



Impact Energy Asia Development

ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT SUMMARY

MONSOON WIND POWER PROJECT



Environmental Resources Management
The business of sustainability

INTRODUCTION

This Project is the first cross-border wind power project to be approved by the Government of Laos (GOL) and Government of Vietnam (GOV) in accordance with the Memorandum of Understanding (MoU) to supply power from Laos' Windfarm Project to Vietnam Electricity (EVN).

In 2011, Impact Energy Asia Development (IEAD) signed a MoU with the GOL to explore the possibility of developing a wind power project.

In 2015, IEAD signed a Project Development Agreement (PDA) with the GOL for the development of a wind power project with a capacity of 600 MW following the initial feasibility study.

IEAD expects to execute a Concession Agreement with GOL in August – September 2022 and to start construction in October 2022.

The Commercial Operations Date (COD) is anticipated to be December 2025. Concession period for the Project is understood to be 25 years from the COD . Construction is estimated to take approximately 30 months.

PROJECT COMPONENTS

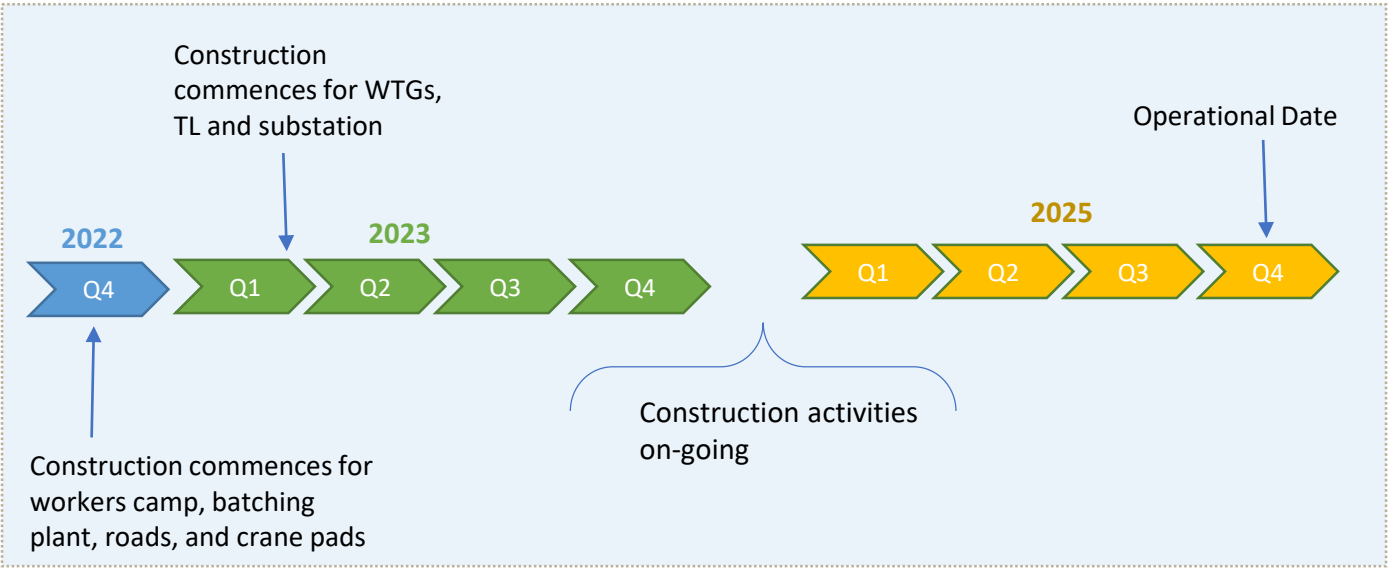


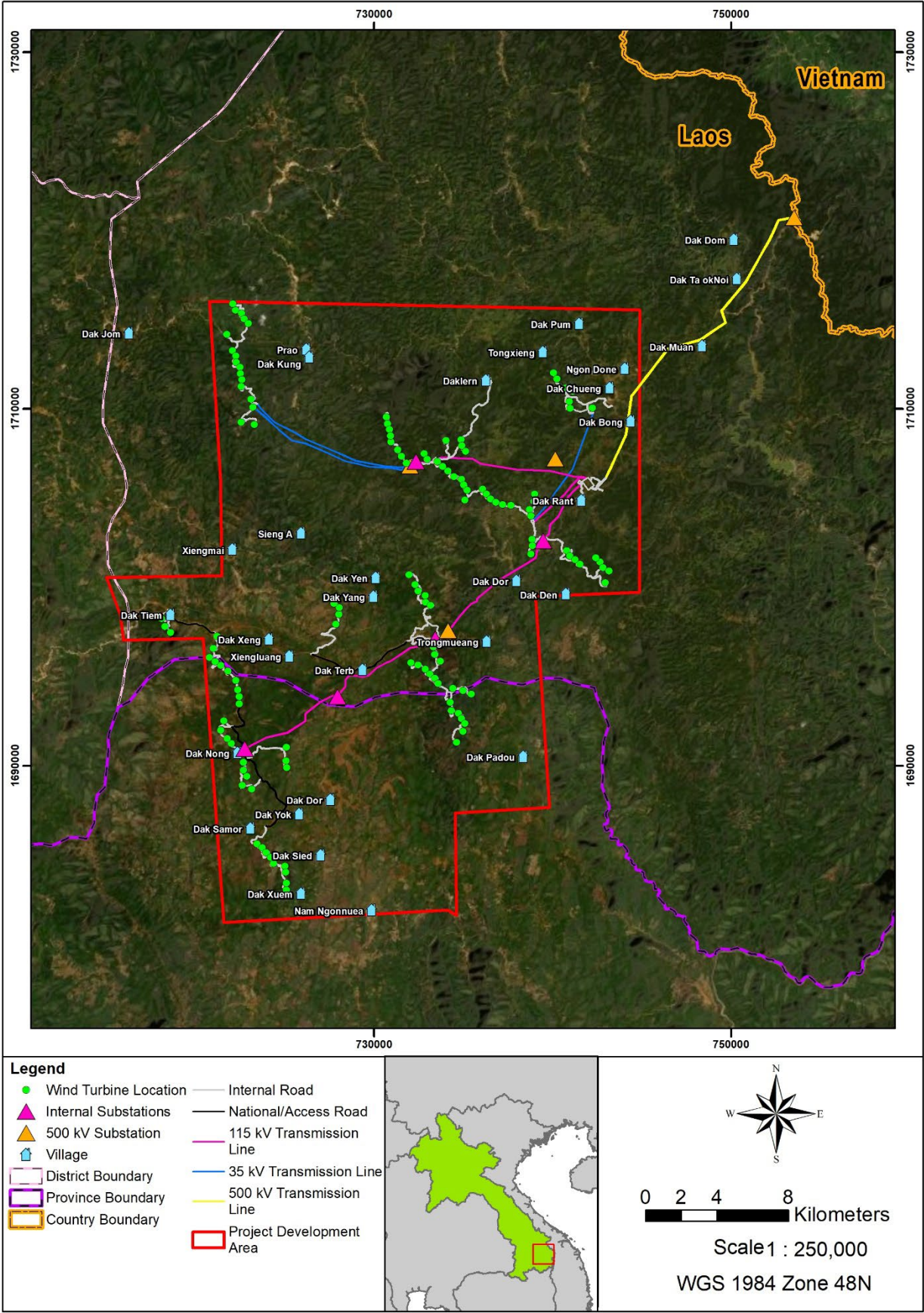
The Project is the Monsoon Wind Farm with an installed capacity of 600 MW in Dak Cheung District of Sekong Province and Sanxay District of Attapeu Province.

The development area (excluding the transmission line (TL)) is approximately 70,828 ha

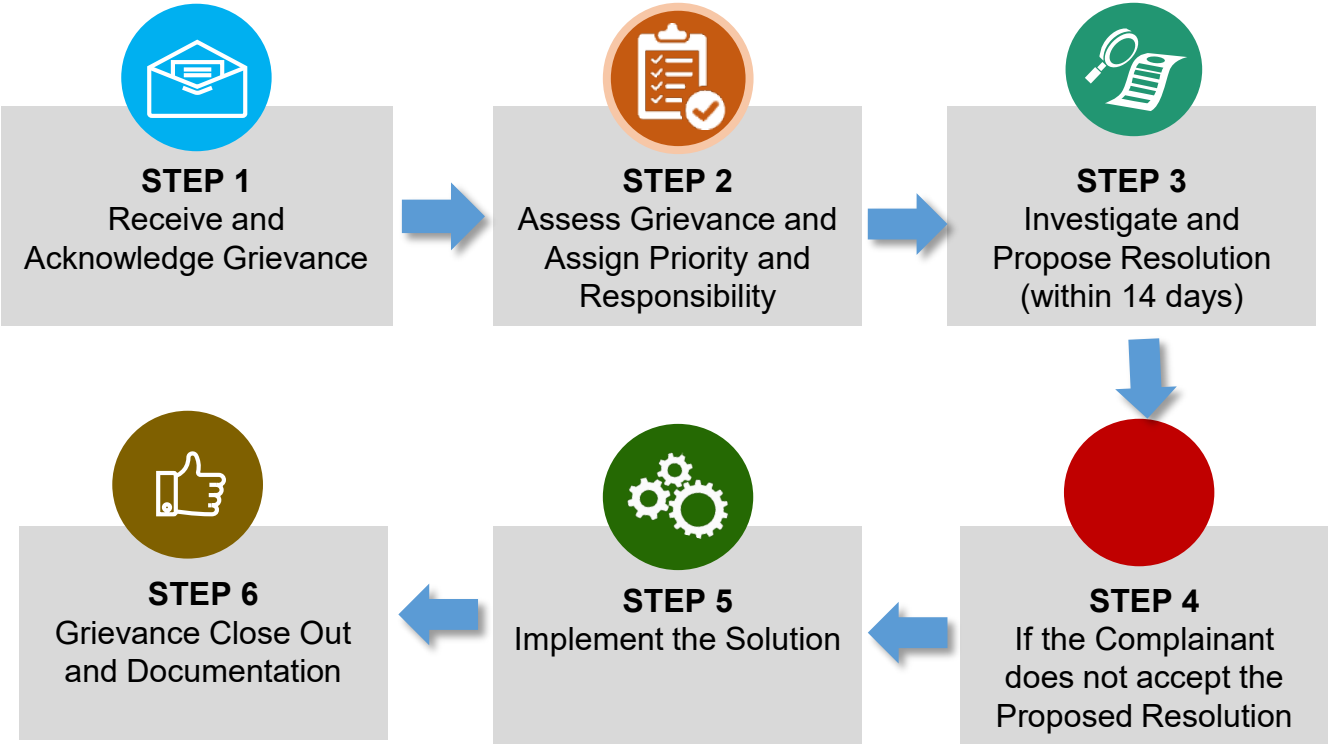
- 133 units of Wind turbines (110 m hub height)
- 22 km 500 kV overhead TL from the development area to the Laos/Vietnam border
- Underground and overhead 35 kV and 115 kV TL
- 8 m width access road and drainage system
- Other facilities include 115&500 kV substations, concrete batching plants (temporary), operation and maintenance building, laydown areas, worker accommodation, and soil disposal areas.

PROJECT SCHEDULE

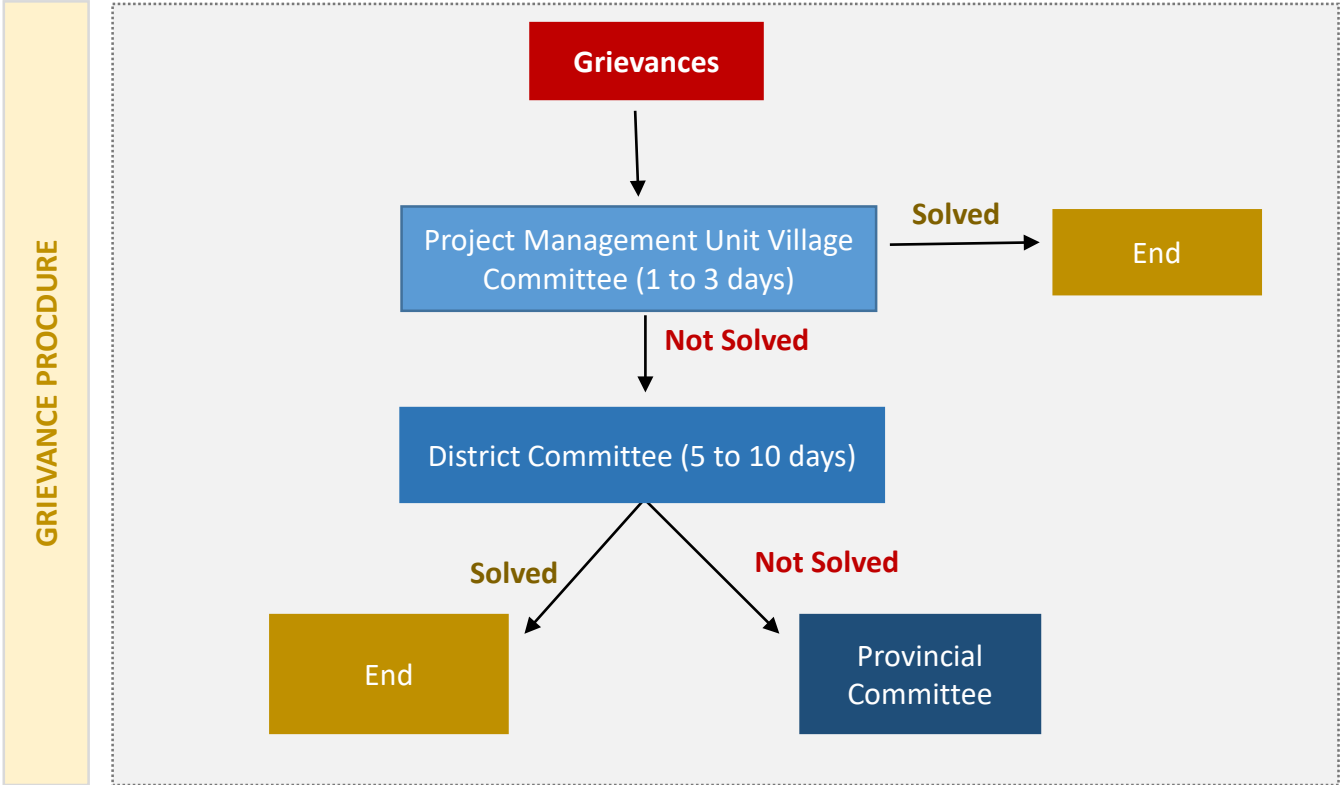




COMMUNITY GRIEVANCE PROCEDURE



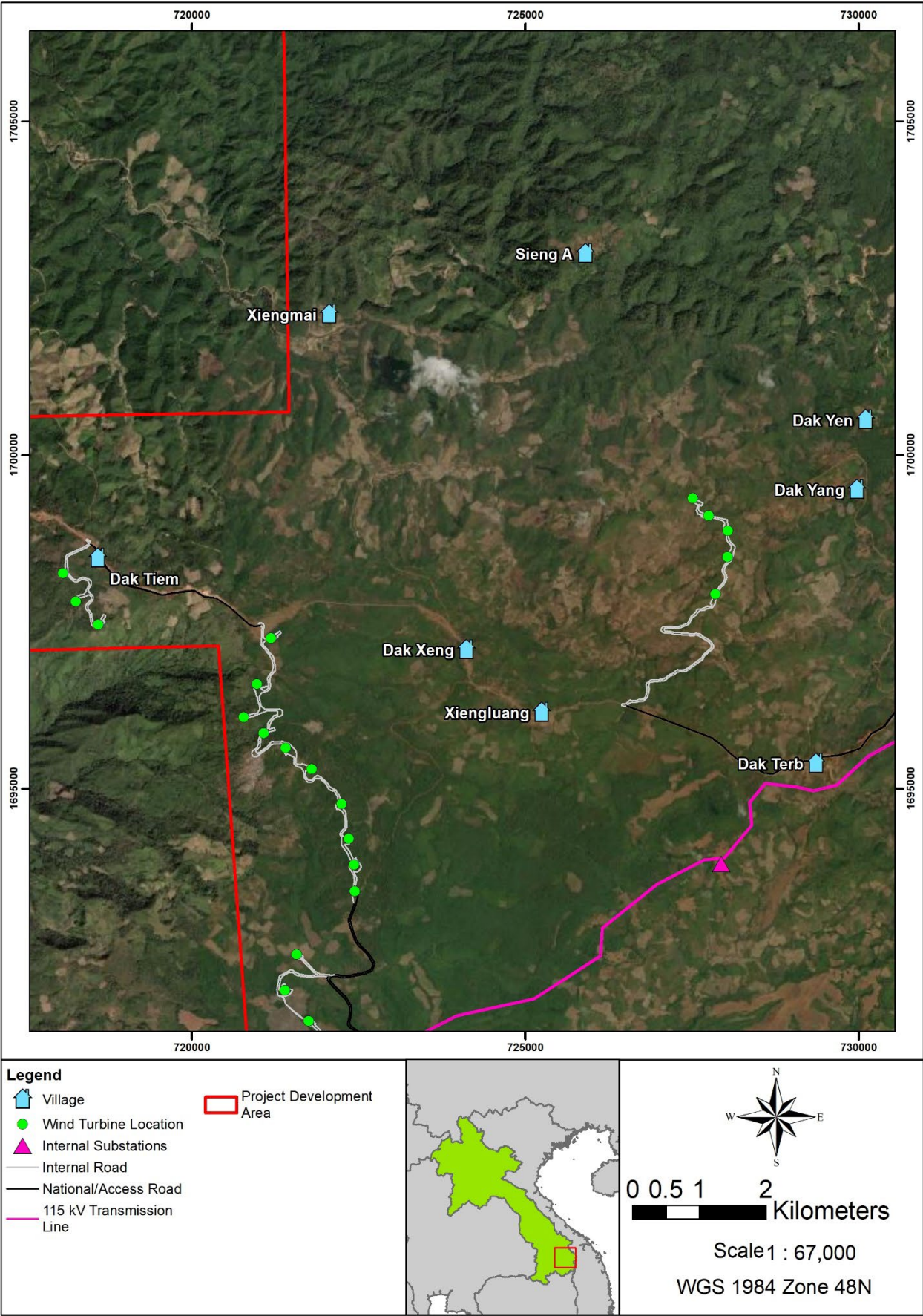
The objective of this system is to ensure there is a robust and transparent process available for addressing complaints. This system comprises a sequential process of three (3) levels of resolution. The next level of resolution is triggered if the complaint cannot be resolved at a lower level.

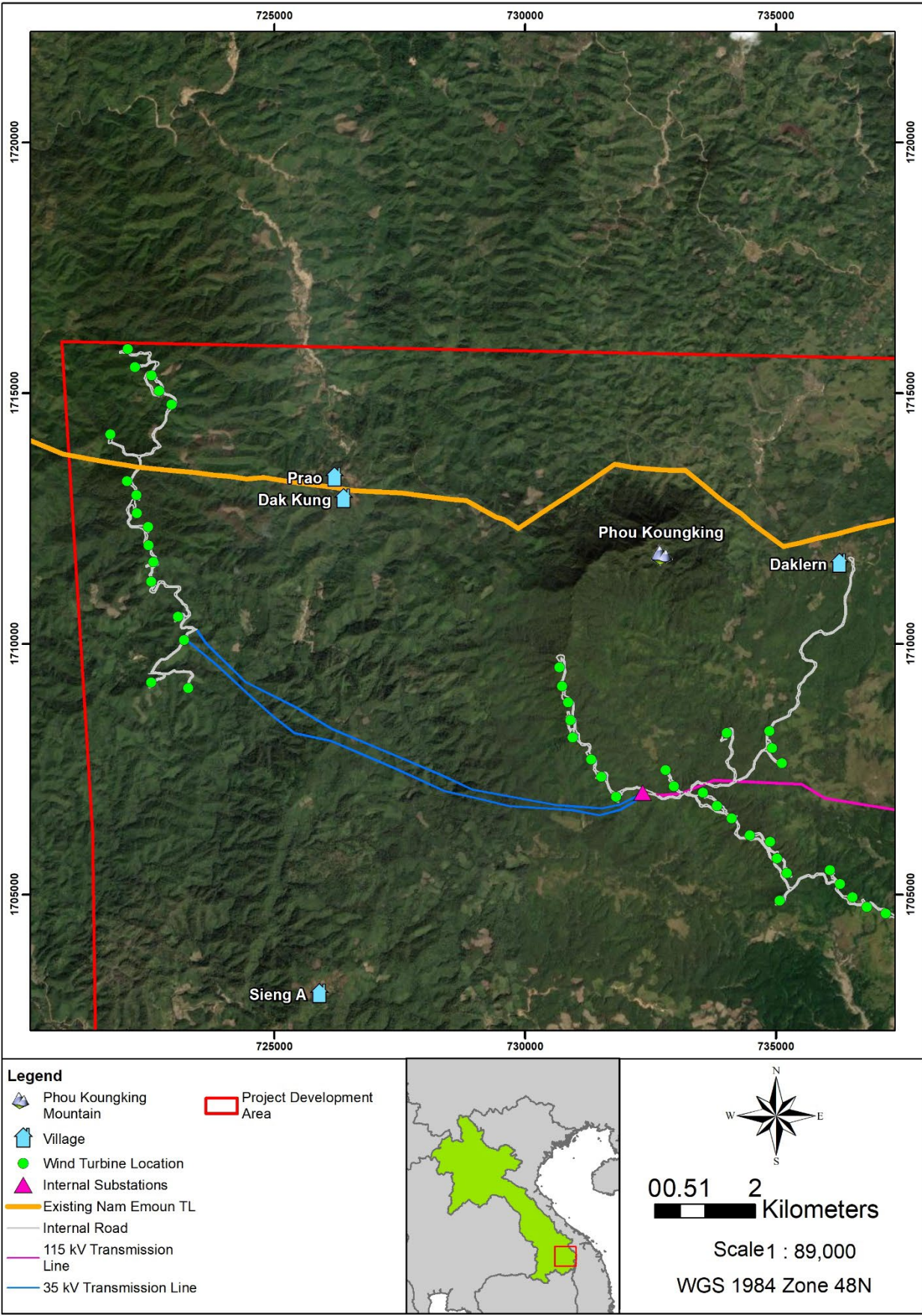


OVERVIEW OF AFFECTED VILLAGES

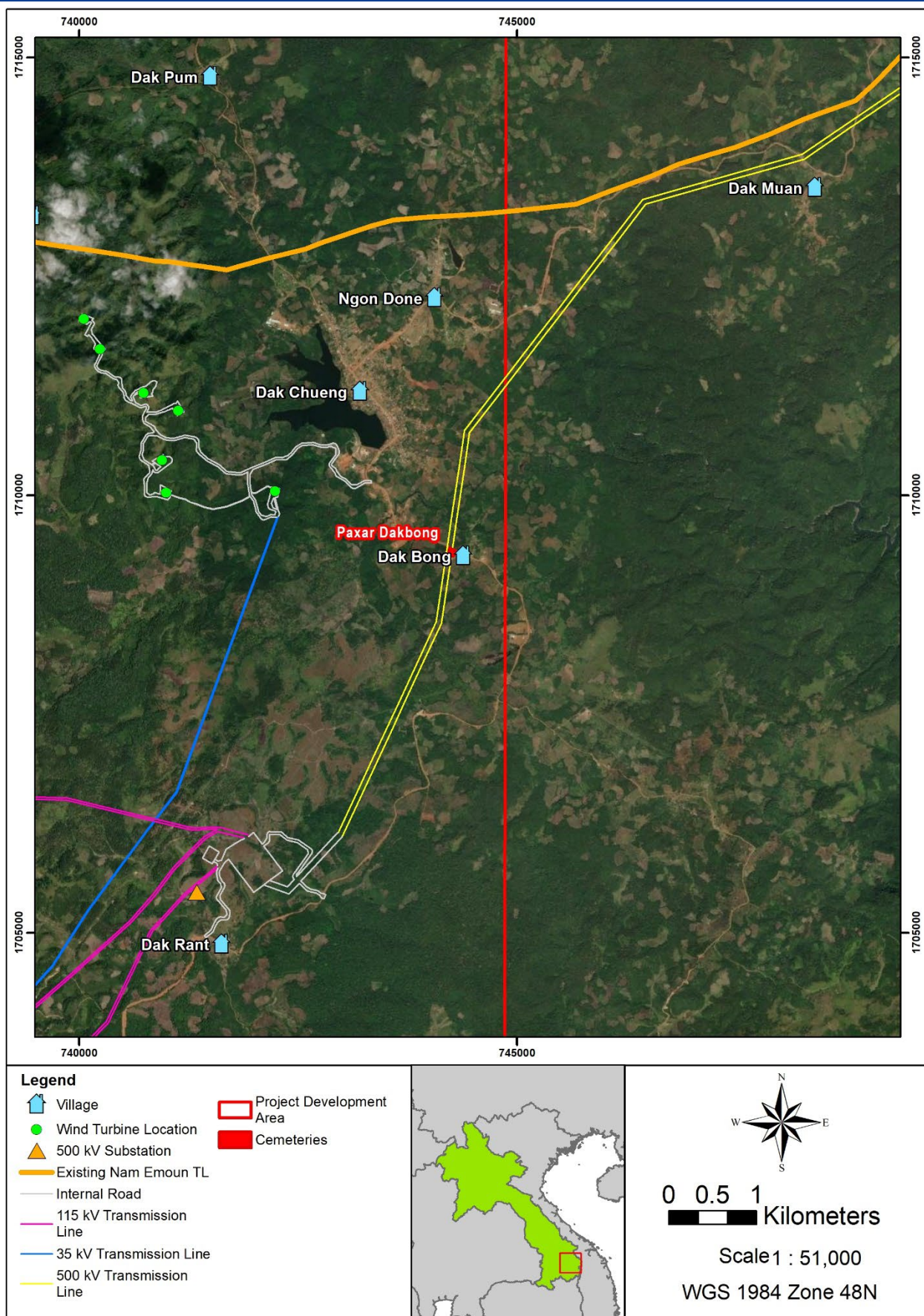
Villages	Impact			
	Amount Affected HH Economic Displacement	Cemetery / Sacred Forests / Biodiversity	Shadow Flicker	Visual Amenity
Dakcheung, Sekong				
Dak Tiem	23 Potential physical displacement (1 house)		Moderate	Moderate
Dak Xeng	4			
Xiengluang	9			
Dak Turb	38			
Prao	0	Close to Phou Koungking		
Dak Kung	5	Close to Phou Koungking		
Dak Rant	46	Close to Phou Koungking		
Dak Dor	31			
Dak Cheung	2			Moderate
Ngon Done	30			
Dak Muan	31			
Dak Bong	109 Potential physical displacement (2 houses)	Overhead TL passing through cemetery	Moderate	
Sanxay, Attapeu				
Dak Nong	19		Moderate	
Dak Samor	9			
Dak Yok	4			

Dak Tiem, Dak Xeng, Xiengluang, Dak Turb

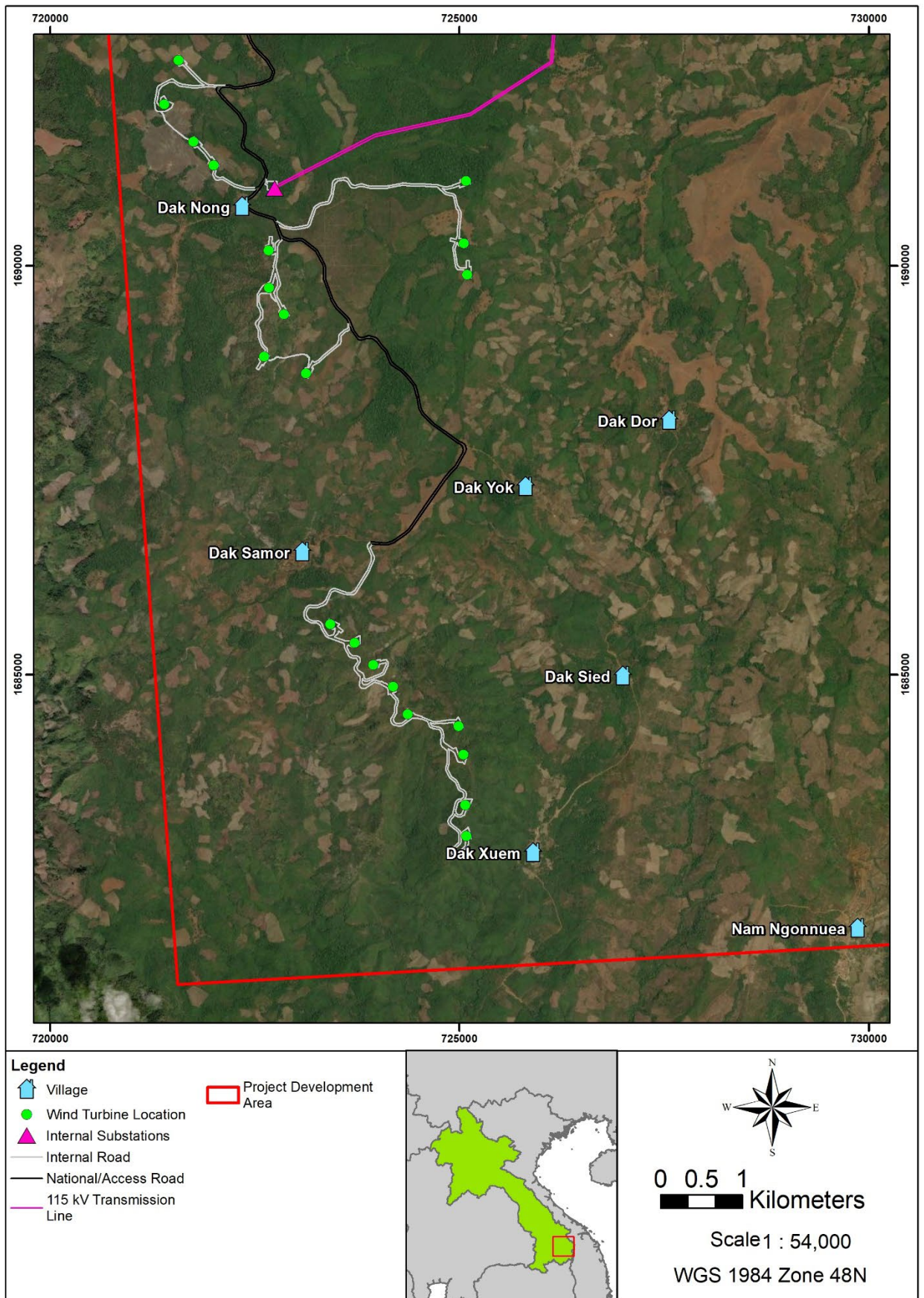




Dak Rant, Dak Cheung, Ngon Done, Dak Muan, Dak Bong



Dak Dor, Dak Nong, Dak Samor and Dak Yok



ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Geology and Soils impacts -

Arrange earthwork in the dry season and avoid the rainy season, where possible

Stockpiling of the construction materials must be kept at least 30 m from rivers and waterways

Ensure that the construction materials are stored in designated areas, and are not causing obstruction or located in areas of potential soil erosion

Monitoring / auditing conducted to inspect erosion control measures

Air Quality impacts –

Conduct air quality monitoring

Reduce the speed of vehicles arriving to and leaving the affected villages to 30 km/hour

The roads should be paved. If the road isn't paved, it is required to regularly spray water at least two times per day

Topography impacts -

Provide appropriate slope protection and drainage controls

Conduct area clearance or cutting of trees in the Project footprint / Concession Area only

After the construction, conduct restoration of the area and return the landscape to the original condition as much as possible



Surface Water Quality / Water Resources impacts -

A Drainage management plan including diversion of clean runoff from “dirty” or disturbed areas, containment, treatment and reuse of wastewater from batching plants

Prepare and implement a Water Use Plan. This plan must be communicated and agreed with the local people and with the District and Provincial Authorities

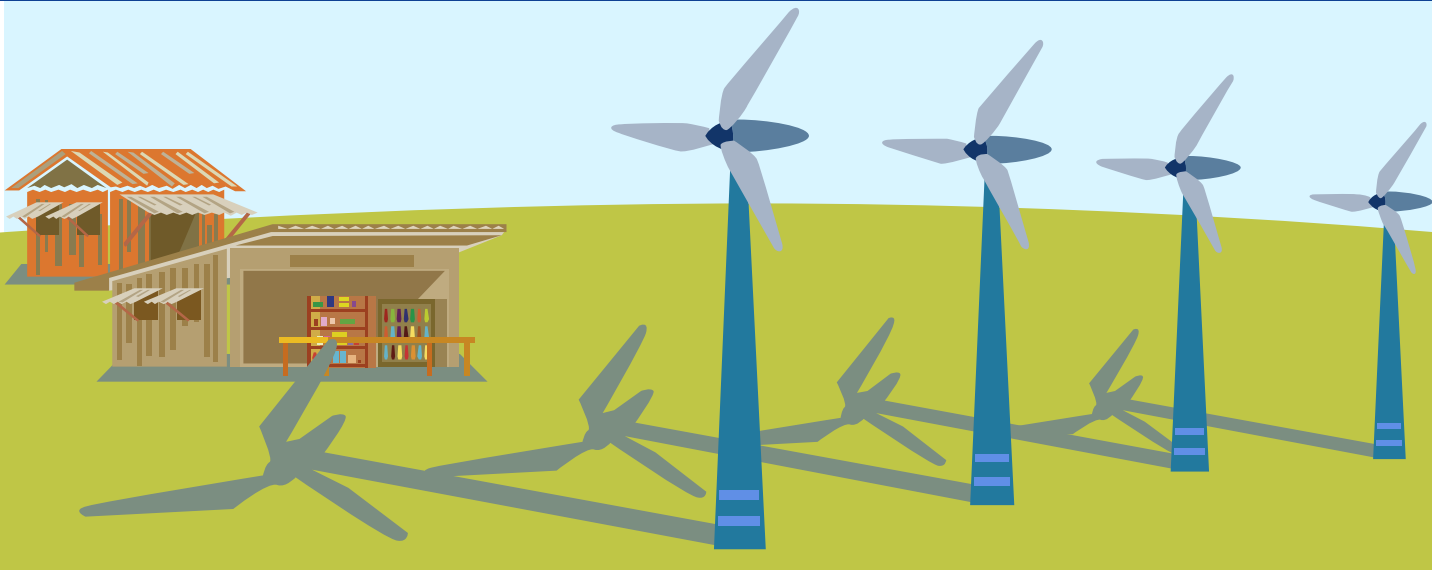
Conduct pre-construction surface water monitoring (5 sampling locations) in the same locations as surface water sampling for the baseline, but to identify and analyse presence of POPs

Noise impacts –

All WTGs that were identified to have a significant impact to households have been moved.

Conduct noise monitoring as per the recommendations in the local EIA report

Avoid unnecessary noise due to idling diesel engines and fast engine speeds when lower speeds are sufficient



- Shadow flicker is the flickering effect of sunlight from rotating wind turbine blades that can cast shadows through constrained openings such as the windows of neighboring properties.
- This impact is during operation and may cause nuisance.
- Modelling was conducted for the ESIA. The villages potentially impacted by shadow flicker include: **Dak Tiem, Dak Yen, Dak Bong and Dak Nong.**



MITIGATION MEASURES

- ❑ During the ESIA, all turbines that has significant shadow flicker impacts were moved further from villages.
- ❑ Wind turbines have been sited according to the World Bank/IFC Guidelines to ensure shadow flicker is below 30 hours per year at all potential sensitive receptors, where possible.
- ❑ Grievance Monitoring and Reporting - Close monitoring through engagement with residents during the operational phase, where there are predicted impacts from shadow flickers for locations that have been finalized by the project proponent and earmarked for construction.

Photomontages of the turbines when built – Dak Tiem

Current



Photomontage



Current



Photomontage



Current



Photomontage



Photomontage of the turbines when built – Dakyan

- ☐ Laydown areas and construction camps located in areas that are already disturbed or cleared of vegetation
- ☐ Minimize night lighting while guaranteeing the minimum safety level
- ☐ Use of materials that will minimize light reflection should be used for all Project components
- ☐ Existing vegetation retained to the greatest extent possible. Vegetation retained along roads, and other Project infrastructure



BIODIVERSITY IMPACTS AND MITIGATION MEASURES

Physical destruction and/or disturbance of vegetation impacts -

Re-routing of access roads to take place during pre-construction surveys an ecologist, around particularly sensitive biodiversity features

Avoid locating construction camps and material/equipment laydown areas within or near mapped forest areas

Illegal hunting/poaching and collection of forest resources impacts

Illegal activities such as hunting of wildlife or collecting of forest species is to be discussed with construction workers and such activities are to be prohibited

Access controls to be implemented to limit access to areas of high sensitivity (e.g. older growth, less impacted forest areas)

Reduction in habitat for supporting key species impacts -

Sweep through areas prior to construction to flush animals from habitats likely to be directly affected

Schedule habitat clearance, grading and road construction activities outside of key species' breeding periods where known



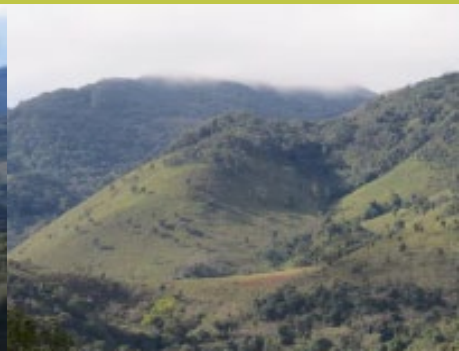
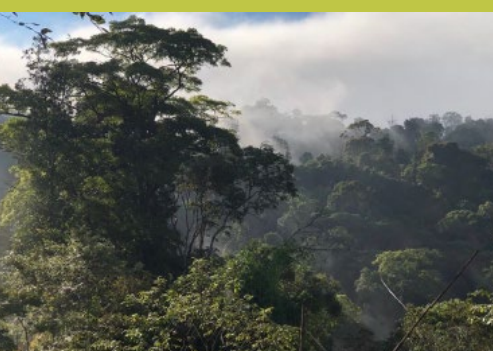
Bird & bat collisions with wind turbines resulting in injury or mortality

Implement an annual monitoring plan focused on investigating fatalities during period of heightened bird/bat activity (seasonally relevant)

Undertake further operational monitoring to confirm operational impacts and to inform appropriate mitigation options

Prepare an adaptive management plan to be informed by long-term annual bat/bird carcass monitoring, to determine where additional mitigation may be necessary for specific turbines/clusters of turbines

Habitat enhancement for bats (e.g. creation of pools) and provision of bat-boxes in areas under IEAD control away from wind turbines, may serve to reduce the number of bats in the wind farm area and therefore reduce collision risks



SOCAIL IMPACT ASSESSMENT & MITIGATION MEASURES

Impacts on Community Health and Safety

Environmental management plans such as the Traffic Management Plan, Air Quality Management Plan, and Noise and Vibration Management Plan will be prepared

Impacts on Economic Opportunities

- Employment and Local Capacity Building
- Rural Electrification and Community Development Programs
- Potential to provide access to new areas from new roads.

Impacts of Wind Farm Operation on Local Amenity

Regular noise monitoring will be undertaken. Where the noise criteria is exceeded

Prepare a restoration management plan that includes the replanting of indigenous species, and landscaping and rehabilitation of construction yards

Impact on Cultural Heritage (Tangible and Intangible)

- The layout of the access roads and facilities has avoided crossing any known cemetery areas.
- A Cultural Heritage Management Plan will be prepared to guide the workers on the protection of cultural heritage sites, structures and values that may be impacted by the Project

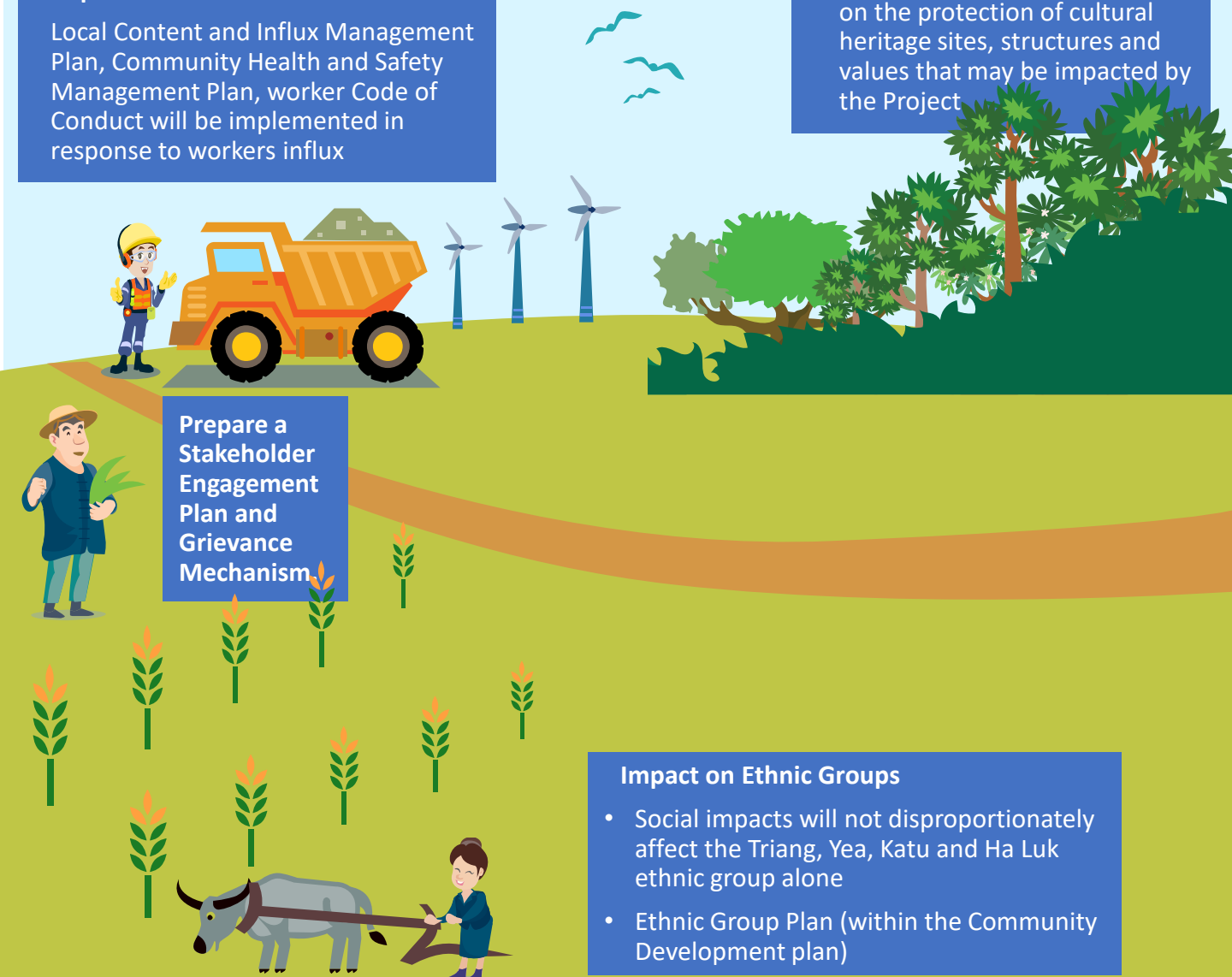
Impacts Associated with Influx

Local Content and Influx Management Plan, Community Health and Safety Management Plan, worker Code of Conduct will be implemented in response to workers influx

Prepare a Stakeholder Engagement Plan and Grievance Mechanism

Impact on Ethnic Groups

- Social impacts will not disproportionately affect the Triang, Yea, Katu and Ha Luk ethnic group alone
- Ethnic Group Plan (within the Community Development plan)



Overview of Land Acquisition Impacts

No.	Location	Project Activity	Loss of Agricultural Land					
			Affected Area (ha)		Affected HHs (No.)			Total Affect HHs (No.)
			Per.	Temp.	Per.	Per & Temp.	Temp.	
Dak Cheung District, Sekong Province								
1.	Dak Tiem	Turbine site, Access Road	2.69	10.69	2	19	2	23
2.	Dak Xeng	Access Road	0.18	0.45	-	4	-	4
3.	Dak Yang	Turbine site, Access Road	0.61	1.04	-	4	-	4
4.	Dak Yen	Turbine site, Access Road	0.56	1.33	-	4	1	5
5.	Xieng Luang	Access Road	0.73	1.65	-	9	-	9
6.	Dak Turb	Internal TL 115kV	0.05	5.24	-	12	26	38
7.	Tong Muang	Internal TL 115kV	0.01	1.59	-	2	3	5
8.	Dak Dor	Internal TL 115kV	1.35	7.61	1	14	16	31
9.	Dak Den	Turbine site, Access Road	0.34	0.93	-	5	-	5
10.	Dak Rant	Turbine site, Access road, Internal TL 115kV, Sub 500kV	5.59	24.44	1	24	21	46
11.	Dak Cheung	Access road	0.19	0.41	-	2	-	2
12.	Dak Lern	Access road	0.32	0.76	-	4	1	5
13.	Dak Kung	Turbine site, Access road, Internal TL 35 kv	0.76	1.43	-	5	-	5
14.	Dak Jom	Access road	0.04	0.21	-	1	-	1
15.	Dak Bong	Internal TL 115kV, 35kV, TL500kV	20.87	51.13	4	49	57	110
16.	Dak Muan	TL500kV	0.08	16.91	-	5	26	31
17.	Nonsavan	TL500kV	0.02	2.23	-	1	3	4
18.	Ngon Don	TL500kV	0.11	25.62	-	8	22	30
19.	Dak Ta-ok Noi	TL500kV	0.04	5.30	-	2	-	2
	Total		34.52	158.97	8	174	178	360
Sanxay District, Attapeu Province								
1.	Dak Nong	Internal TL 115kV,Turbine site, Access road	2.11	5.26	-	18	1	19
2.	Dak Samor	Turbine site, Access road	0.97	1.43	3	6	-	9
3.	Dak Yok	Turbine site, Access road	1.12	3.32	-	4	-	4
4.	Dak Padou	Turbine site, Access road	0.39	1.21	-	3	1	4
	Total		4.59	11.22	3	31	2	36
	Grand Total		39.12	170.19	11	205	180	396

Impacts to NTFP Collection Areas

The Project land acquisition will result in 153 ha of permanent and 440 ha* of temporary loss of NTFP collection area. The permanent and temporary clearing of forest has been kept to a minimum, and comprises less than 1% of the total Project area. The area of forest will be cleared will, amongst other things, allow for access roads to be laid. The access roads will provide greater access to other areas of the forest that the affected villagers may currently be unable to access, or have difficulty accessing. As such, while there are 2,107 households affected by the clearing of forest, **the Project will not remove the ability for NTFP collection.**

**This figures may change following the DMS results of the new layout*

Mitigation Measures

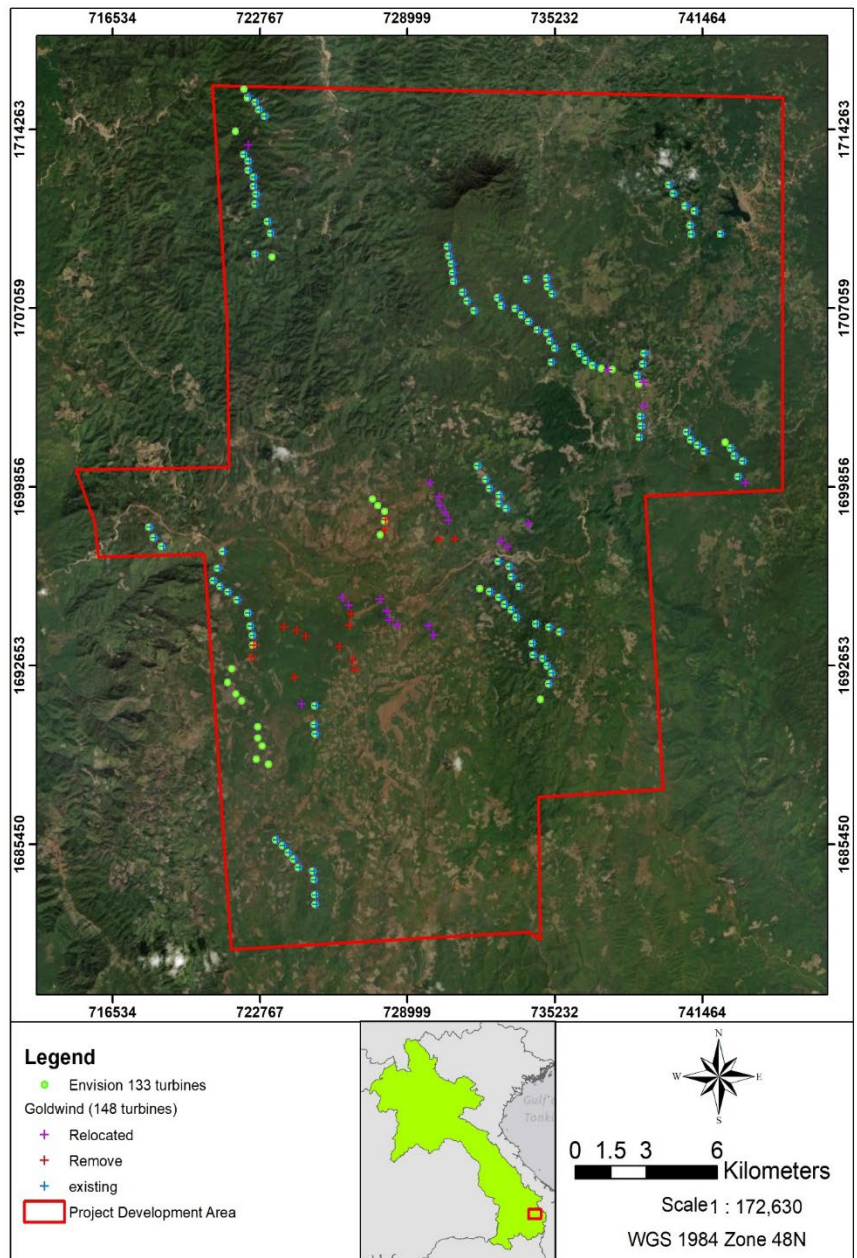
Layout Optimization

The Project has reduced the number of WTGs from 148 to 133 units. In addition, the Project also refined the TL and internal road route to avoid impact to residential houses, cemetery and agricultural land, where possible.

Resettlement Plan

A Resettlement Plan has been developed in response to the Project causing economic displacement and impacts to livelihoods. The RP is to ensure that the livelihoods of all displaced persons are improved or at least restored to the pre-project levels and standards of living of the displaced vulnerable groups are improved

Project Layout Optimization

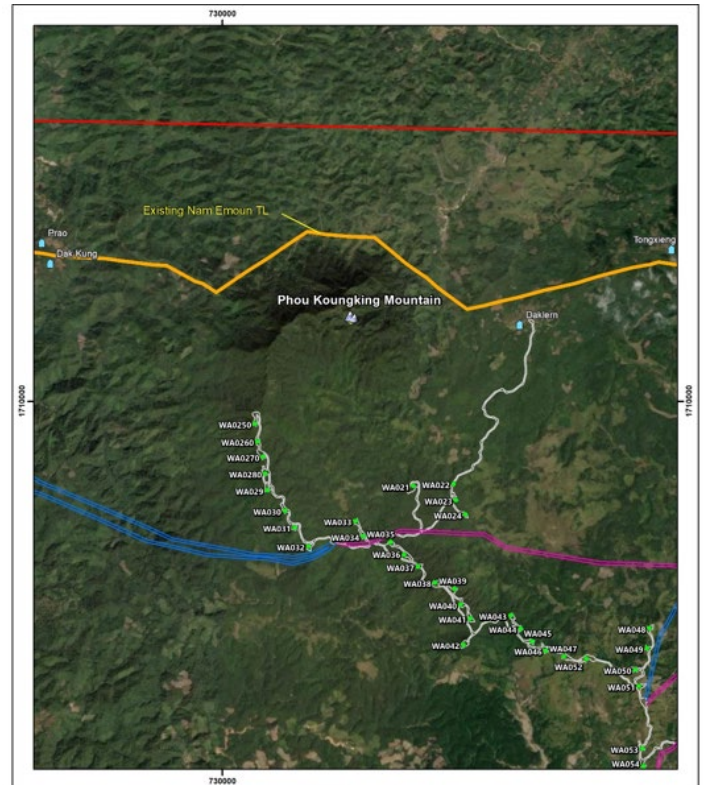


Prao, Dak Kung, Dak Lern and Dak Rant Villages

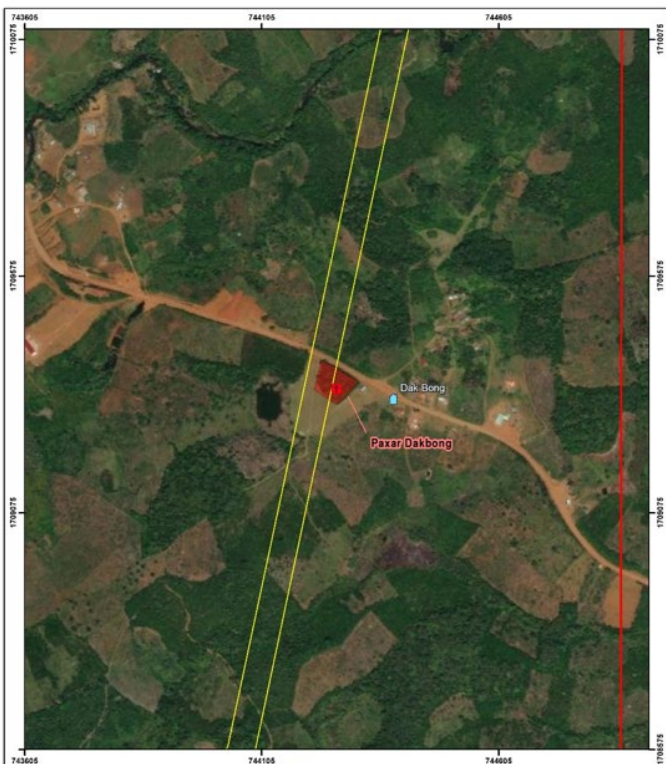
Phou Koungking

Eight (8) WTGs, transmission line and internal roads will be developed within Phou Koungking. The forest is believed to be inhabited by a spirit known as Phi Bang Bot who can cause illness for people entering the forest without permission.

- A ritual must be performed in accordance with local customs
- The Project will limit land clearance and strictly comply with the regulation and the Biodiversity Action Plan (BAP). The Project therefore will not cause disruption to the integrity of the forest in which the spirit resides.



Dak Bong Village



Dak Bong Cemetery

An overhead transmission line will pass over Dak Bong Cemetery. The transmission line is approximately 70 m above the ground, therefore there will be no modifications (i.e. vegetation clearance and earthwork) made to the cemetery area.

The Project will conduct additional consultation with Dak Bong villagers and comply with required ceremony or ritual in order to enter and proceed with Project activities within Dak Bong cemetery.



Project Stakeholders

- Affected Population
- Cumulative Impacted Population
- Central and Provincial Government Agencies
- District Administration Offices
- Aviation Operation/ Airport
- Electricity Off taker
- Operators of meteorological radar and communication system (radio, TV, mobile-telephone network sites and relay antennas)
- Non-Governmental Organisations and Community Groups

The SEP identifies the Project stakeholders and describes how these stakeholders will be engaged throughout the Project lifecycle.

Consultation During Disclosure Site Visit (18-22 July 2022)

- Village heads and affected people (affected by Project land acquisition) are they key targets of the engagement, particularly those affected by Project land acquisition.
- Minutes of Meeting will be signed by the participants to express their agreement on the proposed mitigation measures. For those who are not able to read, the meeting will be summarized verbally to them before signing of the minutes.

Stakeholder Engagement Stages for Future Phases

- Pre-construction - Undertake supplementary Environmental Social Impact Assessment (ESIA) and Environmental and Social Management Plans
- Construction - Regularly engage with stakeholders throughout the construction process and activities
- Operation - Day-to-day engagement with stakeholders

Stakeholder Engagement Principles

- begin early in the process of identification of environmental and social risks and impacts and continue on an ongoing basis as risks and impacts arise;
- be based on the prior disclosure and dissemination of relevant, transparent, objective, meaningful and easily accessible information which is in a culturally appropriate local language(s) and format and is understandable to affected communities;
- focus inclusive engagement on those directly affected as opposed to those not directly affected, such as men, women, the elderly, youth, displaced persons, and vulnerable and disadvantaged persons or groups;
- be free of external manipulation, interference, coercion, or intimidation;
- enable meaningful participation, where applicable; and
- be documented. If the Project has already engaged in such a process, adequate documented evidence of such engagement should be provided.

Additional Strategies for Women and Vulnerable Groups

- **Focus groups for women** - led and facilitated by a woman in each village in the Directly Affected Population
- **Focus groups for youth** - led by a youth facilitator in each village in the Directly Affected Population.
- **School visits** - consult and information disclosure with school children and teachers
- **Household visits** - particularly for people with disabilities, the elderly who have mobility issues, and other vulnerable people that are unable to attend community meetings
- **Most Ethnicity/IPs** - established a group of local who will hold small group meetings in local ethnic languages including Triang, Yae, Katu and Ha Luk to explain printed disclosure materials

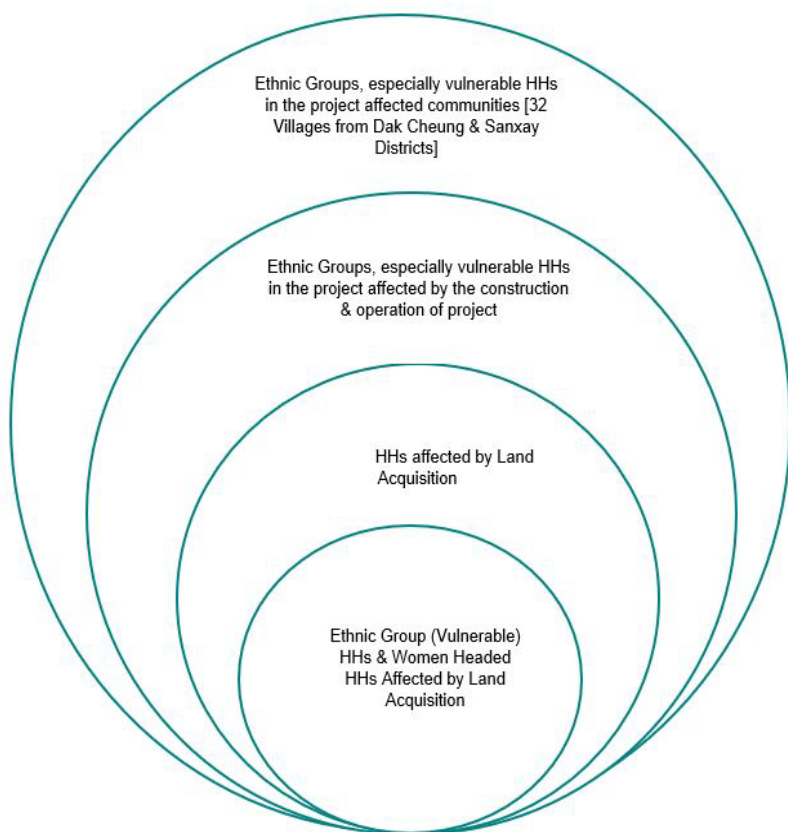


COMMUNITY & ETHNIC GROUP DEVELOPMENT PLAN (CEGDP) – Benefit Sharing Measures



Proposed Benefit Sharing Measures

- ❖ Rural Electrification (Off Grid)
Solar power systems
- ❖ Agriculture (Coffee) &
Husbandry Training
- ❖ Local Employment and Skill
Opportunities
- ❖ Education and Sponsorship
Assistance (college)
- ❖ Health Services & Support
- ❖ Community Awareness Raising
Trainings
- ❖ Local Capacity Building



Target Communities & Eligibilities

- ❖ The CEGDP is developed
with emphasis
to ethnic groups and
women.
- ❖ Ethnic Groups Triang,
Yea, Katu & Ha Luk from
Project
Affected Communities (32
Villages)

COMMUNITY & ETHNIC GROUP DEVELOPMENT PLAN (CEGDP) – MITIGATION MEASURES

Project Activities	Potential Social Impacts	Villages	Mitigation Measures
Construction and operation of the Project	Economic Opportunities <ul style="list-style-type: none"> Local Employment and Training) Increased Access to Agricultural Land/Forest 	All 32 villages in the Aol	N/A
Turbine site, Access road, Internal TL 35kV, 115kV, Sub 500kV, TL500kV	Economic Displacement and Impacts to Livelihoods <ul style="list-style-type: none"> Loss of Agricultural Land Loss of NTFP Collection 	23 villages affected by loss of agricultural land are listed in Table 8.54 <ul style="list-style-type: none"> 25 villages affected by loss of NTFP collection are listed in Table 8.56 	<ul style="list-style-type: none"> Resettlement Plan Stakeholder Engagement Plan Community & Ethnic Development Plan
Vehicle movements from the delivery of materials and use of infrastructure and machinery, associated with construction activities	Impacts to Community Health and Safety <ul style="list-style-type: none"> Infrastructure and Machinery Vehicle Movements Security Potential Spread of Diseases 	All 32 villages in the Aol	<ul style="list-style-type: none"> Stakeholder Engagement Plan Grievance Redress Mechanism Local Content and Influx Management Plan Occupational Health and Safety Management Plan
Construction of the Project	Impacts Associated with Influx <ul style="list-style-type: none"> Labour and Working Conditions Transactional Sex Community Dynamics and Gender-Based Violence Public Infrastructure and Resources 	Location of worker's camp	<ul style="list-style-type: none"> Local Content and Influx Management Plan Workers Camp Management Plan Community Health and Safety Management Plan Occupational Health and Safety Management Plan Stakeholder Engagement Plan
Operation of the Project	Impacts on Local Amenity: <ul style="list-style-type: none"> Noise Landscape and Visual Disruptions Shadow Flicker 	All 32 villages in the Aol	Stakeholder Engagement Plan
Construction of the Project	Impact on Ethnic Groups <ul style="list-style-type: none"> Erosion of Ethnic Culture 	All 32 villages in the Aol	<ul style="list-style-type: none"> Local Content and Influx Management Plan Community & Ethnic Development Plan
Construction of the Project	Impact on Cultural Heritage (Tangible and Intangible) <ul style="list-style-type: none"> Access / impacts to the Sacred Forest 	All 32 villages in the Aol	Culture Heritage Management Plan

COMMUNITY & ETHNIC GROUP DEVELOPMENT PLAN (CDP)

1

Local Employment from the Project

- The community have significant interest in the potential employment opportunities provided by the Project. Through a collaborative approach to the local employment skills training will be implemented, particularly in context to labour needs for the Project development.
- It will be vital for the local villages to obtain skills training related to Project work and to be further employed in the Project upon the successful completion of various trainings.



2

Rural Electrification

Focuses on the providing increased access to electricity for HHs that are not connected to the national grid. Approximately 56 HHs with a total population of 280 people in Dak Dom village will be able to have access to the off grid solar power systems.

3

Agriculture and Husbandry Training

- This will involve local capacity building in collaboration with local authorities, particularly the Department of Agriculture and Forestry to facilitate trainings specific to areas of strengthening the coffee quality and enabling consistency in production shall improve and further the coffee production
- The other program that will focus enhancing agricultural outputs will target livestock rearing. The scheme will assist in building capacity to promote livestock rearing via a series of community trainings.



COMMUNITY & ETHNIC GROUP DEVELOPMENT PLAN (CDP)

4

Education and Sponsorship Assistance

- Construction and Rehabilitation of education facilities
- Educational Funding Scheme
- Local Capacity Building in Education Services
- Scholarship Support for College



5

Health Support

- Health assistance and local capacities will be strengthened during the project operation phase.
- The communities will benefit from various activities prescribed and agreed by the Joint Committee for the CDP on the annual basis to obtain access to health support and services.
- The medical supplies will be further supported by Project in the 5 health centres within the Project AOI. It will also focus on multiple aspects of healthcare for children vaccination and vitamin and nutrient supplies to further development of early childhood stages and beyond.



6

Local Capacity and Awareness Building

- The Joint Committee shall be established for the purpose of Implementation Community Development Programme. The committee will be responsible for the overall supervision of the community development programme and consider annual updates on the needs and opportunity of the villages and the initiatives shall be guided by the management plans.
- Various Community awareness trainings shall be facilitated to strengthen the local capacities at different level.



Gender Specific Mitigation Measures

- ❖ Community & Ethnic Group Development Plan
- ❖ Local Content Management Plan
- ❖ Resettlement Plan
- ❖ Stakeholder Engagement Plan
- ❖ Local Content and Influx Management Plan
- ❖ Community Health and Safety Management Plan

The Gender Mainstreaming with emphasis to the following community initiatives specific to women shall be adopted by the project :

- ❖ **Women Economic Empowerment**

Income Generating Livelihood Program via Agriculture & Husbandry Training

- ❖ **Local Capacity Building**

- Local Membership to Joint Committee
- Engagement and Participation in Project Activities
- Employment and Skill Opportunities

- ❖ **Education and Sponsorship Assistance (college)**

Education Scholarship

- ❖ **Health Services & Support**

Women specific health support and assistance



Overview

Resettlement Plan (RP) is prepared to address the economic displacement impacts on affected households due to land and right of way impacts for the development of wind farm components. The objective of the RP is to ensure that the livelihoods of all displaced persons are improved or at least restored to the pre-project levels and standards of living of the displaced vulnerable groups are improved to at least national minimum standards

Eligibility

Households under the followings are eligible for compensation from the Project:

- (i) persons with formal legal rights to land lost in its entirety or in part;
- (ii) persons who lost the land they occupy in its entirety or in part who have no formal legal rights to such land, but who have claims to such lands that are recognized or recognizable under national laws; and
- (iii) persons who lost the land they occupy in its entirety or in part who have neither formal legal rights nor recognized or recognizable claims to such land. The involuntary resettlement requirements apply to all three types of displaced persons.

Cut Off Date

- Eligibility will be determined with regards to the “cut-off date”, which will be the final day of the detailed measurement survey (DMS) of the Project.
- The Project DMS was conducted on 17 May to 21 June 2022 in Dak Cheung District and 14-18 June 2022 in Sanxay District.
- All APs identified as of the cut-off date will be entitled to compensation for affected assets, and rehabilitation measures sufficient to assist them to improve or at least maintain their pre-project living standards, income-earning capacity and production levels.



Key Project RP Principles

The key project Principles are as follows but not limited to the mentioned provision only :

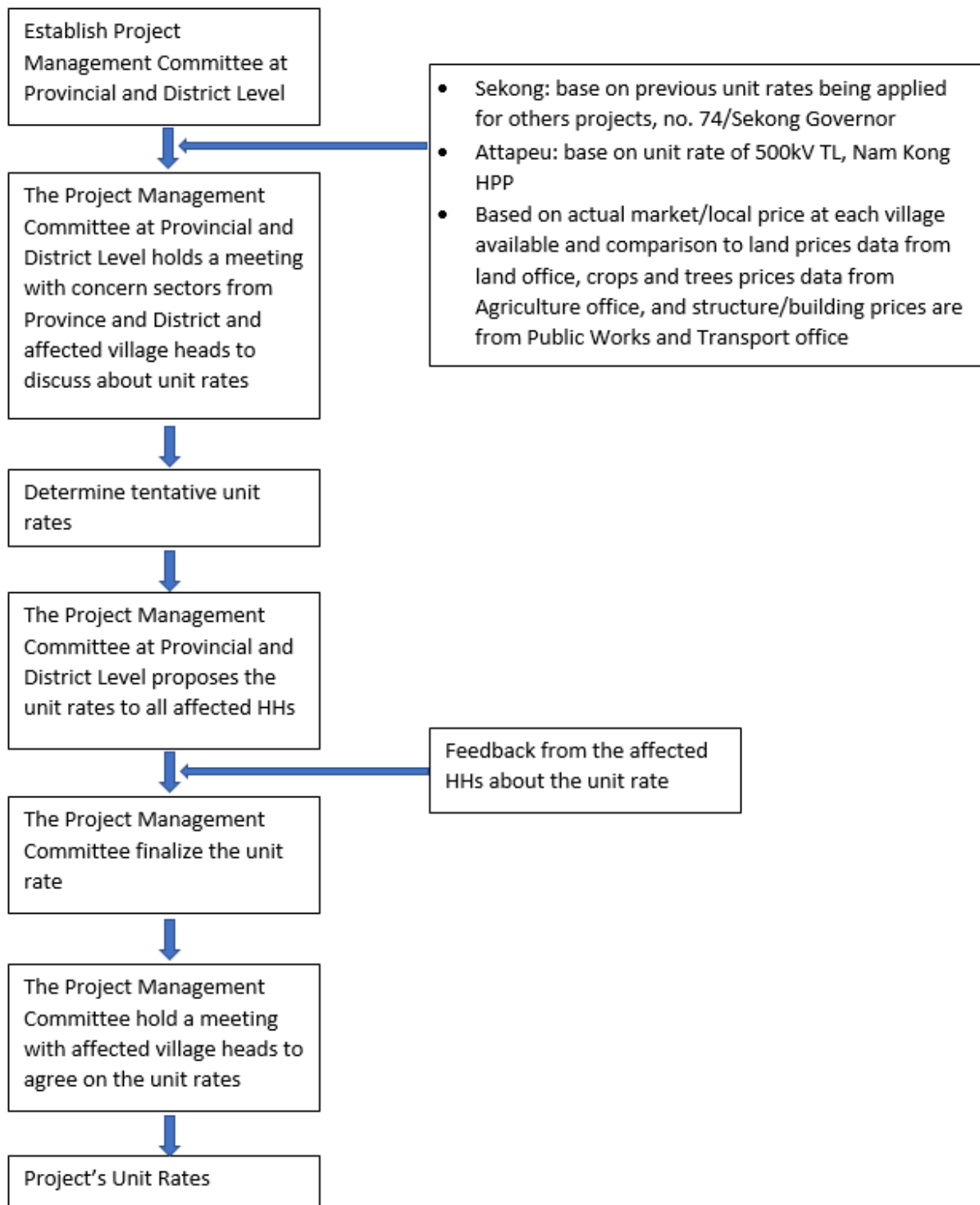
- ❖ Economic displacement of PAPs is carried out in compliance with Laos laws and ADB Safeguard Policy.
- ❖ Whenever it is possible, in-kind compensation (e.g., land for land) will be offered to AHs. Cash compensation will only be considered based on the preference of AHs. Where the land for land is not available, the lack of land will be demonstrated and documented by the Project
- ❖ AHs whose land or assets are impacted by the Project's land acquisition at the date of the DMS (the cut-off date) will be entitled to compensation according to the DMS and the entitlement matrix. They may also be entitled to rehabilitation assistance to assist them in improving, or at least maintaining their pre-project living standards and productive capacities, as necessary.
- ❖ A household is considered severely affected if it loses 10% or more of its productive assets.
- ❖ The Project recognizes all displaced person including those (i) persons with formal legal rights to land lost in its entirety or in part; (ii) persons who lost the land they occupy in its entirety or in part who have no formal legal rights to such land, but who have claims to such lands they occupy in its entirety or in part who have neither formal legal rights nor recognized or recognizable claims to such land. The compensation and other assistance apply to all three types of displaced persons.
- ❖ The Project will provide compensation at full replacement costs
- ❖ There will be effective grievance mechanism for receiving and resolving grievances during updating and implementation of the RP
- ❖ Special measures will be incorporated in the resettlement plan to protect socially and economically vulnerable groups

Compensation and Valuation Methodology

The Project land acquisition is led by the government, The Project has undertaken the steps to determine the compensation unit rates:

- Established Environmental and Social Impact Management Committee in November 2020 for Dak Cheung District, Sekong Province and March 2022 for Sanxay District, Attapeu Province.
- Determine unit rates by the Environmental and Social Management Committee ('the Committee)
- Disclosed and consulted with the affected people regarding the unit rates, and agreement get feedback on the proposed unit rates from affected people
- The Committee finalized the unit rates
- Meetings at village levels are held for the affected people to approve the unit rate
- Approval of compensation unit rates by the Committee

Compensation and Valuation Methodology



Eligibility and Entitlement Matrix

Type of Loss	Entitled Persons/Entity	Compensation Policy
Loss of agricultural land (title holders)	<ul style="list-style-type: none"> • Owners with legal titles to the land; or • be eligible to have land legal titles allocated as regulated by the Land Law or • have claims to such lands that are recognized or recognizable under national laws 	<ul style="list-style-type: none"> • Cash compensation at replacement cost for the affected area or land for land compensation where feasible • For replacement land, land titles will be provided with all related costs borne by the Project • Includes option of compensation to those affected land remaining after acquisition is no longer viable (for Severe loss of agricultural land i.e. loss of more than 10% of total productive assets)
Loss of agricultural land (non-title holders)	<ul style="list-style-type: none"> • Displaced persons without legal titles 	<ul style="list-style-type: none"> • Compensation at full replacement cost for non-land assets
Temporary loss of agricultural land	<ul style="list-style-type: none"> • All affected peoples (title holders and non-title holders) 	<ul style="list-style-type: none"> • Provision or land rental value based on prevailing lease rate at the time of temporary use in similar locations during the duration of use or temporary acquisition • Land used temporarily will be returned to users after being restored to the original condition or preferably after being rehabilitated to better conditions
Agricultural land within the ROW of the transmission line	<ul style="list-style-type: none"> • All affected peoples (title holders and non-title holders) 	<ul style="list-style-type: none"> • For land affected by underground cables, agricultural land will be compensated for as permanent loss for title holders because the AHs can no longer use the land due to concrete structure over the underground cables. Non-title holders will be compensated for non-land assets. • For land affected by overhead TL, agricultural land will be compensated for as temporary loss • Crops and trees will be compensated for accordingly to the type of crops/trees and loss (temporary or permanent) • The community forest land is not be eligible for compensation as per the Laos requirements. The land will be included in the land conversion agreement with the government in Concession Agreement. If trees of such forest lands are privately owned, compensation will be provided to the individuals for loss of such trees.

Eligibility and Entitlement Matrix

Type of Loss	Entitled Persons/Entity	Compensation Policy
Loss crops and trees	<ul style="list-style-type: none">Persons/households whose crops (annual/perennial) and trees are affected by the Project.	<ul style="list-style-type: none">For affected trees, cash compensation at market rate in the local (Dak Cheung District and Sanxay District)Cash compensation for perennial crops and fruit bearing trees based on annual net product market value multiplied by 5 yearsFor timber trees, cash compensation at replacement cost equal to current market prices based on types, age and diameter at breast height of trees.Notice to harvest annual crops, if possible.For annual crops that cannot be harvested, cash compensation equivalent to current market prices times the average yield/crop calculated over the past three (3) years.
Vulnerable households	<ul style="list-style-type: none">Households that are categorised under the vulnerable criteria	<ul style="list-style-type: none">Land-for-land option will be a guaranteed option for vulnerable displaced persons.Additional allowance for loss of land or structureVulnerable households will have priority in any employment required for the project.

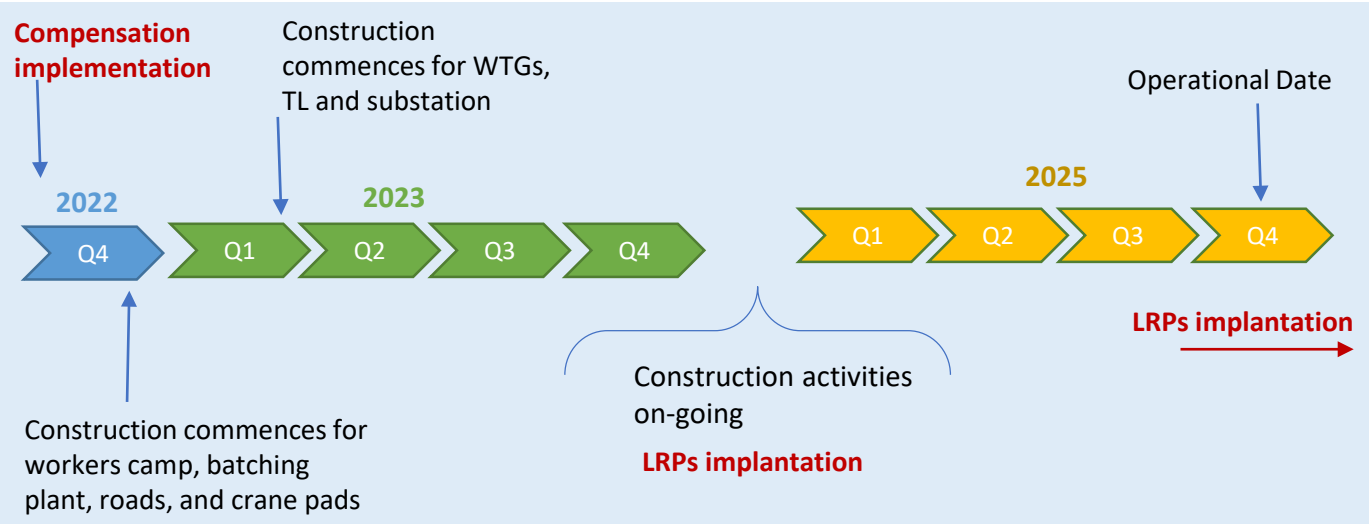


Livelihood Restoration Plan

Area of Focus		Eligibility	Plan	Project Development Phase	Timeframe of Implementation Consideration
1	Agriculture & Husbandry Training				
1.1	Promote and Capacitate method of subsistence farming	PAPs	Livelihood Restoration Plan (LRP)	Operation Phase	Throughout the Project Period
1.2	Provide seeds and livestock for long-term self-consumption and space for livestock rearing	PAPs	Livelihood Restoration Plan (LRP)	Operation Phase	Throughout the Project Period
1.3	Introduce Terrace Farming	PAPs	Livelihood Restoration Plan (LRP)	Operation Phase	Throughout the Project Period
1.4	Support growing different types of plants for the commercialization and livelihood income generation (avocadoes, macadamia, nuts etc.)	PAPs	Livelihood Restoration Plan (LRP)	Operation Phase	Throughout the Project Period
1.5	Provide rice and coffee milling equipment	PAPs	Livelihood Restoration Plan (LRP)	Operation Phase	Throughout the Project Period
1.6	Women Led Income Generating Activities	PAPs	Livelihood Restoration Plan (LRP)	Operation Phase	Throughout
1.7	Enhance quality of products to export to Global Market	PAPs	Livelihood Restoration Plan (LRP)	Operation Phase	Throughout the Project Period
1.8	Women Economic Empowerment (income generating activity)	PAPs	Livelihood Restoration Plan (LRP)	Operation Phase	Throughout the Project Period
2	Local Employment & Skill Opportunities				
2.1	Local Employment	PAPs	Livelihood Restoration Plan (LRP)	Construction & Operation Phase	Throughout the Project Period

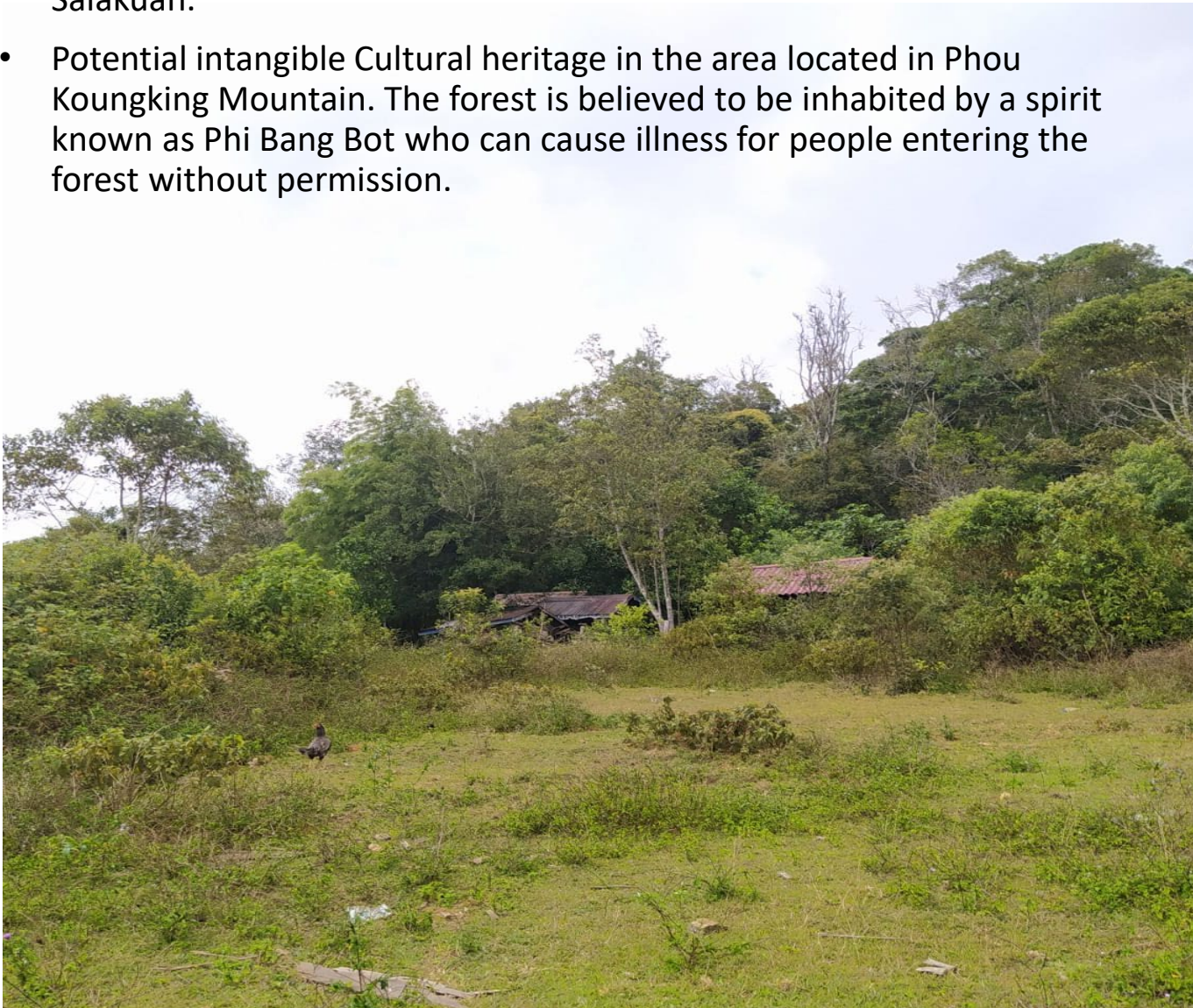
Timeline for Land Acquisition and Implementation of Livelihood Programs

- Compensation will be implemented in Q4 (October – December) of 2022
- Livelihood restoration programs (LRPs) will be implemented during construction and operation



Overview and Potential Impacts

- The CHMP sets out the management measures established to address the potential impacts to cultural heritage sites, structures and values that may result from Project activities.
- Tangible Cultural heritage in the area include cemeteries which are mostly forested areas and are sacred as a burial place of the deceased from the villages. People are prohibited from entering for any kind of activities. Poles located in the middle of the villages are used for securing animals and serve as a place for performing animal sacrifice. Sacred houses or Salakuan in the middle of villages are used for performing animal sacrifices. Women and outsiders are strictly forbidden from entering Salakuan.
- Potential intangible Cultural heritage in the area located in Phou Kouncking Mountain. The forest is believed to be inhabited by a spirit known as Phi Bang Bot who can cause illness for people entering the forest without permission.





Management Measures

- Consult stakeholders who may be impacted by damage to or removal of cultural heritage and provide opportunities for them to give feedback.
- Develop a calendar of festivals/events and a map of known cultural heritage sites to avoid potential Project impacts during these events.
- Ensure relocation of known cultural heritage sites within the Project boundary is done in a culturally appropriate manner prior to construction.
- Provide the Project workforce with information and awareness training on the surrounding cultural heritage sites.
- Conduct ongoing engagement with stakeholders for an awareness for timing of construction activities and potential impacts
- Implement and maintain a community grievance mechanism.
- Establish physical barriers between and/ or setback distances from cultural heritage sites, structures, and values, where necessary.

Overview and Potential Impacts

The BAP has been prepared to outline the offsets and mitigation. Biodiversity offsets are conservation outcomes designed to compensate for significant biodiversity impacts.

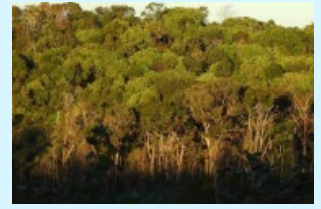
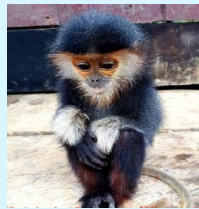
Residual impacts of moderate significance relate to the potential loss of critical forest habitat. These impacts are likely to result in a net biodiversity loss unless adequately mitigated through an appropriate biodiversity compensation strategy.

Engagement with Stakeholders

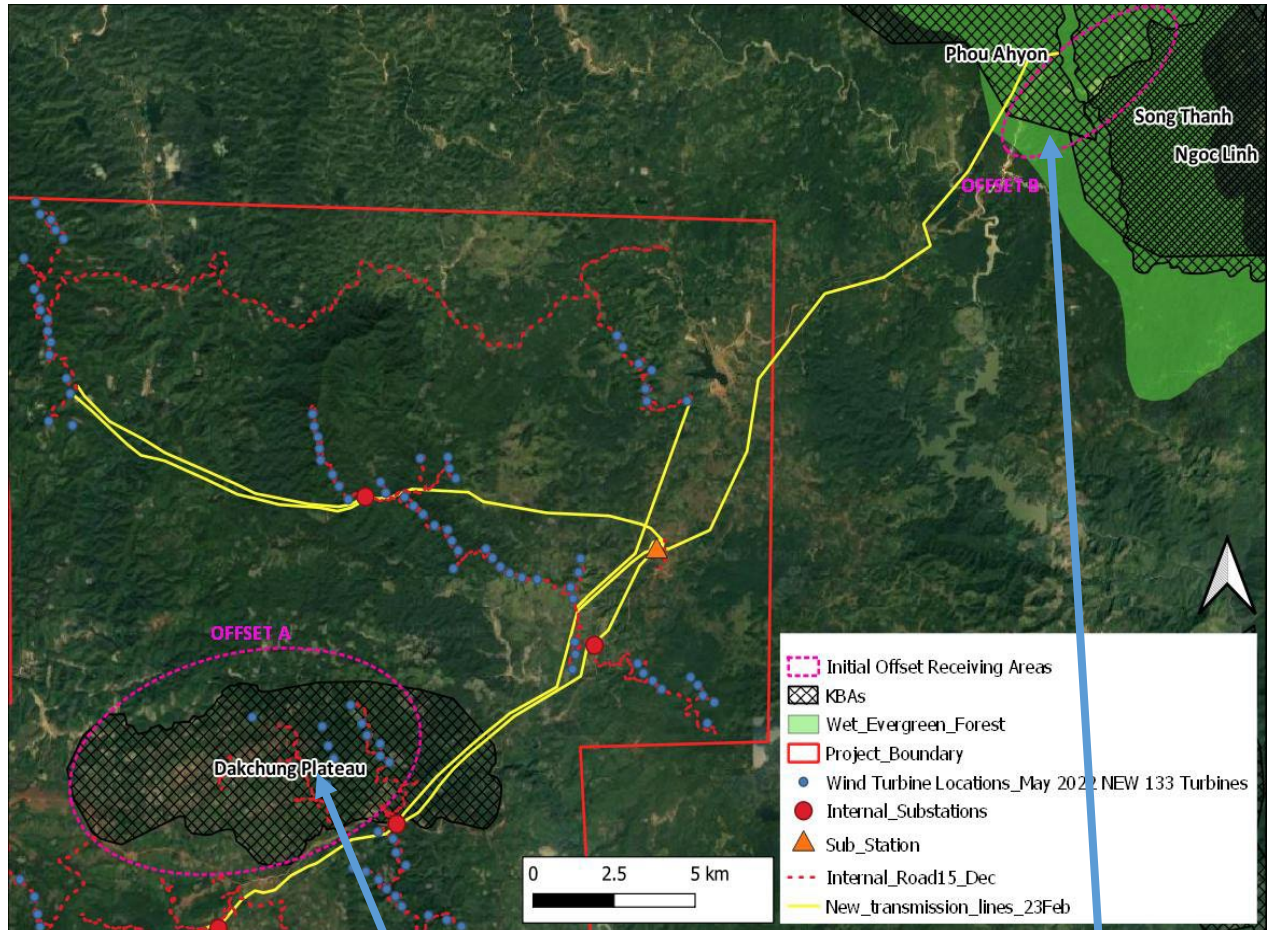
- Consultation included local experts in mammals and birds of Laos, and Key Biodiversity Areas (KBAs), and reptiles and amphibians in Southeast Asia.
- NGOs
- Community groups
- Governmental organizations
- Relevant ministries that may have interest in the Project in the area



INITIAL BIODIVERSITY ACTION PLAN (BAP)



Offset Strategy



Offset Site A: Near Dak Yen and Dak Yang Village: Within the Dak Chung Key Biodiversity Area (KBA). This is selected due to presence of Montane Evergreen Forest habitat and as the site is close to impacted forest areas. The Project may support the existing Protected Area network, or local KBAs or to align with already existing initiatives and/or areas and cumulatively contribute to them. Examples could include working with the Lao PDR Ministry of Natural Resources and Environment (MoNRE) to create a protected area covering the mountain area, using the data collected for the Monsoon WF application to support such a designation.

Offset Site B: Near Dak Dom Village: Offsetting of Wet Evergreen Forest loss. Best achieved by locating the offset receiving area along the existing access road through the Wet Evergreen Forest habitat to the north-east, associated with the Phou Ayon KBA. The opportunity here would be to restore degraded forest habitat impacted by the access road.



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