2.4 RESIDUAL IMPACTS

Through the additional mitigation measures proposed, the residual impact sensitivity and the magnitude will remain *medium*. This results in the significance of impact to be **moderate**.

1.8.2.5 IMPACTS OVERVIEW

The below table presents an overview of the impacts as described in this section:

TABLE 1.22 IMPACTS ON COMMUNITIES LINKED TO WORKER INFLUX

Impact Significance				
Project Phase	Pre-construction	**Construction**	**Operation**	
Impact Nature	**Negative**	Positive	Neutral	
	The impact will be **negative**.			
Impact Type	**Direct**	**Indirect**	Induced	
	The impact will be both direct (e.g. through increased pressure on services) and indirect (e.g. through potential impact on community relations, and/or domestic dynamics), as a result of an increased, migrant population.			
Impact Duration	Temporary	Short-term	**Long-term**	Permanent
	The impact is likely to be experienced during the construction and operation phases.			
Impact Extent	**Local**	Regional	International	
	The impact is limited to the villages in the AoI.			
Frequency	The impact is continuous throughout the construction and operation phases.			
Impact Magnitude	Positive	Negligible	Small	**Medium**	Large
	Impact magnitude is expected to be medium after implementation of additional mitigation measures as proposed.			
Receptor Sensitivity	Low	**Medium**	High	
	There is limited ability of at least some parts of the population (e.g. women) to adapt to the change.			
Impact Significance	Negligible	Minor	**Moderate**	Major
	The impact significance is moderate.			

1.9 IMPACTS ON COMMUNITY, HEALTH, SAFETY AND SECURITY

This chapter assesses the potential impacts on community Health, Safety and Security (HSS) arising from the development of the Project. It provides information on how the people in the SAoI could potentially be exposed to health impacts, due to the presence of the Project, e.g. through hazards around construction sites and laydown areas. It also describes impact to healthcare facilities which may experience impact through increased demand on local hospital and health care facilities in relation to HSS risks, as well as soil mining and flooding impacts which could arise as a result of the Project.

1.9.1 BASELINE CONDITIONS

According to the baseline data collected for the EIA conducted by E&A, there are 2 healthcare facilities in the SAoI. However, many of the facilities are very basic with limited capacity. The nearest hospital is Boeung Khyang Health Center located 2.4 km northwest of the Project site. There is also another hospital, Put Sar Health Center and a private clinic, Kunthara Suchita Clinic, within 3 km of the Project site.

Healthcare services within the SAoI, whilst present, face various challenges including a lack of medicine, inadequate emergency medical equipment. 44% of the interviewed households use public health services at the health center for illnesses such as influenza, fever and diarrhea, while 25% of families chose to go to private clinics to treat serious illnesses or for surgery. 21% of families buy their own medicines from their respective village pharmacy.

The most prevalent diseases in the SAoI comprise of the common flu, polycystic ovary syndrome, high blood pressure, diarrhea, and pelvic arthritis.

The facility will have its own security workers who are armed. Risks can arise from intentional or inadvertent trespassing. Based on a report conducted by Stiftung Asienhaus on the impacts of land acquisition resulting from the Project, the presence of authorities in the area has become a source of intimidation, with patrols frequently reported and instances of violence used to suppress any form of community advocacy or protest.[17]

1.9.2 IMPACT ASSESSMENT

1.9.2.1 SOURCE OF IMPACT

The presence of an active construction site, including the installation of new infrastructure and movement of large machinery, can lead to accidents and injuries if not managed appropriately. The presence of hazards around construction sites and laydown areas can create a range of safety issues, for people in the SAoI. The following planned activities can have impacts to community health, safety and security:

- Workforce mobilization and presence;
- Land preparation (site clearance, excavation, and levelling), fencing, and civil works;
- Construction of Project facilities and access road/s;
- Sand mining for earthworks; and
- Equipment and material transportation and supply.

[17] Stiftung Asienhaus Study. 2024. A Kingdom for an Airport. Stiftung_Asienhaus_Study_A_Kingdom_for_an_airport_web.pdf

Potential impacts related to both construction and operation include:

- Community members being struck by machinery, during construction causing injury;
- Noise, vibration, and dust resulting from general construction activities, which can cause disruptions in daily life and / or health impacts;
- Increased vibration during construction may also have an impact on buildings and other structures (e.g. causing cracks) if nearby to construction activities;
- Excessive dust may be generated from the movement of dirt and machinery during construction. This dust may exacerbate the effects of respiratory diseases (e.g. asthma, upper respiratory infections);
- Vibration from the use of machines may cause cracks of foundations and buildings;
- Soil mining, particularly for construction purposes, can also increase water turbidity and suspended solids. Elevated turbidity can smother aquatic habitats, reduce light penetration, and interfere with photosynthesis in aquatic plants. The machinery used in soil excavation poses a risk of oil spills and leakages, contaminating water sources. Hydrocarbon pollution is toxic to aquatic life;
- Sand in-filling, the practice whereby sand is used to fill a lake or waterbody to create real estate for construction of buildings, requires sand dredging to harvest or mine the required amount of sand. Environmental concerns related to river sand dredging include river embankment destruction; increased flood risk; fish kills; groundwater table retention reduction; changes in flow velocity; loss of land; and animal habitat loss. The construction of hotels, restaurants, and other infrastructure involves infilling lakes and water bodies. This practice can disrupt the natural hydrology, leading to increased flooding risk. The loss of these water bodies reduces natural water retention and absorption capacity, exacerbating flood impacts during heavy rainfall events;
- Construction activities often result in soil erosion, which can lead to increased sedimentation in rivers and lakes. This sedimentation raises the total dissolved solids (TDS) levels, degrading water quality and aquatic habitats. High TDS levels can harm fish and other aquatic organisms, reducing biodiversity and disrupting the ecological balance;
- An increase in noise due to airplanes taking off and landing may interrupt sleep or cause other disruptions to community activities. Notably, disruptions associated with noise (such as sleep disruptions) have been linked to increases in depression and anxiety;
- Waste, if inadequately disposed, during construction and operation could lead to health impacts due to a lack of adequate waste disposal sites. Contamination from the poor management of wastes generated onsite can also impact aquatic fauna and flora;
- Nearby water resources may be polluted if wastewater is not managed appropriately during construction, leading to health impacts Operational mismanagement resulting in releases, spillages and leakages of chemicals, hydrocarbons and sewage may lead to a depletion of the natural ecosystem. to local communities who rely on the fish or use the water to irrigate their paddy fields; and
- The Project will require numerous security guards for the duration of the construction and operation phases. The number of security personnel required was unclear at the time of writing this ESIA Addendum. Their presence may result in impacts on community safety from intentional or inadvertent trespassing of community members. The management of security

personnel will ensure that a professional approach that safeguards is maintained, rather than introducing risk to the local population and workforce.

1.9.2.2 SIGNIFICANCE OF IMPACTS

Construction activities occurring in the vicinity of the villages in the SAoI will expose people to new impacts and there is limited ability for people in the SAoI to influence construction activities that may cause health and safety impacts. As the Project will change the baseline environment, people have a *medium* sensitivity. The magnitude of the impact on community health and safety is *medium*, as there could be a wider range of impacts during construction and operation. This makes the significance of the impact **Moderate.**

1.9.2.3 MITIGATION MANAGEMENT, AND MONITORING PROCEDURES

The potential impacts associated with construction can be reduced by appropriate safety measures to be implemented during construction and operation. Existing controls for each physical component namely, air quality, noise, surface water and soil are outlined in ***ESIA Addendum – Physical Environmental Impact Assessment***.

In addition, the following measures should be implemented:

- Preparation and implementation of a **Community Health and Safety Management Plan**. The Plan should set out the agreed controls and mitigation measures to protect the health and safety of people in the SAoI, such as recruitment of local nurse/s or doctor/s to support the local healthcare needs including mental health and counselling, and prevention and control measures to avoid significant health impacts. Potential for over-demand or impact on local health services should be described in the Community Health and Safety Management Plan;
- Extensive stakeholder engagement with the local community to inform them on Project activities performed during the construction and operation phases of the Project, as well as any potential impacts;
- Develop and enforce human resource related policies to ensure continuity of construction process during a pandemic situation, if it arises;
- Adoption and implementation of health and safety controls and prevention procedures;
- Implementation of good waste management practices;
- Conservation and recycling of water and implementation of adequate wastewater management, prior to the wastewater treatment plant being operational to avoid contamination of water sources;
- Preparation and implementation of a Stakeholder Engagement Plan (SEP) to ensure that effective communication channels with local stakeholders are put in place to address any issues which might arise during the construction and operation phases of the Project, and establish appropriate protocols for ongoing communication with local stakeholders, including a Grievance Redress Mechanism. The SEP should include various programs. An example of a program to be implemented as part of the SEP is a Community Environmental and Safety Awareness Program, which seeks to enable people to understand and identify construction and operation risks, and how to stay safe. The program would include topics such as:
- Activities that cause disruption such as air, traffic and noise impacts;
- Workers' code of conduct, worker's health and safety plan;

- An Emergency Preparedness and Response Plan (EPRP) should be developed and implemented including specific processes to alert the community in case of incidents that may affect them including road safety, especially for children. The EPRP should be communicated to the community; and
- A **Security Management Plan** should be developed in accordance with IFC PS 4. This plan will be guided by the principles of proportionality and GIIP such as the Voluntary Principles on Security and Human Rights, UN Code of Conduct for Law Enforcement Officials and the UN Basic Principles on the Use of Force and Firearms by Law Enforcement Officials. The Plan should include procedures to: assess risks posed by security arrangements including GBVH risk; adopt identified mitigations into a plan which among others will include: ensure hiring, rules of conduct, training, equipping, and monitoring of security personnel; provide for background verification on security personnel's individual character with no incidents of past abuses; train security personnel to exhibit appropriate conduct towards workers and neighboring communities including awareness on GBVH issues; train security personnel to manage mock sessions of labor unrest and protests; and to report, track, manage and address incidents and grievances related to security and the use of force and outline repercussions for any health and safety risks to community members; provision of conflict resolution training to security personnel.

1.9.2.4 RESIDUAL IMPACTS

With the implementation of the above mitigation measures, it is expected that the residual impact significance would be reduced to **Minor** for all impacts related to community HSS, as the magnitude of the impact on community health and safety will reduce from *medium* to *small.*

1.9.2.5 IMPACTS OVERVIEW

The below table presents an overview of the impacts as described in this section:

TABLE 1.23 IMPACTS ON COMMUNITY HEALTH, SAFETY AND SECURITY

Impact Significance				
Project Phase	Pre-construction	**Construction**	**Operation**	
Impact Nature	**Negative**	Positive	Neutral	
	Accidents or injury to community members are negative in nature.			
Impact Type	**Direct**	Indirect	Induced	
	Activities conducted during construction and operation can pose risks to community health and safety.			
Impact Duration	Temporary	Short-term	**Long-term**	Permanent
	The impact may occur during construction and operation phases.			
Impact Extent	**Local**	Regional	International	
	The impact is limited to the villages in the AoI.			
Impact Frequency	The impact will be frequent during construction and operation phases.			

Impact Significance					
Impact Magnitude	Positive	Negligible	**Small**	Medium	Large
	With the implementation of mitigation measures, the intensity of change should be of **small** impact to the local community.				
Receptor Sensitivity	Low	**Medium**	High		
	There is limited ability for people in the SAoI to influence Project construction activities that may cause health and safety impacts.				
Impact Significance	Negligible	**Minor**	Moderate	Major	
	The impact significance is **minor**.				

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