

Resettlement Plan

Project Number: 42916-014
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Sarulla Operations Limited, Sarulla Power Asset Limited, Kyuden Sarulla Private Limited, OrSarulla Incorporated and PT Medco Geopower Sarulla

Sarulla Geothermal Power Development Project
(Indonesia)

Prepared by Sarulla Operations Limited for the Asian Development Bank. This is an updated version of the draft originally posted in October 2013 available on <http://www.adb.org/projects/42916-014/documents>.



FINAL REPORT

Volume V: Resettlement Plan

Development of Sarulla Geothermal Field and Power Plant of 330 MW Capacity

**North Tapanuli Regency
North Sumatera Province**

March 2014

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UNITS AND ABBREVIATIONS

ADB	Asian Development Bank
AIDS	Acquired Immune Deficiency Syndrome
AMDAL	Analisis Mengenai Dampak Lingkungan
ANDAL	Analisis Dampak Lingkungan
BBM	Bahan Bakar Minyak (also known as Fuel in English)
BLH	Badan Lingkungan Hidup (also known as Environmental Agency in English)
BOP	Blow Out Preventer
CDP	Community Development Program
CSOs	Civil Society Organisations
CSR	Corporate Social Responsibility
dB	Decibel
dBA	Average Decibel
EIA	Environmental Impact Assessment
EPC	Engineering Procurement Contracting
EPFIs	Equator Principles Financing Institutions
ERM	Environmental Resources Management
ESC	Energy Sales Contract
FE	Final Evaluation
FGDs	Focus Group Discussions
FI	Financial Intermediary
FPIC	Free, Prior, and Informed Consent
GCCU	Geothermal Combined Cycle Unit
GTRM	Grievance Tracking and Redress Mechanism
H ₂ S	Hydrogen Sulphide
HIV	Human Immunodeficiency Virus
HR Dept.	Human Resources Department
HSE	Health, Safety and Environmental
ICP	Informed Consultation and Participation
IEC	Information Education Consultation
IEE	Initial Environmental Examination
IFC	International Finance Corporation
IGCCU	Integrated Geothermal Combined Cycle Unit
ILO	International Labour Organisation

IPPs	Independent Power Producers
IPs	Indigenous Peoples
JOC	Joint Operation Contract
KPIs	Key Performance Indicators
LOI	Letter of Intent
MOE	Ministry Of Environment
MSDS	Material Safety Data Sheet
MW	Mega Watt
NIL	Namora I Langit
NGOs	Non-Governmental Organisation
Nm ³	Nano Meter Cubed
NO _x	Nitrogen Oxides
OEC	Ormat Energy Converter
OEM	Original Equipment Manufacturers
OHS	Occupational Health and Safety
ORC	Organic Rankine Cycle
Pb	Lead
PLTP	Pembangkit Listrik Tenaga Panas (also known as Geothermal Energy Power Plant in English)
PLN	PT. Perusahaan Listrik Negara
ppm	part per million
PS	Performance Standards
RKL	Rencana Pengelolaan Lingkungan
RPL	Rencana Pemantauan Lingkungan
SIL	Silangkitang
SOL	Sarulla Operations Limited
SO _x	Sulphur Oxides
SPS	Safeguard Policy Statement
SR	Safeguard Requirements
STIs	Sexually Transmitted Infections
UKL	Upaya Pengelolaan Lingkungan
UNSG	Unocal North Sumatera Geothermal
UPL	Upaya Pemantauan Lingkungan
USEPA	United States Environmental Protection Agency
WHO	World Health Organisation

EXECUTIVE SUMMARY

ES1 INTRODUCTION

Sarulla Operations Limited (SOL) is the operation company established by the Consortium of Itochu Corporation, Kyushu Electric Power Co., Inc., Ormat International, Inc. and PT. Medco Energi International Tbk. SOL plans to develop the geothermal field and power plant combined capacity of 330 MW in Sarulla, in Pahae Jae and Pahae Julu Districts, North Tapanuli Regency, North Sumatera Province (Figure ES-1). Details of the Project are provided in Table ES-1.

Table ES-1 Summary of the Project for Development of the Geothermal Field and Construction of PLTP Sarulla

<i>Item</i>	<i>Contents</i>	
Project Name	Sarulla Geothermal Power Project	
Location	North Sumatra, Indonesia	
Capacity	320.8 MW, net (1 Unit of 105.4 MW net at Silangkitang ("SIL") and 2 Units of 107.7MW net at Namora-I-Langit ("NIL-1" and "NIL-2"))	
Sponsors	PT Medco Power Indonesia ("Medco") Itochu Corporation ("Itochu") Kyushu Electric Power Co., Inc. ("Kyuden") Ormat International, Inc. ("Ormat")	:37.25% :25.00% :25.00% :12.75%
Project Co.	Sarulla Operations Ltd. ("SOL")	
Commercial Operation Date	SIL: 29 months after financial close NIL-1: 40 months after financial close NIL-2: 46 months after financial close	

In relation to the Regency Spatial Plan, the Government of North Tapanuli Regency issued North Tapanuli Regency Regulation No. 19 of 1994 regarding North Tapanuli Regency spatial planning, which designated the sub districts of Pahae Jae (Silangkitang area or SIL) and Pahae Julu (Namora I Langit or NIL) as areas of geothermal natural resources.

Figure ES-1 Location of the Project for Development of Geothermal Field and Construction of PLTP Sarulla



ES1.1 PROJECT OBJECTIVES AND BENEFITS

The proposed Project has the following objectives:

- To overcome electricity shortage in Indonesia, especially in North Sumatera;
- To support the Government of Indonesia policy in energy diversification and fossil fuel consumption reduction; and
- To optimize the use of geothermal energy that has a high economic and environmental potential.

The Government of Indonesia will benefit from this proposed Project through an increase in electricity supply of 330 MW from geothermal energy which is environmentally friendly compared to traditional sources of electricity generation and is locally available in an area with an increasing energy demand. This project can help to reduce fossil fuel dependency in producing electricity by utilizing the renewable energy of geothermal.

The benefit will also reach local governments and the community in the North Sumatera Region as the direct beneficiary of the power generated from this project. It will help to improve the local economy by providing business and employment opportunities, particularly at the project location. This project will provide economic, social and technological benefits at national and regional levels.

ES1.2 PURPOSE OF THIS RESETTLEMENT PLAN

SOL, as part of this development plan, is seeking a financial investment from the Japan Bank for International Cooperation (JBIC), Asian Development Bank (ADB) and a group of Equator Principles Financing Institutions (EPFIs). Project proponents seeking financing from JBIC, ADB and EPFIs are required to comply with the applicable bank's environmental, social and health policies, developed for managing the environmental and social risks associated with project finance.

ERM was commissioned to prepare this Resettlement Plan (RP) for remaining lands to be acquired by the Project. The land acquisition process for the transmission line between SIL and NIL will be conducted through negotiated settlement where direct negotiations and agreements between land owners and SOL, facilitated by the government of North Tapanuli Regency. Where landowners refuse to sell their land, the project will seek to re-route. The transmission line alignment has not been finalised and SOL has not obtained a location permit from the relevant government authorities. . In addition SOL will acquire land in the NIL area for the Laydown, Road 5, WJP 1N, NIL 1N and 4A Expansion, WJR 2N and Access Road. It will therefore be necessary for SOL to update this RP following confirmation of these Project components.

Specifically, this Plan has been developed in order to meet the requirements set out by the ADB (namely the ADB's Safeguard Policy Statement and the Safeguard Requirement 2 (Involuntary Resettlement Safeguards)), as well as JBIC Social Requirements and the IFC's Performance Standard 5 (Land Acquisition and Involuntary Resettlement).

This report forms Volume V for the proposed development of the Sarulla Geothermal Field and Power Plant of 330 MW Capacity, North Tapanuli Regency, North Sumatera Province. All Volumes are as follows:

- Volume I: Environmental Compliance Audit Report and Corrective Action Plan;
- Volume II: Environmental and Social Impact Assessment (ESIA) Addendum;
- Volume III: Indigenous Peoples Plan (IPP);
- Volume IV: Social Safeguards Compliance Audit Report and Corrective Action Plan; and
- Volume V: Resettlement Plan (this plan).

ES1.3 REPORT CONTENTS

This RP presents estimates of affected land and assets based on preliminary alignment and therefore may change once location permit has been obtained and detailed design finalised. Preliminary socio-economic details on the Project Affected Peoples (PAPs) are presented based on a sample survey. The RP also presents the Project's entitlements matrix, income restoration activities, along with SOL's implementation budget, schedule and monitoring and reporting requirements. The RP will be updated based on final design, 100% asset inventory and census and key information disclosed to affected people during negotiation and prior to actual land take. Entitlement matrix may be enhanced but not downgraded.

ES2 SCOPE OF LAND ACQUISITION AND RESETTLEMENT IMPACTS

The transmission line from NIL to SIL has estimated length of 14 km while the transmission line from SIL to the power station has an estimated length of 12km. The transmission line from the power station to the tentative location of the PLN substation is about 2km. A typical 150kV transmission line has a corridor of impact of 20 meters (10 meters on each side of the transmission line) hence approximately 30 hectares of land will be within the corridor of impact (COI) of the transmission line. Land within the COI will not be acquired but some land use may be restricted hence an easement fee will be paid.

From NIL to SIL, 47 towers will be built from SIL to the PLN substation will be built with an estimated distance of approximately 300 meters between each of the towers. It is estimated that each transmission tower will require 900 m², and therefore the total land required for the towers is 4 ha.

Land required for the Project will be procured through negotiated settlement. It will be undertaken in stages as the construction of the geothermal field progresses. SOL has identified 57 land owners that will be affected by the future land acquisition process. The transmission towers involves 29 landowners, the laydown and access road involve 25 land owners and WJP 1N involves 3 landowners. Remaining land for acquisition for Road 4 Expansion, NIL 1N and 4A Expansion and WJR 2N and the access road has not been identified or surveyed yet. Before the remaining potential land owners can be identified and surveyed SOL will be required to obtain the Location Permit (Izin Lokasi) for the transmission line from the GoI. In addition, PLN will be required to decide where the sub-station will be located and obtain the Location Permit (Izin Lokasi) for the substation.

ERM conducted an initial survey of 12 landowners in seven villages (10% of potential landowners affected by the Project 57 landowners). The majority of land owners surveyed will have their land acquired for the tower footprint (30 m x 30 m). The sampling method to conduct the survey was a purposive sampling method; respondents were selected from each of the Project Affected Villages.

The transmission line will pass through seven villages in Pahae Jae and Pahae Julu Sub-district. In SIL: Silangkitang and Sigurung-gurung villages and at NIL Sitolu Ama, Hutabarat, Lumban Garaga, Sibaganding, Lumban Jaean, Lubung Pining and Simanampang villages.

ES3 **CONSULTATION AND GRIEVANCES**

Although consultation in relation to the Project and its impacts has been undertaken in the majority of the above villages since 2008, land acquisition socialisation activities associated with lands still to be acquired have not been conducted. SOL plan to commence these activities in mid-October 2013 after obtaining the location permit. However, the rates for land purchase are widely known in the affected villages as this has been discussed during community meetings.

SOL has established a grievance mechanism that is being managed by the external relations team. The grievance mechanism has been socialised with the majority of the PAPs.

ES4 **COMPENSATION AND ENTITLEMENTS**

The valuation methodology for the land compensation was based on the sub-district office reference for PLN (IDR 50,000 per m²) in 2010 and also current

land market prices (with no crops or plants) in the Pahae Julu (IDR 35,000 per m²). The compensation for land (IDR 65,000 per m²) was not based on its productivity or type of land. SOL is offering IDR 125,000 per m² for land and paddy (immature) which is considered above market replacement value. The valuation for plants was based on the Agriculture Agency in the North Tapanuli Regency rates who base price on the age of plants reflecting its type/category (seeds, unproductive and productive) and current/actual condition/type of land. Acquisition of structures will be based on Indonesian Regulations.

The following land owners are eligible for entitlements:

- Land owners who have lost access to land, plants and structures or any built assets as a result of project land acquisitions, whether or not they have legal title to the land including those with heritage land claims to the affected land;
- Land owners and owners of structures and trees whose land use or assets will be affected as a result of restricted use which will be imposed within the corridor of impact of the transmission line;
- Land owners who have lost housing as a result of project land acquisition, including those with heritage land claims to the affected land;
- Land owners whose incomes have been significantly affected by loss of access to land as a result of project land acquisition, whether or not they have legal title to the land, including with heritage land claims to the affected land; and
- land owners who have special social categories which render them more vulnerable to social and economic displacement and also who has lost of access to land as a result of project LAQ.

Entitlements will include:

- Compensation at replacement cost for land and compensation based on agriculture agency rates for crops/plants which are considered above market prices;
- Moving assistance;
- Priority for vocational training and Project employment;
- Additional assistance to households according to vulnerability levels;
- Agriculture and livelihood restoration (as stated in the IPP); and
- Compensation for the easement fee of 10% current land value of land for tower bases without deductions for taxes and administration cost.

The SOL's external affairs team will be responsible for the delivery of entitlements and implementation of livelihood restoration program.

ES5 ***BUDGET AND MONITORING AND EVALUATION***

The Resettlement Plan budget is being developed by SOL and will be finalised after the 100% census and inventory is complete. A cut-off date will also be identified at this time. The budget will reflect the affected landowners needs and vulnerabilities.

SOL plan to undertake internal monitoring and external evaluations. The two processes will run simultaneously and will be used to ensure that the resettlement is meeting the objectives outlined in this Plan. The external evaluations will be undertaken by a third party to ensure that the Project is meeting ADB, JBIC and IFC standards for resettlement; restoring and where possible improving livelihoods of the PAPs.

1 INTRODUCTION

1.1 PROJECT PROPONENT

SOL or “Sarulla Operations Limited” is the operation company established by the Consortium of Itochu Corporation, Kyushu Electric Power Co., Inc., Ormat International, Inc. and PT. Medco Energi International Tbk. SOL plans to develop the geothermal field and the power plant in Sarulla, in Pahae Jae and Pahae Julu Districts, North Tapanuli Regency, North Sumatera Province. Project proponent contact details can be found below:

Company: SARULLA OPERATIONS Ltd. (SOL)

Address: The Energy Building 51st Floor
SCBD Lot 11A, Jl Jend Sudirman
Jakarta 12190
INDONESIA

Telephone: +62 (0)21-29951648

Facsimile : +62 (0)21- 29951649

In the development of the Sarulla geothermal field and power plant at 330 MW capacity, the Consortium and SOL signed a DOA with PT. PLN (Persero); a JOC with PERTAMINA Geothermal Energy; and an ESC 1 with PERTAMINA Geothermal Energy - and PT. PLN (Persero).

1.2 REPORT CONTEXT

The Indonesian electricity business is largely conducted by the State and carried out by The State own enterprise (PLN). Indonesia’s energy demand is increasing with a growth of electricity demand estimated at 7.1% annually (2006-2026) and there is currently a shortage of electricity supply in several provinces, particularly in Java and Sumatera (Djamin, 2008). Operative, private sector and local enterprises have an opportunity to participate in electricity business as Independent Power Producers (IPPs).

Indonesia is estimated to hold approximately 40% of the World’s estimated geothermal resource. These resources are concentrated within tectonic areas in Sumatera, Java and Sulawesi, in the same areas where electricity demand is under met. With traditional fossil fuels widely developed, the Indonesia Government has placed a priority on alternative energy development including renewable energy to enhance energy security.

SOL is proposing the Sarulla Geothermal Field and Power Plant Development Project to further develop the geothermal potential in Sumatera, commenced in 1993 by Unocal North Sumatera Geothermal (UNSG). As part of this development plan, SOL is seeking a financial investment from the Asian Development Bank (ADB) and a group of Equator Principles Financing Institutions (EPFIs). Project proponents seeking financing from the ADB and EPFIs are required to comply with the applicable bank's environmental, social and health policies, developed for managing the environmental and social risks associated with project finance.

The ADB and EPFIs recognise the specific issues associated with private sector projects and manage these through the ADB Safeguard Policies and Equator Principles.

ERM was commissioned to prepare this Resettlement Plan for remaining lands to be acquired by the Project. This Plan has been developed in order to meet the requirements set out by the ADB (namely the ADB's Safeguard Policy Statement and the Safeguard Requirement 2 (Involuntary Resettlement Safeguards)), as well as JBIC Social Requirements and the IFC's Performance Standard 5 (Land Acquisition and Involuntary Resettlement).

This report forms Volume V for the proposed development of the Sarulla Geothermal Field and Power Plant of 330 MW Capacity, North Tapanuli Regency, North Sumatera Province. All Volumes are as follows:

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- Volume V: Resettlement Plan (this report).

1.3 STRUCTURE OF THIS RESETTLEMENT PLAN

This report is structured as follows:

Chapter 1: Introduction;

Chapter 2: Project Description;

Chapter 3: Scope of the Land Acquisition and Resettlement

Chapter 4: Socio-economic Information and Profile;

Chapter 5: Information, Disclosure, Consultation and Participation;

Chapter 6: Grievance Redress Mechanism;

Chapter 7: Legal Framework;

Chapter 8: Entitlements, Assistance and Benefits;

Chapter 9: Income Restoration and Rehabilitation;

Chapter 10: Resettlement Budget and Financing Plan;

Chapter 11: Institutional Arrangements;

Chapter 12: Implementation Schedule; and

Chapter 12: Monitoring and Reporting.

2 **PROJECT DESCRIPTION**

2.1 **DEVELOPMENT HISTORY**

The Project was initiated by UNOCAL North Sumatera Geothermal (UNSG), after the Energy Sales Contract (ESC) and Joint Operation Contract (JOC) were signed in 1993. Extensive exploration activities were then conducted including geo-scientific geology, geochemistry and geophysics investigations and the development of certain infrastructure such as well pads and access roads. This was followed by drilling activities between 1994 and 1998.

Nine exploratory wells (5 in SIL and 4 in NIL) were drilled in the contract area, followed by well completion and production testing to prove the quality and quantity of the resource.

After receiving the right to develop the Project, the Consortium has re-evaluated the Sarulla exploration data in order to undertake the next strategy for the field development stage of the Sarulla Contract Area.

The new development plan, including future drilling by utilizing reservoir forecast simulation, was established in 2011.

2.2 **SOL PROJECT LOCATION**

The proposed activity is located \pm 40 km south of Tarutung at the side of the Trans Sumatera Highway (Tarutung - Sipirok). Administratively, the Project is located in Pahae Jae and Pahae Julu Districts, North Tapanuli Regency, North Sumatera Province.

In relation to Regency Spatial Plan, the Government of North Tapanuli Regency issued North Tapanuli Regency Regulation No. 19 of 1994 regarding spatial planning, which designated the sub districts of Pahae Jae (Silangkitang area or SIL) and Pahae Julu (Namora I Langit) as areas of geothermal natural resources.

The Silangkitang field (SIL) has three (3) existing well pads developed by the former project proponent, UNSG in 1994. The pads are SIL 1, SIL 2 and SIL 3 and located around the periphery of these coordinates:

- SIL 1 - N201,374 and 510,500;
- SIL2 - N202,126 and E508,614; SIL 3 - N199,925 and E510,910.

SIL is located in Pahae Jae District, North Tapanuli Regency. The pad locations can also be described as follows:

- SIL 1 - located in Silangkitang Village, about 50 meters from Sumatera Highways (Tarutung - Sipirok);
- SIL 2 - located at the north-west of SIL 1, on the side of Aek Batang Toru which is part of Sigurung-gurung Village;
- SIL 3 - located at the south of SIL 1, in Pardomuan Nainggolan Village.

SIL 1 has three (3) existing wells, SIL 1-1, 1-2 and 1-3 drilled in 1994 through 1997 at the depth of around 2,000m. SIL 1-2 and 1-3 are planned to be used as permanent production wells for SIL PLTP. In 2008, these two wells underwent work-over to remove existing well plugs and in case of SIL1-3 repair a portion of the casing at 13-3/8" layer to prepare them for production testing and usage as permanent production wells. SIL 1-1 is not intended to be utilized as permanent well in the operation of SIL PLTP. It is intended to be used as a temporary reinjection well during the production flow testing of SIL 1-2 and SIL 1-3 (supplemental to SIL 2-1) and afterwards, the wells will continue to be used as monitoring point of reservoir. Three (3) additional production wells (allowing 1 as allocation for failure) are planned to be drilled in this SIL 1 pad to obtain the geothermal fluid quantity needed for SIL PLTP operations. Two (2) reinjection wells are also planned to be drilled in this SIL-1 pad.

SIL 2 pad has one (1) existing well, SIL 2-1. SIL 2-1 drilled in 1995 at the depth around 2,100m is not intended to be used as permanent part of the wells during operation of SIL PLTP. This is to be used as temporary reinjection (as the primary with SIL 1-1 and 3-1 as supplemental) well during the production flow testing of SIL 1-2 and 1-3 and afterwards, the wells will continue to be used as monitoring point of reservoir. Three (3) new reinjection wells are planned to be drilled in this SIL-2 pad.

SIL 3 pad has one (1) existing well, SIL 3-1 drilled in 1995 at the depth around 2,100m. SIL 3-1 is not intended to be used as permanent part of the wells during operation of SIL PLTP. This is to be used as temporary reinjection (as the supplemental to SIL 2-1) well during the production flow testing of SIL 1-2 and 1-3 and afterwards, the wells will continue to be used as monitoring point of reservoir.

Namora I Langit (NIL) field has three (3) existing well pads developed in 1997. The pads are NIL 1, NIL 2 and NIL 3 located around the periphery of these coordinates:

- NIL 1 - N207,509 and E501,941;
- NIL 2 - N208,245 and E501,131;
- NIL 3 - N208,745 and E503,328.

The pad locations can also be described as follows:

- NIL 1 - located in Sibaganding, Lumban Jaean, and Simataniari villages (there is one investigation well);
- NIL 2 - located in Sibaganding, Lumban Jaean, and Simataniari villages (there are two investigation wells); and
- NIL 3 - located in Sibaganding, Lumban Jaean, and Simataniari villages (there is one investigation well).

In order to mitigate significant static pressure differences between power plant and well pads, the most recent updates of the development strategy for the NIL geothermal field was developed, none of the 3 existing well pads will be utilized as locations for drilling the permanent (or initial/start-up) production wells, and consequently, none of the 4 investigation wells drilled in 1997 through 1998 at the depth of around 1,700m that exist therein. The existing well in NIL-3 pad will be used as temporary reinjection well during the early stage of drilling the new production wells in NIL for well testing purposes until such time that permanent reinjection wells are drilled, afterwards, the well will continue to be used as monitoring point of reservoir. The permanent wells will be drilled on new well pads.

Table II-1 Number of wells be drilled on new well pads

<i>No</i>	<i>Location</i>	<i>Number of wells to be drilled</i>
1	NIL-1n	7 production wells (1 allocation for failure)
2	NIL-2n	8 production well (1 allocation for failure)
3	WJP-1n	5 production wells
4	WJR-1n	3 reinjection wells
5	WJR-2	3 reinjection wells

Source: SOL Data, 2013

2.3 STAGES OF PROJECT ACTIVITY

The development of Sarulla geothermal field and 330 MW power plant includes the following activities:

- The development of Sarulla geothermal field i.e. Silangkitang (SIL) field and Namora I Langit (NIL) field;
- The construction and operation of 330 MW geothermal power plant, one unit at SIL and two units at NIL each with a nominal capacity of 110 MW;
- The construction of a combined length of approximately 14kms of 150 kV (high voltage) overhead transmission line from Silangkitang field (SIL 1) to PLN Substation and from Namora I Langit field (NIL 1) to PLN substation. The width of the T/L ROW will be based on PLN (9 m on each side). The minimum clearance to the ground is 12 m from the main road, 9 m from the normal ground, 5.5 m from any trees. Table II-2 shows the minimum distance from tower 150KV T/L to other areas based on Minster Regulation No.01. P.47.M.PE-1992. SOL does not intend to restrict access to or use of the RoW.

Table II-2 Minimum Distance from Tower 150KV T/L to Land Areas

No	Location	150KV T/L
1	Open space or open yard	7.5
2	Area with specific situation:	
	a. Building without fire proof	13.5
	b. Building with fire proof	4.5
	c. Road traffic	9,0
	d. Trees, forest, plantation	4,5
	e. Sport yard	13.5
	f. Other high voltage overhead lines, i.e. communication network, radio antenna, television antenna, cable car	4.0
	g. Rail train	9.0
	h. Iron bridge, other iron frame for retaining conductor, electricity train, etc.	4.0
	i. Highest level or point on the mast standing tide	4.0

Source: Minster Regulation No.01. P.47.M.PE- 1992

The transmission line will be connected to the PLN Substation; currently there are no other projects connecting to the substation which will be located on private land. At the moment, PLN has not acquired any land yet due as it is still waiting for the location permit (*Ijin Lokasi*).

Drilling activities for the new production and injection wells in SIL are to take place at the existing well pads (previously developed by UNSG). For NIL, all are planned to be on the new well pad locations. The NIL new well pads are located on farmland and mixed forest areas.

The power plant locations for both SIL and NIL will be at mixed plantation areas. SIL is situated approximately 500 meter from the nearest residential area whilst NIL is located at least 1km from a residential area.

The project schedule for the development of Sarulla 330 MW power plant at SIL and NIL is presented in Table II-3.

Table II-3 Project schedule for the development of Sarulla 330 MW power plant at Silangkitang (SIL) and Namora I Langit (NIL)

Activity	Time	Month						
		0	+10	+20	+30	+40	+50	>50
Preconstruction		█						
Construction								
SIL			█	█	█	█		
NIL 1			█	█	█	█		
NIL 2			█	█	█	█		
Operation								
SIL					█	█	█	█
NIL 1						█	█	█
NIL 2							█	█

2.4 PROJECT LAND REQUIREMENTS

Land required for the Project will be procured on a negotiated settlement basis. It will be undertaken in stages as the construction of the geothermal field progresses. The process will be conducted using direct negotiations and agreements between land owners and SOL. A total of 127 ha of land located in the districts of Pahae Jae and Pahae Julu, North Tapanuli Regency will be needed for the land use plan for the development at SIL and NIL is shown in Table II-4.

Table II-4 Land Use Plan and Area Required for SIL and NIL

<i>Project Component</i>	<i>Estimated Required Area (m²)</i>	<i>Acquired by UNOCA L</i>	<i>Acquired by SOL as of 30 September 2013</i>	<i>Remaining land to be acquired (and covered by this RP)</i>	<i>Current Land Use of Remaining Land to be Acquired</i>
SIL					
Brine Injection Line (SIL 1-SIL 2)	18,498	-	18,498	-	Mainly rice/paddy field
SIL 2 ke Batang Toru River	10,374	-	10,374	-	Wild plantation area, Rice field area
Disposal For Power Plant	71,348	59,008	12,340	-	Wild plantation area, Rice field area
Borrow Area	25,105	3,995	21,110	-	Wild plantation area (various trees such as rubber, incense (<i>Kemenyan</i>), cacao, coffee and bushes)
Well Pad SIL 1	71,348	59,008	12,340	-	Wild plantation area, Rice field area
Power Plant	196,946	131,339	64,360	1,247	Wild plantation area (various trees such as rubber, incense (<i>Kemenyan</i>), cacao, coffee and bushes)
SIL 2 Expansion & Access Road	53,110	23,110	-	30,000	Wild plantation area (various trees such as rubber, incense (<i>Kemenyan</i>), cacao, coffee and bushes)
Laydown 1	28,000	-	-	28,000	Wild plantation area (various trees such as rubber, incense (<i>Kemenyan</i>), cacao, coffee and bushes)
Laydown 2	40,454	20,454	-	20,000	Wild plantation area (various trees such as rubber, incense (<i>Kemenyan</i>), cacao, coffee and bushes)

<i>Project Component</i>	<i>Estimated Required Area (m²)</i>	<i>Acquired by UNOCA L</i>	<i>Acquired by SOL as of 30 September 2013</i>	<i>Remaining land to be acquired (and covered by this RP)</i>	<i>Current Land Use of Remaining Land to be Acquired</i>
NIL					
Main Access Road (Road 1 & 1A)	131,711	95,476	33,447	2,788	Mainly rice/paddy field
Well Pad NIL 2N & Access Road	57,231	-	57,231	-	Wild plantation area, Rice field area
Disposal 1 & 2 & Access Road	176,050	-	176,050	-	Wild plantation area, Rice field area
Borrow Area	93,923	-	87,900	6,023	Wild plantation area (various trees such as rubber, incense (<i>Kemenyan</i>), cacao, coffee and bushes)
WJR 1n & Access Road	66,045	30,532	35,295	218	Wild plantation area, Rice field area
Power Plant & Access Road	228,113	-	228,113	-	Wild plantation area (various trees such as rubber, incense (<i>Kemenyan</i>), cacao, coffee and bushes)
Laydown	80,000	-	-	80,000	Wild plantation area (various trees such as rubber, incense (<i>Kemenyan</i>), cacao, coffee and bushes)
Road 5	120,000	-	-	120,000	Wild plantation area (various trees such as rubber, incense (<i>Kemenyan</i>), cacao, coffee and bushes)
WJP 1	80,000	-	-	80,000	Wild plantation area (various trees such as rubber, incense (<i>Kemenyan</i>), cacao, coffee and bushes)
NIL1 Exp& Access Road	80,000	-	-	80,000	Wild plantation area (various trees such as rubber, incense (<i>Kemenyan</i>), cacao, coffee and bushes)
WJR 2N & Access Road	40,000	-	-	40,000	Wild plantation area (various trees such as rubber, incense (<i>Kemenyan</i>), cacao, coffee and bushes)

The land required for the power plant construction has already been taken into account in the land acquisition process for the development of geothermal field and construction of access roads. In the construction plan, one power plant unit will be built at SIL and two units at NIL. Each will have a capacity of 110 MW (a total of 330 MW). The amount of land required for the power plants is approximately 6.5 Ha for SIL and 22.6 Ha for NIL.

2.4.1 *Land Acquisition Process Considered for this Resettlement Plan*

This resettlement plan covers the impacts of acquisition land for transmission line tower footings, restricted use of land within the transmission line corridor of impact, acquisition of land in the NIL area for the Laydown, Road 5, WJP 1N, NIL 1N and 4A Expansion, WJR 2N and Access Road (Figure II-1).

Land required for the Project will be procured through negotiated settlement. The land acquisition process for the transmission line between SIL and NIL will be conducted using direct negotiations and agreements between land owners and SOL, facilitated by the government of North Tapanuli Regency. The land required to build the transmission towers has not yet been purchased. SOL plan to maximise where possible the use of government/forestry lands. Where land owners are unwilling to sell their lands SOL will seek to reroute. At the time of writing (October 2013) 30 out of the planned 47 tower areas have been acquired through the negotiated settlements with no refusals to sell.

The purchased land will be used as platforms for the transmission towers (not for transmission lines). Approximately 47 towers¹ will be built with an estimated distance of 300 meters between each of the towers. It is estimated that each transmission tower will require 900m², and therefore the total of land required for 47 towers is 4 ha. SOL have estimated 900m² the following factors:

- Larger foundation sizes may be required where the soil conditions are not stable; and
- Cut and fill area allowances are needed for the foundations located in sloping area.

Furthermore the size factors in the fact that some landowners may insist on SOL purchasing their remaining unviable land.

¹ SOL conducted an initial survey in April, 2013, at the time of this survey the number of towers was estimated at 36 however the final number of towers will be fixed after the land acquisition process. The towers will be located almost same nature of land hence the impact of change from 47 to 36 towers is not considered by SOL as significant.

Figure II-1 Location of the Transmission Line and High Voltage Transmission Tower



3 SCOPE OF LAND ACQUISITION AND RESETTLEMENT

3.1 AFFECTED PERSONS

SOL has initially identified 57 land owners that will be affected by the acquisition of land for the transmission line tower footings, restricted use of land within the transmission line corridor of impact, acquisition of land in the NIL area for the Laydown, Road 5, WJP 1N, NIL 1N and 4A Expansion, WJR 2N and Access Road. Table III-1 shows the number of potential land owners identified.

Table III-1 Total Number of Potential Land Owners

No	Area name	Date/Month Action	Project Affected Households	Current Status
1	Transmission Line ROW	August 2013	30	Identified and completed the initial survey for only 30 landowners for tower footprint. Impacts of restricted use of land and other assets inside the transmission line ROW will be identified and surveyed after location permit has been obtained.
2	Laydown	August 2013	8	Identified and done the initial survey
3	Road 5	August 2013	16	Identified and done the initial survey
4	WJP 1	August 2013	3	Identified and done the initial survey
5	Road 4 Expansion	September 2013	NA	To be identified and surveyed
6	NIL 1N and 4A Expansion	September 2013	NA	To be identified and surveyed
7	WJR 2N and Access Road	September 2013	NA	To be identified and surveyed
Total			57	

Source: SOL Primary Data, 2013

3.1.1 Transmission Line Affected Landowners

The transmission line from NIL to SIL has estimated length of 14 km while the transmission line from SIL to the power station has an estimated length of 12km. The transmission line from the power station to the tentative location of the PLN substation is about 2km. A typical 150kV transmission line has a corridor of impact of 20 meters (10 meters on each side of the transmission line) hence approximately 30 hectares of land will be within the corridor of impact (COI) of the transmission line. Conductors will be strung in between towers with a minimum clearance to the ground of 9 meters above normal ground, open and agricultural land. Indonesian regulations impose height restrictions for structures and trees under the lines. Impacts of restricted use of land and other assets inside the transmission line COI will be identified and surveyed prior to location permit has been obtained.

A total of 47 towers will be built with an estimated distance of approximately 300 meters between each of the towers. It is estimated that each transmission tower will require 900 m², and therefore the total land required is 4 ha.

Land will be acquired for the 14 km of 150kV transmission line from the NIL and SIL areas. The line routing was determined considering technical and economic factors; as well as environmental and social aspects including:

- Avoiding traversing or passing closely by urban areas, densely populated areas, settlement, schools, public buildings and market places;
- Avoiding traversing or passing closely by shrines, historical places, national parks and protected areas;
- Avoiding traversing in forest and water catchment zones;
- Keep electrical field, magnetic field, audible noise and TV interference as far as possible below national/international accepted levels;
- Keep impacts on flora, fauna, nesting places, animal trails, migration zones and sensitive ecological areas to a minimum; and
- Apply selected bush clearing, minimise access tracks.

The identified land owners for the transmission line are listed in Table III-2. To date 36 towers requiring a footprint of 30 m x 30 m to support the transmission line ROW have been identified (out of a possible 47).

Table III-2 Summary of Land Acquisition and Resettlement Impacts of T/L

No	Type of Land Acquisition	Number of Towers	Land Affected		Structures affected	
			Number of land owners	Area (sq.m.)	Number of structure owners	Area (sq.m.)
1	Permanent Land Acquisition through Negotiated Settlement	36	50	32,400	-	-
2	Permanent Land Acquisition through Lease of Government Land	-	-	-	-	-
	Subtotal	36	50	32,400	-	-
3	Temporary Land Acquisition/Lease - (in case required for track access to towers)	-	7	6,000	-	-
4	Land Use/Building Restrictions	TBD	TBD	TBD	TBD	TBD
	Total	-	57	38,400	-	-

The current land use to be acquired for the identified 36 transmission line towers is outlined in the Table III-3.

Table III-3 Existing Use of the land to be affected by Towers

<i>No</i>	<i>Category</i>	<i>Estimated m²</i>
1	Rubber Plantation	10,000
2	Cacao Plantation	5,000
3	Pinang (<i>Areca Catechu</i>) Plantation	2,500
4	Rice Paddy Plantation	10,000
5	Mix Garden	900
6	Mix Fruit Trees	3,000
7	Empty land	1,000
	Total	33,400

Source: ERM Data, 2013

The transmission line RoW is predominantly plantation and rice paddy field. The list of potential land owners is presented in Table III-4.

Table III-4 Total Number of Potential Land Owners for Transmission Towers

No.	Name of Land Owners	Tower #	Domicile of Landowners
NIL Power Plant to Sub Station			
1	Intan Sitompul	Tower 1	Sibaganding
2	Robert Sitompul	Tower 2	Lumban Jaean
3	Jupri Berdifa Sitompul	Tower 3	Lumban Jaean
4	Agus Sitompul/Pamanjar Sitompul	Tower 4	Lumban Jaean
5	Heberlin Matondang	Tower 5	Sibaganding
6	Waris Sitompul/Dianles Sitompul	Tower 6	Lumban Jaean
7	Janiner Sitompul	Tower 7	Lumban Jaean
8	Himler Pasaribu	Tower 8	Sibaganding
9	Tumpak Hutabarat/Binslamat Hutabarat	Tower 9	Hutabarat
10	Ricard O Hutabarat	Tower 10	Hutabarat
11	Togi M. Hutabarat	Tower 11	Hutabarat
12	Lamhot Simanjuntak	Tower 12	Hutabarat
13	Panusunan Lumban Tobing	Tower 13	Simanampang
14	Wilfried Panggabean	Tower 14	Simanampang
15	Bilmer Pakpahan	Tower 15	Simanampang
16	Lawardes Panggabean	Tower 16	Simanampang
17	Martanda L. Tobing	Tower 17	Simanampang/Medan
18	Briston L. Tobing	Tower 18	Simanampang
19	Sanherip Panggabean	Tower 19	Simanampang
		Tower 20	Simanampang
20	Lando Hutabarat	Tower 21	Sitolu Ama
21	Royen Hutabarat	Tower 22	Sitolu Ama
22	Pantas Hutabarat	Tower 23	Sitolu Ama
23	Toga Panggabean	Tower 24	Sitolu Ama
24	Latur Hutabarat	Tower 25	Sitolu Ama
25	Birnad Sitompul	Tower 26	Sitolu Ama
26	TBD	Tower 27	Sitolu Ama
SIL Power Plant to Sub Station			
1	Opulasria	Tower 28	Silangkitang
2	Basri Sihombing/Rosma Sihombing	Tower 29	Silangkitang
		Tower 30	Silangkitang

Source: SOL Data, 2013

3.1.2 Laydown and Access Road Affected Landowners

This includes the Project Laydown, Road 5, WJP 1N, NIL 1N and 4A Expansion, WJR 2N and Access Road. In total 46 Ha of land will be acquired for the use of supporting project facilities for Power Plant, i.e. Laydown areas for storage the heavy equipment and materials that will be needed for construction preparation; Road 5 and Access Road to access the project location and WJP 1N and NIL 1N (the production well).

There are 17 potential land owners associated with the access road (Table III-5). The majority of the land owners reside in Sibaganding and Lumban Jaean Village in Pahae Julu Sub-District.

Table III-5 Total Number of Potential Land Owners for Access Road

No.	Name of Land Owners	Size of affected land (m ²)	Land Use Classification	Domicile of Land Owners
1	Jocen Sitompul	2,991		Lumban Jaean
2	Mama Adi Hutabarat	8,692		Lumban Jaean
3	Raden /Gunser Sitompul	3,466		Lumban Jaean
4	Gilmor Sitompul	2,843		Lumban Jaean
5	Daulat Sitompul	3,263		Lumban Jaean
6	Toto Hutagalung	4,583		Lumban Jaean
7	Gimbot Sitompul	8,032		Sibaganding
8	Bedaren Sitompul	2,431		Sibaganding
9	Token Sitompul	6,432		Sibaganding
10	Mensia Pasaribu	653		Sibaganding
11	Remon Sitompul	6,217		Sibaganding
12	Doanser Sitompul	9,366		Sibaganding
13	Tumpal Sitompul	10,645		Sibaganding
14	Rasio Sitompul	15,507		Lumban Jaean
15	Desmi Hutapea	10,396		Sibaganding
16	Lonce Pasaribu	12,795		Sibaganding
17	Bonardo Sitompul	678		Sibaganding
	Total	108,990		

Source: SOL Data, 2013

There are eight potential land owners whose land will be acquired for the Laydown area (Table III-6). The majority reside in Sibaganding and Lumban Jaean in Pahae Julu Sub-District.

Table III-6 Total Number of Potential Land Owners for Laydown

No.	Name of Land Owners	Size of affected land (m ²)	Land Use Classification	Domicile of Land Owners
1	Janmaurid Sitompul	3,179		Lumban Jaean
2	Volwin Sitompul	1,736		Lumban Jaean
3	BennyPanggabean	8,459		Lumban Jaean
4	Juwinter Sitompul	11,247		Lumban Jaean
5	Ujung Sitompul	11,411		Lumban Jaean
6	Tomu Sitompul	9,079		Lumban Jaean
7	Parhoda Sitompul	4,341		Sibaganding
8	Marhaludin Lumbantobing	1,715		Lumban Jaean
	Total	51,167		

Source: SOL Data, 2013

There are three potential land owners for WJP 1N (Table III-7); the majority of who reside in Sibaganding and Lumban Jaean villages in Pahae Julu Sub-District.

Table III-7 Total Number of Potential Land Owners for WJP 1N

No.	Name of Land Owners	Size of affected land (m ²)	Land Use Classification	Domicile
1	Arbijon Sitompul	2,350		Sibaganding
2	Hetmar Sitompul	45,862		Sibaganding
3	Lonce Pasaribu	10,942		Sibaganding
	Total	59,154		

Source: SOL Data, 2013

Remaining land for acquisition for Road 4 Expansion, NIL 1N and 4A Expansion and WJR 2N and the access road has not been identified or surveyed yet.

The land to be acquired is likely to pass through seven villages in Pahae Jae and Pahae Julu Sub Districts. The initial survey and identification for the transmission line RoW has been conducted for only 30 land owners. The remaining potential land owners will be identified and surveyed prior SOL to obtain the Location Permit (*Izin Lokasi*) for the transmission line from the Bupati North Tapanuli, however SOL is waiting PLN to decide where the sub-station will be located and obtain the Location Permit (*Izin Lokasi*) for the substation.

The identification of land owners in T/L ROW alignment including those whose use may be restricted within the COI is expected to be finalised by mid - end of March 2014 for the T/L and remaining areas. Based on the census and final asset inventory, the following categories of affected people will be identified: (i) significantly affected people or those losing 10% or more of their productive assets (income generating) or income-generating assets and/or requiring physical displacement of housing; (ii) vulnerable households such as the elderly, female-headed households. From among those significantly affected, SOL will identify those losing more than 50% of their total landholding or those whose remaining land will be unviable (i.e. equal to or less than 400 sq.m.).

4 SOCIO-ECONOMIC INFORMATION AND PROFILE

4.1 METHODOLOGY APPLIED

ERM conducted an initial survey of 12 landowners in seven villages (10% of potential landowners affected by the Project 57 landowners). The majority of land owners surveyed will have their land acquired for the tower footprint (30 m x 30 m). During the site visit, it was identified that most of the land affected is rice-paddy and plantation area. Table IV-1 shows the list of land owners who were interviewed.

The sampling method to conduct the survey was a purposive sampling method; respondents were selected who were representative from one of each of the Project Affected Villages.

SOL will be required to update this RP based on a 100% census and asset inventory after finalisation of the detailed engineering design in December 2013.

Table IV-1 List of Land Owners Interviewed

No.	Name of Land Owners	Gender	Area Name	Domicile	Land Holding (m ²)	Land Affected (m ²)	Land Remaining (m ²)	Land Affected (%)
1	Anggiat Sihombing	M	Tower Footprint 30	Silangkitang	3,200	900	2,300	28.00
2	Rosma Sihombing	F	Tower Footprint 29	Silangkitang	1,200	900	300	75.00
3	Birnad Sitompul	M	Tower Footprint 26	Sitolu Ama	2,000	900	1,100	45.00
4	Lamhot Simanjuntak	M	Tower Footprint 12	Simanampang	5,000	900	4,100	18.00
5	Wilfried Panggabean	M	Tower Footprint 14	Simanampang	20,000	900	19,100	4.50
6	Togi Hutabarat	M	Tower Footprint 11	Hutabarat	5,500	900	4,600	16.36
7	Richard Hutabarat	M	Tower Footprint 10	Hutabarat	3,000	900	2,100	30.00
8	Jupri Berdiva Sitompul	M	Tower Footprint 3	Lumban Jaean	31,200	900	30,300	2.88
9	Dianles Sitompul	M	Tower Footprint 6	Lumban Jaean	1,300	900	400	69.23
10	Himler Pasaribu	M	Tower Footprint 8	Sibaganding	45,000	900	44,100	2.00
11	Doanser Sitompul	M	Access Road	Sibaganding	15,000	9,366	5,634	62.44
12	Volwin Sitompul	M	Laydown	Lumban Jaean	7,400	1,736	5,664	23.46

Source: SOL Data, 2013

4.2 SOCIO ECONOMIC PROFILE OF POPULATION ALONG T/L ROUTE

This section presents a summary of the socio-economic profile of the population along the tentative route of the transmission line ROW and proposed Project facilities. The focus of the socio-economic field study has been in the two sub-districts. The data is based on sub district in figures and interviews undertaken by ERM during August 2013.

The transmission line RoW will pass through seven villages in Pahae Jae and Pahae Julu Sub-district. The villages affected at SIL Area are Silangkitang and Sigurung-gurung villages and at NIL Sitolu Ama, Hutabarat, Lumban Garaga, Sibaganding, Lumban Jaean, Lubung Pining and Simanampang villages.

The majority of land owners interviewed were farmers, except for one land owner (Richard Hutabarat) who now lives in Medan. One land owner was female with four children and one plot land was rented by Netan Hutabarat (the Hutabarat Village Head). Netan cultivates rice paddy and cacao plants on the land to be acquired by the Project.

The potentially impacted villages have a very similar economic profile to those identified in NIL and SIL in the IPP. Details of the landowners surveyed are discussed below.

Figure IV-1 Anggiat Sihombing



Anggiat Sihombing has a total of 3,200 m² (0.32 ha) that consists of a fish pond, pig sty, duck pen, cacao and pinang trees. It was identified that 200 cacao trees and 20 pinang (*areca catechu*) trees will be acquired by Project. Potentially, the Project may also acquire the semi-permanent house.

Figure IV-2 Rosma Sihombing



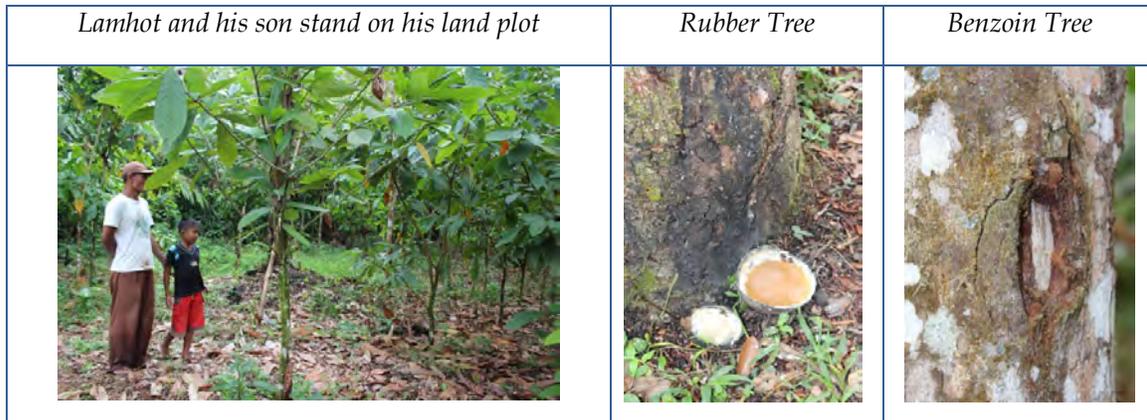
Rosma Sihombing has heritage land from her parents. She has three brothers who live outside of Silangkitang village. She has mandated to use the land and cultivate rice paddy on heritage land with total 1,200 m² (0.12 ha). She has four children.

Figure IV-3 Birnad Sitompul



Birnad Sitompul and his brother Anton Sitompul have 2,000 m² of land from their parents. However, they do not use the land. Their neighbour cultivates vegetables (chili and spinat tree) on their land.

Figure IV-4 Lamhot Simanjuntak



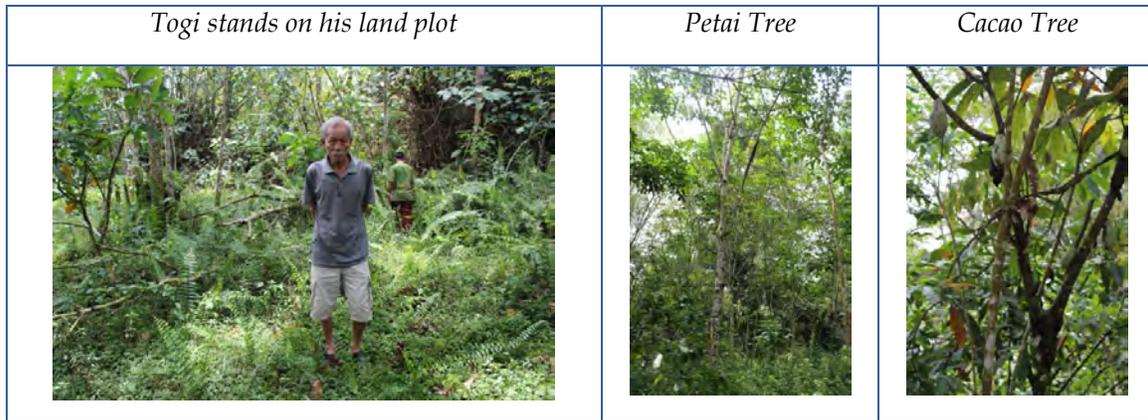
Lamhot Simanjuntak is 42 years old and farms rice paddy; he also has other land plots to plant perennials. He has 40 cacao trees, 20 benzoin trees, 40 rubber trees, 3 sugar palm trees that will be potentially acquired by Project.

Figure IV-5 Wilfried Simanjuntak



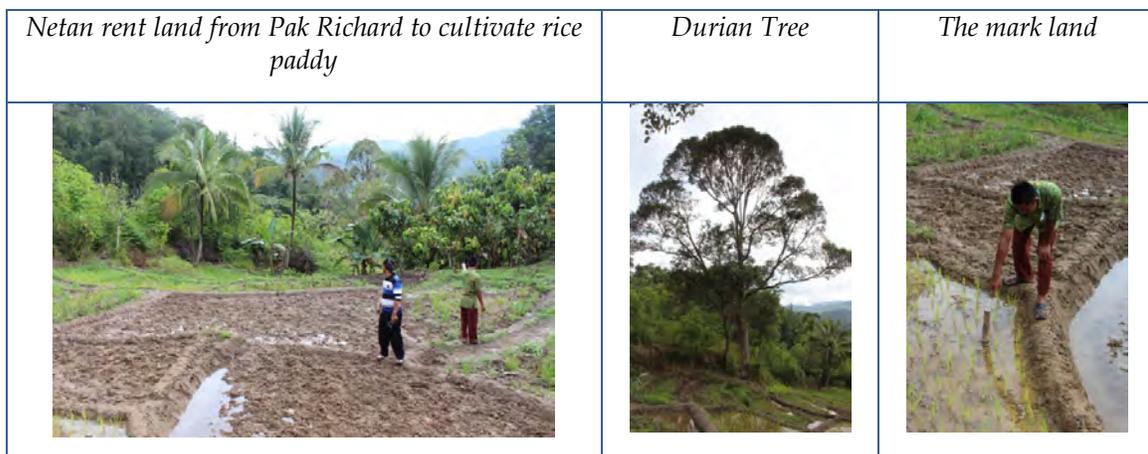
Wilfred is 49 years old. The land has 100 rubber trees, 20 cacao trees, one sugar palm tree, one mango tree, one durian tree, and other perennials.

Figure IV-6 Togi Hutabarat



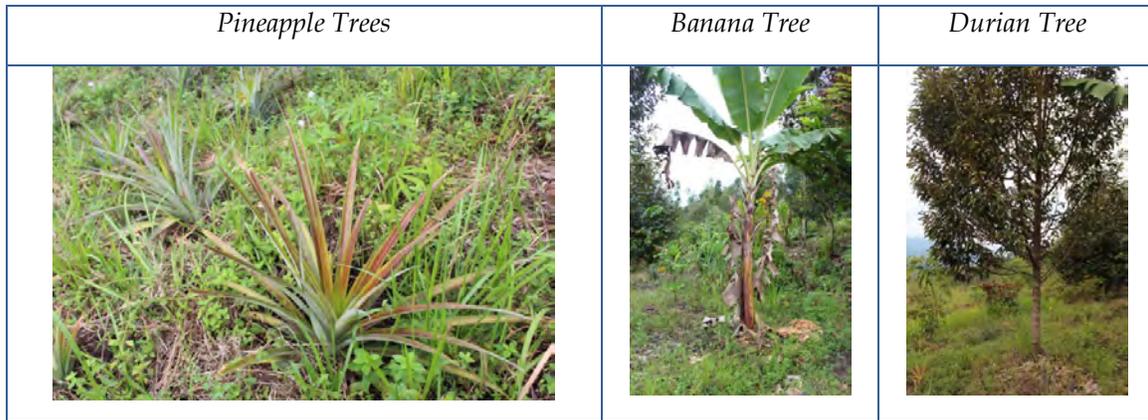
Togi Hutabarat is 71 years old and has five cacao trees, two benzoin trees on his land plot. He does not cultivate this land but hires labour to cultivate and take the crops from his land. He has 5,500 m² of land (0.55 ha).

Figure IV-7 Richard Hutabarat



Richard Hutabarat is living in Medan, so he rents his land to Netan and receives rent of around IDR 2,000,000 per year. Netan has cultivated rice paddy and one durian tree.

Figure IV-8 Jupri Berdiva Sitompul



Jupri Berdiva Sitompul is 53 years old. He has around 30,000 m² (3 Ha), after the surveyor identified and marked the land. It has twenty pineapple trees, banana, sugar cane and durian tree.

Figure IV-9 Dianles Sitompul



This land belongs to Waris Sitompul who has five children. One of his sons is Dianles Sitompul, 38 years old. He is now farming rice paddy on total Waris Sitompul land 1,300 m² (0.13 ha).

The main source of livelihood of the people in the project area is predominantly agriculture. The contribution of agriculture sector to Gross Regional Domestic Product (GRDP) in North Tapanuli Regency 2011 is still dominant with 53.19%. The agriculture sector consists of food crops, plantation, animal husbandry, forestry and fishery.

The most important source of income for the Project Affected Households is agriculture; 83.33% of Project Affected Households are farmers. (One is a village head and one a police officer).

The preliminary socio economic survey identified Project Affected Households have an economic income between IDR 320,000 – 2,000,000 (Table IV-2).

Table IV-2 Preliminary Survey of PAH’s Economic Income

No.	Income (IDR)	Number of PAHs	Percentage
1	< IDR 500,000	1	8.33
2	IDR 500,000-1,000,000	10	83.33
3	IDR 2,000,000-3,000,000	1	8.33
4	IDR 3,000,000-4,000,000	-	-
5	>IDR 4,000,000	-	-

Source: ERM Data, 2013

The majority of the population in Pahae Jae and Pahae Julu Sub-District rely on agriculture. They cultivate rice paddy and plantation, such as cacao, rubber, and benzoin. Other agricultural products contributing to the community’s livelihood include:

- Livestock, i.e. pig, buffalo, duck and chicken;
- Fishery of freshwater fish, i.e. gold fish, *mujair* (tilapia) fish, etc.; and
- Forestry crops including eucalyptus, pinewood and charcoal wood.

In the Pahae Jae and Pahae Julu Sub Districts males have the responsibility for agricultural activities from cultivating to irrigation, also looking after the crops and collecting the harvest. Generally women support the men in agriculture, during the cultivating time, during the harvest and the processing the family’s own product.

The purchasing of food and clothes is normally undertaken by women; men mainly make decisions around household devices, agricultural seeds or fertilizer and animals to be purchased. Men normally control the major household assets; hence they are the owner of the house, agricultural land, farming equipment and animals.

Figure IV-12 Farming Activities

<p><i>A lady takes care of her rice paddy crops</i></p>	<p><i>A man takes care of his rice paddy field</i></p>
	
<p><i>A man takes care of his pig</i></p>	<p><i>A lady takes care of her rice paddy field</i></p>
	

Figure IV-13 Types of Agricultural Livelihoods

<p><i>Animal Husbandry (Pigs)</i></p>	<p><i>Animal Husbandry (Ducks)</i></p>
	
<p><i>Agriculture (Rice paddy field)</i></p>	<p><i>Fishery (Gold and Mujair/Tilapia Fish)</i></p>
	

The community in Pahae Jae and Pahae Julu Sub District have access to education, health and other utilities. Currently there are 5 elementary schools, 1 junior high school, and 1 vocational high school located within the 4 villages in Pahae Jae; while 4 elementary schools and 1 junior high school are located within the 4 villages in Pahae Julu. In total, 14 elementary schools, 4 junior high schools, and 4 high schools are recorded in Pahae Jae; while 23 elementary school, 5 junior high schools, and 3 high schools are located in Pahae Julu. The majority of children in both sub-districts go to school with a total of 6,000 students registered from elementary school to high school.

Figure IV-14 Education Facilities



There are various health facilities available in Pahae Jae and Pahae Julu Sub District. In Pahae Jae and Pahae Jul Sub District public health services, maternity clinic and rural based integrated health service are available. Based on interviews with land owners, they have good access to go to paramedic staff when they are sick. There are no endemic disease occurs in the area.

The other utilities related to clean water sources is also available. Communities in both sub-districts use mountain spring water located in the forest surrounding their village.

A typical house is generally made from wood and wall. The majority of land owners have semi-permanent houses but only 50% have sanitary facility at home. Some of them use public toilet/bath room (MCK) for bathing and washing. Sometimes, they use the stream or river, i.e. Hapesong, Holang, etc.

Figure IV-15 Community Infrastructure



4.3.1 General Land Acquisition Impacts

The land acquisition process will be based on a negotiated settlement basis to ensure no pressure is placed on the land owners to sell. This will be undertaken in a culturally sensitive consultation methods i.e. using the Batak language and involving Batak as facilitators.

The land price being offered to land owners is IDR 65,000 per m²; this is considered above the market replacement value as is the price offered for crops and plants. It will be important for SOL to ensure socialisation and negotiation activities are undertaken and are fully participative and inclusive of those identified as vulnerable. Given the limited economic opportunities in the area, the limited skill sets and low income earned, the loss of land and the loss of income for those who do not purchase replacement land or crops may result in significant impacts to the land owners (such as nutrition impacts, adverse health etc.) if the process is not appropriately managed. This is particularly relevant for those who may lose all/most of their land.

It will be important for SOL to undertake a 100% census and inventory to ensure incomes, expenditure and livelihoods etc. are fully understood in order to develop suitable mitigation measures (as part of the ISP to minimise negative and enhance positive impacts).

4.3.2 Gender Issues and Vulnerability

Based on the statistics of the sub-district in figure, the population in Pahae Jae in 2012 was recorded as 10,458 people and in Pahae Julu is 12,177 people. The growth rate was only 0.82% in Pahae Jae from 2005 to 2006 and 0.74% growth rate from 2010 to 2011. In Pahae Julu, the population size decreased by 0.37% from 2005 to 2006; however grew by 0.86% from 2010 to 2011. The most of population are of a productive age between 15 to 64 years old.

The majority of land owners are male gaining land from their parents; however there is one female who is now a family household head. The land owners are of a productive age (15-64 years old); only one land owners is 71 years old.

Land acquisition will directly affect both men and women. Nonetheless, females may be more affected compared to men as they may lose their opportunities to utilise lands for livelihood and economic income. Furthermore these activities

have the ability to marginalize females who have a limited ability to earn an income to manage household affairs and provide for their family. In addition the increased income in the communities may result in squandering of household income on alcohol, increased domestic violence and crime, adultery and increased demand for prostitution.

The measures to address gender issues include:

- Ensuring a strict code of conduct for all workers is in place;
- Providing support to females involved in the land acquisition process such as helping them find and negotiate replacement land;
- Ensuring females have the option to participate in all the land acquisition activities in a gender sensitive manner;
- Prioritise female participation in the income restoration and other ISP activities;
- Prioritising vulnerable females (female headed households, those below the poverty line, elderly females), and Project Affected Households headed by women who will be severely affected (i.e. those losing more than 50% of their land or whose remaining land is less than 400 sq.m.) for employment and procurement of goods and services.

4.3.3 *Ethnicity/IP Impacts*

The major ethnic group is Batak, which consists of a few sub-ethnic groups. In Pahae Jae and Pahae Julu the predominant sub-ethnic group is Batak Toba. It is also consists of various different clan groups that are called *Torombo* known for its patrilineal lineage system. Among the Tarombo, the majority clan group is called Raja Huta which is also known as the village founder.

Batak is spoken by the largest proportion of the population. As identified during interviews, the dominant clan group will dominate the land ownership. Table IV-3 lists the dominant clan groups whose land will be acquired by the Project.

Table IV-3 Clan Groups in the eight Project Affected Village

<i>Sub-district Village</i>	<i>Clan Group</i>	
	<i>Main Group</i>	<i>Other Group</i>
Pahae Jae		
Silangkitang	Sihombing Nababan (Raja Huta), Simorangkir, Hutabarat	Silaban, Lumban Toruan, Hutasoit
Sigurung-gurung	Sitompul (Raja Huta), Panjaitan, Panggabean, Parapat, Sihombing, Tambunan, Simanungkalit	
Pahae Julu		
Sibaganding	Sitompul (Raja Huta), Tobing, Pasaribu, Hutabarat, Sihombing	Simamora, Gultom
Lumban Jaean	Sitompul (Raja Huta), Pasaribu, Hutabarat	Siahaan, Situmeang, Sihombing, Siregar, Lumban Tobing
Simataniari	Sitompul (Raja Huta), Pakpahan, Tambunan, Silitonga, Sarumpaet, Lumban Tobing, Bakkara, Simatupang	
Onan Hasang	Siregar (Raja Huta), Pasaribu, Sitompul, Sinaga, Tambunan, Silalahi	
Janji Natogu	Siregar (Raja Huta)	
Simanampang	Panggabean (Raja Huta)	Lumban Tobing, Sitompul, Nainggolan, Siregar
Hutabarat	Hutabarat (Raja Huta)	Sitompul
Sitolu Ama	Hutabarat (Raja Huta)	Sitompul

Source: ERM Primary Data, 2013

Based on the above table, the majority of land owners interviewed by ERM were in Silangkitang from the clan group Sihombing, as well as in Sibaganding and Lumban Jaean, the land owners' clan group is Sitompul.

The Batak people in the project area meet the criteria set by the SPS to be considered as IPs; this is due to their close association to land and the underground (ancestral burial grounds etc.). Therefore the potential impact from the loss of land may restrict the IPs (whose land may be acquired) ability to perform farming and other land related cultural customs which are of significant value to the Batak people.

It will be key for SOL to ensure activities within the ISP are inclusive of IP custom/cultural preservation and that IPs are included in Project consultation and disclosure activities; as well as understanding and having access to the grievance mechanism.

Further details of the socio-economic profile and potential land acquisition impacts can be found in Volume III: Indigenous Peoples Plan (IPP).

5 ***INFORMATION DISCLOSURE, CONSULTATION AND PARTICIPATION***

5.1 ***OVERVIEW***

This sub-section focusses on the Information Disclosure, Consultation and Participation activities conducted and planned by SOL. These are requirements set out in the Asian Development Bank's (ADB) Safeguard Policy Statement (SPS) 2009 and in the International Finance Corporation's (IFC) Performance Standards (PS) 2012. This Chapter specifically discusses Information Disclosure, Consultation and Participation requirements, activities undertaken with the identified Project communities, government agencies and representative groups (e.g. farming) and planned future activities.

5.2 ***CULTURALLY SENSITIVE CONSULTATION AND PARTICIPATION ACTIVITIES***

5.2.1 ***Identification of Stakeholders***

Stakeholders are defined as *people or entities that are affected or may have an interest in the Project*. SOL's key stakeholders were identified through a stakeholder analysis process at the beginning of the Project. The key stakeholders directly affected by the Project activities are identified as follows:

- Project Affected Communities;
- Village heads from four villages in Pahae Jae Sub District;
- Village heads from five villages in Pahae Julu;
- Pahae Jae and Pahae Julu Sub District heads;
- Community leaders from nine villages;
- Religious leaders from nine villages; and
- Youth leaders from nine villages.

5.2.2 ***Consultation Methodologies***

Project information will be made accessible and understandable to all PAPs. Consultation will be carried out using the local Batak and Indonesian language in a gender sensitive manner. The various methods of consultations will include:

- **Verbal:** consultations from early in the project cycle i.e. socializations, an informal meeting, a public meeting and a focus group discussion with village heads and land owners; and
- **Written:** brochures, leaflets or booklet.

5.2.3 *Information Disclosure*

The effort to disclose information about the proposed Resettlement Plan and Land Acquisition Process will rely on informal and formal meetings with village heads and land owners, in order to enhance stakeholder understanding of RP process and to avoid intimidation. The Resettlement Plan information includes:

- (i) Measurement of losses;
- (ii) Detailed assets valuations;
- (iii) Entitlements and special allowance for income restoration;
- (iv) Grievance procedures;
- (v) Timing of payment; and
- (vi) Displacement schedule.

SOL plan to commence their socialisation activities in mid-October 2013 for the landowners potentially affected by Project components for which land has yet to be acquired. However, information about the compensation is well known in the project area as land has already been acquired for other project facilities. Upon the finalization of identification of land owners in T/L ROW alignment, the Executive Summary of this RP together with the IPP/ISP Executive Summary will be made available in local language in the village offices by the End of March 2014.

5.3 *CONSULTATION UNDERTAKEN TO DATE*

This section provides an overview of the Information Disclosure, Consultation and Participation process that has been implemented to date by SOL. This includes:

- Information education consultation (IEC) materials;
- Dissemination protocols;
- Consultation activities from 2008 until 2012;
- Consultation conducted to date in 2013; and
- Planned future consultation including disclosure of the IPP and ISP.

5.3.1 *IEC Materials*

ADB's SPS states that consultation and participation are central to the achievement of the safeguard policy objectives. It explicitly requires the borrower/client to carry out meaningful consultation with affected persons and communities within the vicinity of the project location. Thus, in order to achieve this objective, SOL is required to ensure that all information related to the Project is well informed and communicated to the communities, groups, or peoples affected by the Project.

This also implies that information disclosure is not merely a one off process but that it is conducted continuously throughout the Project cycle allowing for an effective flow of information. One of the most important aspects of information disclosure is the preparation and establishment of IEC materials.

SOL has prepared numerous forms of IEC materials including brochures/leaflets, Project location maps, pictures/photos and video presentations etc. Such materials are required to be:

- Culturally appropriate and effective: The materials are presented in a language that is understood by the local communities; the IEC materials consider all local customs and values. Even though the Indonesian language is widely spoken and understood by the local communities, the Batak (the majority ethnic group in the project location) speak the Batak language therefore Batak is used when producing IEC materials for this group.
- Clear and understood by the communities: SOL recognises the importance of providing concise and clear information in the IEC materials. Materials are presented in a structured format and are as informative as possible but not in an exhaustive way.

The Project will ensure that all affected people have access to the information concerning the Project and its impacts. Therefore SOL's IEC materials will be made accessible to all affected communities as well as other related stakeholders.

Information and issues covered in the IEC materials range from Project information (project footprints, village settlements, etc.), the Environmental Impact Assessment (EIA) related information, job vacancies, grievance forms, etc. SOL understands the importance of sharing Project information with its local communities. This is demonstrated through the provision of the EIA executive summary document in the affected villages.

The EIA executive summary document has been made available in each village administration office. The complete EIA (ANDAL, RKL/RPL) documents are available in the sub- district offices in Pahae Jae (Silangkitang Area) and Pahae Julu (Namora I Langit Area).

SOL also plans to develop materials that will be presented and explained to the local communities/affected communities during consultation activities which will be conducted in the latter part of 2013. The materials will consist of the following information:

- Introduction of the Project proponent/management;
- Explanation on the Project and its related activities;
- Location of Project facilities and boundaries and facilities closest to local communities;

- Potential impacts from the Project (positive and negative) and how they will be managed;
- Important environmental components to be understood; and
- SOL's grievance mechanism.

As the consultation process is not a one-off activity the IEC materials will be developed throughout the Project lifecycle as one of the tools for information disclosure to the local communities.

5.3.1.1 *Distribution of IEC materials*

In order to ensure that IEC materials are accessible to the general public, especially the affected people, SOL will establish locations where disclosure and the distribution of materials will take place.

At the village level, distribution of IEC materials will be shared via the:

- Head of village and local communities leaders/informal leaders;
- Village board information;
- Village administration staff; and
- Representatives from community group.

At the Sub district level materials will be distributed through the:

- Sub district administration staff; and
- Information board.

At the Project level, the IEC materials will be communicated and presented by SOL's Project field team and management. This task will be managed by SOL's Project external relations officer, Mr Industan Sitompul and his team. The team will be divided into two coverage areas, one for the SIL area and the other for the NIL area.

5.3.2 *Information Dissemination Protocols*

This section explains the information dissemination protocols which SOL has and will continue to apply for the Project. The purpose of these protocols is to ensure that all related stakeholders participate in and are well informed of Project meetings or activities conducted in their area.

Considering the national, ADB and IFC information dissemination requirements and local customs in the Sarulla area, SOL will undertake information dissemination in the following forms:

5.3.2.1 *Direct Communication*

Where information is communicated face to face with the intended individuals. Verbal communication to disseminate information to local communities in the Project area is accepted locally as most villagers communicate in this manner.

This is conducted by sending/distributing notification/invitation letters to the individuals/villagers.

5.3.2.2 *Indirect Communication*

This will be undertaken in the form of a notification through the village information board, brochures, and also newspapers or electronic media, such as radio and television.

5.3.2.3 *Protocol and Implementation*

The guidelines on public consultation, as stipulated by the Government of Indonesia in Minister of Environmental Number 17 year 2012, do not explain in detail the protocols for information dissemination. However the Project will use the regulation as a reference in the implementation, and it will also refer to local culture and practices so information can be well disclosed to the local communities and the public.

5.3.2.3.1 *Initial Communication with the Heads of the Sub Districts and Villages*

Prior to conducting any meetings or activities, the SOL field team/external relations will first coordinate and communicate the planned activity with the heads of the sub districts and villages. In these initial discussions the schedule will also be agreed to ensure the timing is suitable and does not conflict with other key community activities or events. In addition the location of the venue will be agreed. Where possible meetings will take place in the evening to allow the community to carry out their farming activities as normal.

5.3.2.3.2 *Invitation – written and verbal*

After the schedule is agreed with the head of the villages or sub-districts SOL will then prepare a formal invitation letter to be sent to all intended persons/individuals or groups. This invitation will then be distributed to all the intended individuals via the head of each village by SOL's external relation officers.

In addition to the written invitation, as the external relation officers are locally recruited, they will also disseminate information on planned meetings and discussions verbally.

SOL's intent is to ensure that communication on proposed consultation events is undertaken as early as possible to the villagers/participants. This should be at least one week before any activity takes place.

5.3.2.3.3 *Follow up on invitations*

The SOL field team (i.e. the external relation officers) will then follow up with the head of each village to confirm attendees. If the intended person is unable to attend SOL will encourage them to nominate a representative to attend in their place. (This also occurred during the land acquisition socialisation/negotiation process in instances where land owners reside outside of the Project area).

In general the agenda for the above stakeholder meetings follows the below:

- Prayer followed by a welcome speech by SOL and other attendees; Explanation and presentation on current Project activities by SOL. This will also include a two way discussion on the identified potential impacts and risks, and the proposed measures and actions to mitigate the impacts;
- Open discussion in a Question and Answer format;
- Documentation including minutes, attendee list and photos; and
- Closing prayer.

When the majority of villagers are Christian the meeting will be opened and closed with a prayer, performed by the community leader or *Sintua* (church minister).

5.3.2.3.4 *Language*

Local communities in the Pahae Jae and Pahae Julu sub districts are predominantly Batak and use both Indonesian and Batak in their daily communication. They understand Indonesian very well and use it in their daily conversation. However, older people in the communities prefer to use Batak. Thus meetings and activities conducted to date by SOL have been in both languages to accommodate all generations. During informal meetings Batak is and will continue to be used to build a closer relationship with the local communities.

For certain activities, such as land surveying and staking, the process will be slightly different as the meetings will involve less people:

- Coordination with the village head to explain the activity and identify the affected land owners;
- Contact the intended person/land owner directly (accompanied by the village head) to set up the meeting;
- Meet with the land owner (or small group of land owners) to explain land surveying activities; and
- Based on whether consent is obtained from the land owner and village head the survey is conducted.

This protocol will continue to be used when disseminating information to the local communities; adjustments will be made in accordance with the local communities' needs.

5.3.3 *SOL Consultations up to 2013*

This section presents an overview of public consultation activities undertaken by SOL between 2008 and 2013.

The Project commenced consultation activities in 2008 with stakeholders including local government and related agencies, affected communities/groups, local NGOs and other related stakeholders. The objectives of these activities were to:

- Commence the consultation process early in the Project planning phase with affected communities and other related stakeholders;
- Disclose information on Project related information;
- Establish a relationship with local communities, understand their concerns and discuss how the Project could address the issues raised; and
- Undertake socialisation activities for the acquisition of land required for project facilities.

Consultation activities were conducted, where possible, in a venue closest to the local communities. However, in some villages, where no sufficient venues were available, it was agreed with the village heads to hold the meetings in a church or school classroom located close to the village (due to their larger capacity). Some meetings were also held at SOL's Project office meeting hall in Silangkitang. In instances where this occurred SOL provided transportation for the community.

Meeting participants consisted of both men and women who were given equal opportunities to voice their concerns and expectations during the question and answer sessions. A summary of consultation activities conducted between 2008 and 2013 is described in Table V-1.

Between 27th and 31st August 2013 socialization activities were undertaken by SOL in the 8 Project affected villages. The primary aim of which was to disclose the Project activities and discuss the potential impacts and mitigation measures; along with discussing community concerns, the grievance mechanism and settlement process. Furthermore an NGO and CSO information sharing session was held in Jakarta in September 2013. NGO/CSO attendees included AKSI (for Gender, Social and Ecological Justice, WALHI (Selaku pengkampanye tambang dan energi), IESR (Institute for Essential Services Reform) and WWF (World Wildlife Fund). SOL, ADB, ERM and ENVIRON were also in attendance. The detailed minutes and attendances lists of both are presented in Annex A.

Table V-1 Public Consultations Activities Undertaken Between 2008 and 2013

<i>Activities</i>	<i>Date</i>	<i>Stakeholders/ attendees</i>	<i>Description</i>
Project socialization at Silangkitang	5 th February 2008	Head of villages, Representatives of local communities, Representatives of Local Government	Explanation on Project plan and activities
Public consultation in relation to AMDAL preparation	28 th March 2008	Local communities from seven affected villages, Head of Villages, Communities' leaders, Youth groups, Church leaders from both Pahae Jae & Pahae Julu, North Tapanuli Local Government	Information disclosure and discussion on project plan and activities, discussion on communities' concerns and inputs
Project socialization with government institutions in Tarutung	6 th May 2008	Bupati of North Tapanuli, Head of Local Government Offices/ agencies, Head of Sub District of Pahae Julu and Pahae Jae	Information disclosure on project plan and activities
Project socialization regarding land acquisition process for re-injection route	6 th June 2008	Local communities, Head of villages, Head of Sub District	Explanation and discussion on land acquisition process and plan for re-injection line route
Socialization/ Seminar of Sarulla project to local NGOs groups, local communities and local Governments representatives	25 th June 2008	Church Associations and NGOs -JPIC HKBP, JPIC UEM,KSPPM, NINDJA JAPAN, Local Government Agencies (BAPPEDA, North Tapanuli Bupati Office), representative of local communities, Head of Villages	The impact of PLTP Sarulla towards community life and the environment
Socialization of well work over activity in Silangkitang	15 th July 2008	Local communities, head of villages, Head of Sub Districts, Representative of Local Government	Information disclosure on well work over plan and activity
Well work over ceremony in Silangkitang	15 th Aug 2008	Local Government of North Tapanuli, local communities, Head of Villages, Communities' elders, Head of Sub districts	Ceremony event prior to commencing the well work over activity
Dialogue forum with local communities and local NGO - IMARUPA & IARRP	11 th Jan 2011	member of local House of Representatives of North Tapanuli, IMARUPA NGO, IARRP NGO, Head of Villages, Local communities' representatives	Discussions related to concerns on environmental impacts and the project's community development program
Discussion/Meeting with local communities, representatives of North Tapanuli Local Government and IMARUPA/ IARRP	24 th March 2011	Head of villages, village elders, Chairman of IMARUPA NGO and staff, Chairman of IARRP NGO and staff, Representative of Local Government, Head of Sub districts, representatives of local communities	Discussion on the project's CSR program and stakeholders (local communities, SOL, Local NGOs (IMARUPA & IARRP), local government) commitment to support the implementation of the project
Project and AMDAL	23 th March 2011,	Head of villages, villagers and community leaders	Explanation on geothermal project,

<i>Activities</i>	<i>Date</i>	<i>Stakeholders/ attendees</i>	<i>Description</i>
socialization/explanation (in 13 villages) of Pahae Jae and Pahae Julu	15 - 18 th April 2011		environmental impact and project's AMDAL document, communities concerns
Socialization on land acquisition to brine Injection line land owners	25 th Nov 2009	Land owners, Head of Villages, Head of Sub district, BPN (Land Agency Office), Agricultural Office	Explanation and discussion on project's land acquisition plan/ activities for brine injection line route
1st negotiation meeting for Brine Injection line - land owners	9 th Dec 2010	Land owners, Head of Villages, Head of Sub district	Meeting/negotiation on land price
2nd negotiation meeting for Brine Injection line - land owners	19 th Jan 2011	Land owners, Head of Villages, Head of Sub district	Same as above
3rd negotiation meeting for Brine Injection line - land owners	24 th March 2011	Land owners, Head of Villages, Head of Sub district	Meeting/negotiation on final agreement on land price
Socialization on land acquisition/confirmation of land measurement and number of plants, project activities and impact to land owners in Namor I Langit (NIL) Area			
1st group	29 th April 2013	Land owners, Head of Villages, Head of Sub districts	Explanation on Project plan and activities and its impacts and confirmation of land measurement and number of plants
2 nd group	30 th April 2013	Land owners, Head of Villages, Head of Sub districts	Explanation on Project plan and activities and its impacts and confirmation of land measurement and number of plants
3 rd group	1 st May 2013	Land owners, Head of Villages, Head of Sub districts	Explanation on Project plan and activities and its impacts and confirmation of land measurement & number of plants
4 th group	2 nd May 2013	Land owners, Head of Villages, Head of Sub districts	Explanation on Project plan and activities and its impacts and confirmation of land measurement and number of plants
5 th group	6 th May 2013	Land owners, Head of Villages, Head of Sub districts	Explanation on Project plan and activities and its impacts and confirmation of land measurement

<i>Activities</i>	<i>Date</i>	<i>Stakeholders/ attendees</i>	<i>Description</i>
			and number of plants
Socialization on land acquisition/ confirmation of land measurement and number of plants, project activities and impact to land owners in Silangkitang (SIL) Area - Silangkitang and Sigurung-gurung	7 th May 2013	Land owners, Head of Villages, Head of Sub districts	Explanation on Project plan and activities and its impacts and confirmation of land measurement and number of plants
Discussion/ sharing on Sarulla Activities in Silangkitang Village	27 th August 2013	Local communities, head of villages, Head of Sub Districts, Representative of Local Government	Sharing/ discussion about Project plan and activities and its impacts
Discussion/ sharing on Sarulla Activities in Sigurung-gurung Village	28 th August 2013	Local communities, head of villages, Head of Sub Districts, Representative of Local Government	Sharing/ discussion about Project plan and activities and its impacts
Discussion/ sharing on Sarulla Activities in Pardamaean Nainggolan Village	29 th August 2013	Local communities, head of villages, Head of Sub Districts, Representative of Local Government	Sharing/ discussion about Project plan and activities and its impacts
Discussion/ sharing on Sarulla Activities in Simataniari Village	30 th August 2013	Local communities, head of villages, Head of Sub Districts, Representative of Local Government	Sharing/ discussion about Project plan and activities and its impacts
Discussion/ sharing on Sarulla Activities in Pardomuan Nainggolan Village	30 th August 2013	Local communities, head of villages, Head of Sub Districts, Representative of Local Government	Sharing/ discussion about Project plan and activities and its impacts
Discussion/ sharing on Sarulla Activities in Janji Natogu/Onan Hasang Village	31 th August 2013	Local communities, head of villages, Head of Sub Districts, Representative of Local Government	Sharing/ discussion about Project plan and activities and its impacts
Discussion/ sharing on Sarulla Activities in Sibaganding/Lumban Jaean Village	31 th August 2013	Local communities, head of villages, Head of Sub Districts, Representative of Local Government	Sharing/ discussion about Project plan and activities and its impacts

5.3.4 Consultation and Participation Activities during the Construction and Operation Phase

Aside from the consultation and participation activities that have been conducted to date, SOL will continue to conduct public consultation and disclosure activities in various forms. This is not only to comply with ADB, IFC or other international finance standards, but also to establish good communication and relationships with all SOL's stakeholders - especially the affected communities and the communities living in the vicinity of the Project area. Throughout the Project, regular meetings and co-ordination with various stakeholders will be planned and scheduled. This will include disclosure of the ESIA and ESMP.

Table V-2 Key Activities for Planned Future Consultation and Participation

<i>Phase</i>	<i>Issues to be discussed</i>	<i>Planned schedule</i>	<i>Responsibility</i>
Construction	Disclosure of recruitment and opportunities for local manpower/contractors	2 Months before activity commences	SOL's EPC contractor/sub-contractor
	Disclosure of project CSR program planning and implementation	First when construction starts and continually thereafter based on agreement with the related affected communities	SOL
	Disclosure of ESMP monitoring report through Head of Village and local communities focal points	Every six months	SOL
Operation	Socialization to all related stakeholders on the commencement of the project operation	1 month before commissioning	SOL
	Disclosure of ESMP monitoring reports	Every six months	SOL
	Discussion with affected local communities on any issues/concerns during project operation	Once in three months	SOL
Decommissioning	Public announcement on decommissioning of the plant & facilities, potential impacts and how they will be managed	2 months before decommissioning	SOL
	Consultation and socialization to the affected communities, local workers/employees and all employees affected	2 months before decommissioning	SOL

6

GRIEVANCE REDRESS MECHANISM

SOL has established a timely and effective Grievance Mechanism with responsibility lying with the external relations department that has been socialised to the PAPs. Grievances are raised to the department by land owners through verbal and written channels; there are two main contact points for grievances; one for the SIL area, the other for the NIL area.

SOL's external relations department also receive grievances via the village head offices in the nine villages surrounding the SOL Project site. The grievance form used by the land owners is presented in Figure VI-1. When grievances are submitted SOL prioritise the land issues and complaints as follows:

- First Priority: Grievances directly affecting the Project development i.e. grievances concerning land plots within the Project site;
- Second Priority: Grievances related to significant impacts on the community;
- Third Priority: Grievances with insufficient or unclear evidence or documentation that require clarification and further investigation; and
- Fourth Priority: Grievances with no supporting evidence or documentation.

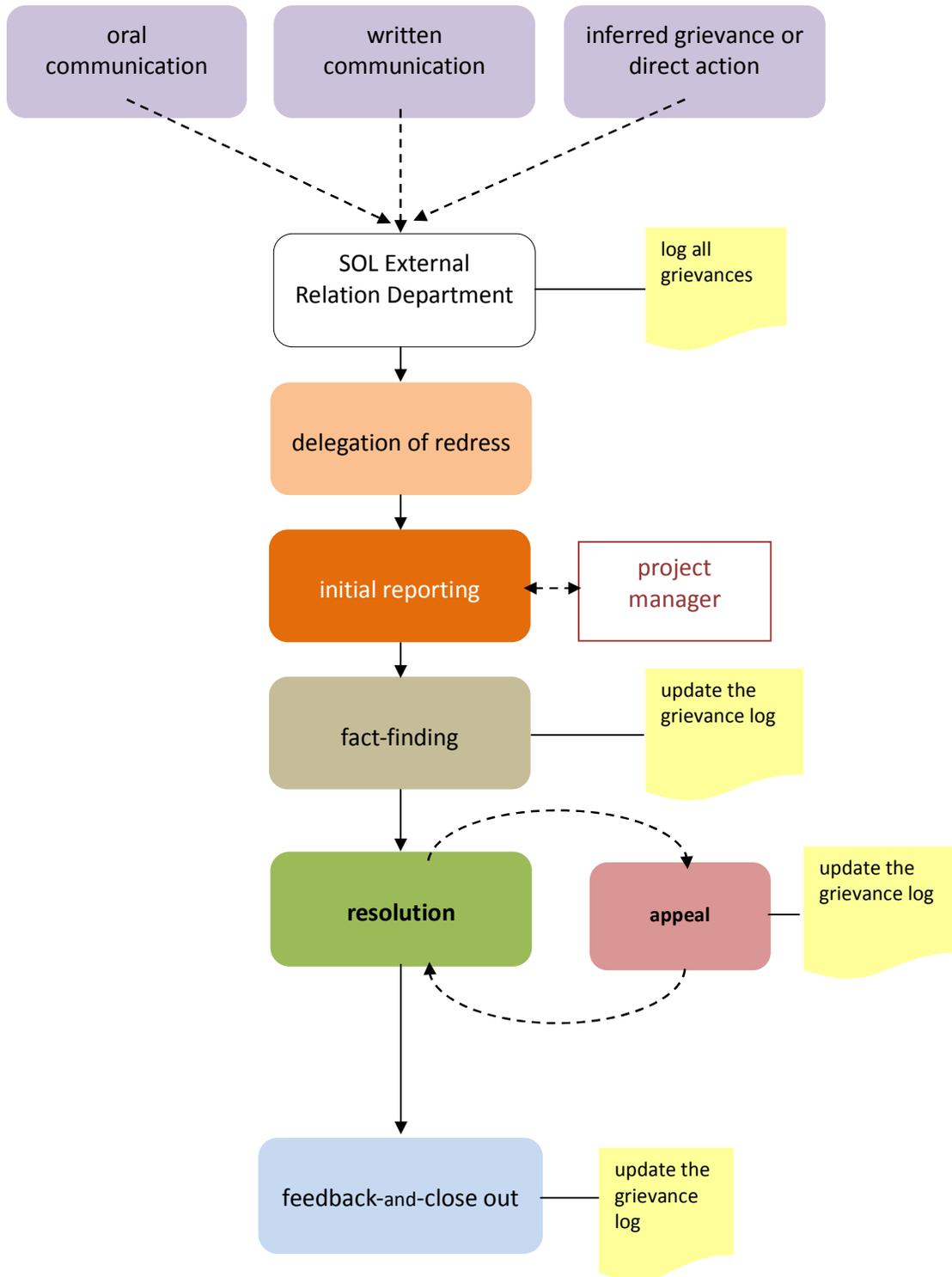
Figure V1-2 illustrates SOL's grievance process in more detail.

Figure VI-1 SOL's Grievance Form

	
Grievance Form	Date:
<i>Reference Number</i>	
<i>Full Name</i>	
<i>Contact information</i>	<i>Address:</i> <i>Telephone</i> <i>Email:</i>
Description of Incident or Grievance (What happened? When did it happen? Where did it happen? Who did it happen to? What is the result of the problem?) :	
What would be your suggestion/recommendation to resolve the problem?	
Consent to disclose grievance-related information to the third parties I am aware that this grievance of mine is submitted to PLTP Sarulla, but it may refer to actions of third parties, (for example, contractors of PLTP Sarulla). I understand that in order to efficiently resolve my grievance PLTP Sarulla will have to contact these third parties so as to check into the facts stated in the grievance and work out a solution. I hereby agree that PLTP Sarulla can disclose this grievance (as well as additional information related to this grievance) to third parties.	
Signature	
Received by : Signature : Date :	

SOL's Grievance Mechanism is illustrated in Figure VI-2.

Figure VI-2 Quick Reference Guide to Grievance Mechanism



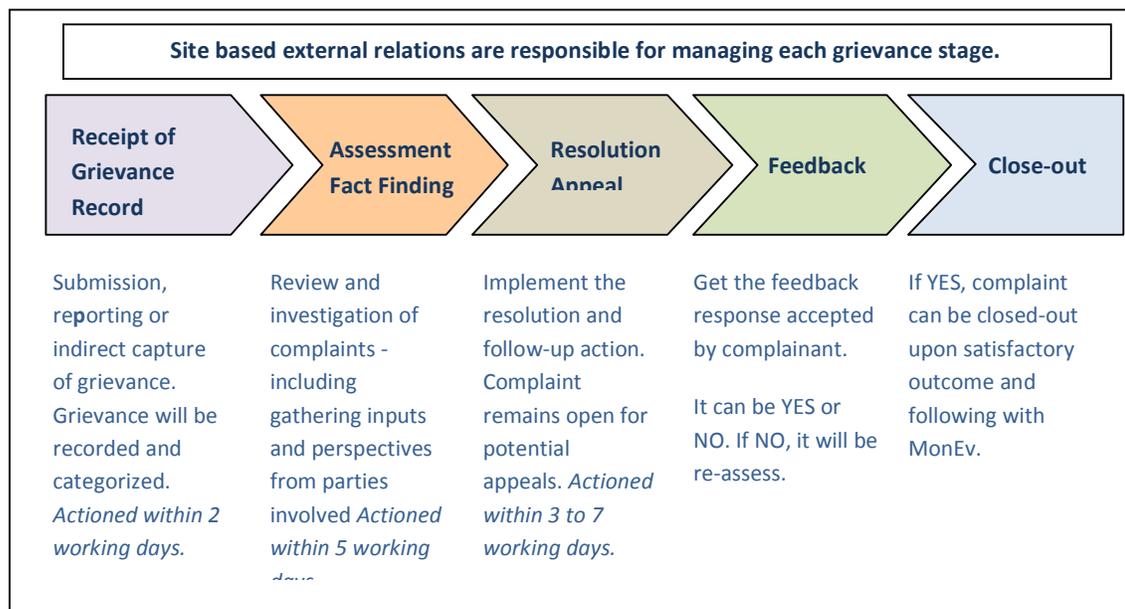
SOL's grievance mechanism has been designed as a locally based, Project specific design that assesses and resolves community complaints and concerns related to all Project activities. The Project grievance mechanism offers a

package of widely understood and effective processes to address affected communities' concerns and complaints. To date community grievances received by the Project have been verbal, without any recorded documentation therefore further work is required to develop and implement the grievance mechanism in accordance with ADB and IFC requirements (i.e. via written documentation).

6.1.1 *Grievance Tracking and Redress Mechanism*

The Project Grievance Tracking and Redress Mechanism (GRTM) that is triggered the instance a community complaint is received is illustrated in Figure VI-3. This is a five step process based on international lender guidance.

Figure VI-3 Summary Overview of the Project Grievance Tracking and Redress Mechanism



NB: At any stage of the grievance mechanism, affected people are not bound by the GRM and have recourse to the normal legal channels

6.1.2 *Receipt of Grievances*

The initial procedure for grievance redress involves a entering the grievance information into the GTRM database – a grievance log and tracking system that will equip SOL management to identify, understand and address vulnerabilities in Project implementation. The GTRM database will be utilised to: a) register, track and recall information about specific grievances and b) categorise reports of grievances by type and frequency.

The original grievance form is kept in the village head office or by the community representative.

A generic report of the grievance is generated from the initial GTRM database that is entered by the External Relations Department in coordination with an appointed manager. This report includes all details known at the time the grievance is registered, and indicates what, if any, information is needed before a full account of the grievance can be logged. This initial report also serves to

provide context and guidance for the fact-finding investigation. Timelines for fact-finding and implementation of possible actions will be established as appropriate for the type and severity of the grievance. The time period to receive a grievance is within 2 working days.

6.1.3 *Assessment and Fact-Finding Investigation of Grievance Redress*

The External Relations Department reviews and undertakes a fact-finding investigation of each grievance received by SOL. These investigations shall seek to establish a clear picture of the circumstances surrounding a particular grievance. Investigations shall verify the information contained in the initial grievance report specifically:

- Identity of the complainant and nature of the complaint;
- Identify the status of the complaint, including if it has been resolved by any immediate remedial actions, if the aggrieved expects that any particular actions need to be implemented, if no action toward resolution is known or expected, etc.; and
- Review supporting evidence for any disputed claims.

For grievances that involve a large number of people or entire villages, community meetings will be held with both open sessions for people to air their complaints and facilitated sessions to help collaboratively identify potential redress actions. Fact-finding investigations undertaken by SOL will rely on consultation that is free of discrimination and coercion.

The review and fact-finding investigation may result in the grievance being resolved; or follow-up actions being required with further coordination within SOL. Following this the External Relations Department can decide who is responsible for responding to the grievance and overseeing redress. The time period to assess the grievance is within 5 working days.

6.1.4 *Resolution and Appeal on Grievance Redress*

Resolution will be undertaken with the hope that agreement on a grievance resolution is achieved at the Project level (i.e. preventing complainants from proceeding to higher levels, such as government authorities). In some cases, redress actions may necessitate coordination with the local authorities. Resolution processes and approaches will rely, whenever possible, on local approaches to conflict resolution. Local authorities and/or respected leaders will be consulted for their insights and advice on the grievance and its proper resolution.

Resolution involves decision-making about grievance redress actions. Through co-ordination with other SOL departments, the External Relations Department is able to handle the communities' grievances and decide on how SOL will respond to the grievance with suitable resolution and a follow-up action plan. SOL will respond in the following ways:

- Written. Upon reaching agreement with the aggrieved, all such

understandings shall be put in writing and a statement signed by both SOL and the complainant will be distributed to all sides involved in the grievance.

- Verbal. Meeting with complaints or dialogue/open meeting with groups – External Relations will ensure the effective and timely communication of grievance notifications, fact-finding inquiries, and will facilitate forums for remediation and restitution decisions.

If a complainant is not satisfied with the implementation outcomes of an agreed-upon grievance resolution measure, he/she may appeal the outcome. Written appeals may be registered with SOL's External Relations Department directly, or complainants may express their desire for an appeal to their Kepala Desa, community representative, or village community relations. When an appeal is registered, SOL will investigate the cause of dissatisfaction associated with the implemented resolution measure and identify follow-up actions that are agreeable to the aggrieved party. No grievance shall be considered closed if an appeal process is pending or active. If however SOL has acted in good faith to resolve a grievance, and the aggrieved party refuses to acknowledge satisfactory resolution after three separate appeal and resolution processes, SOL reserves the authority to list the grievance as intractable and can terminate the appeals process. This time period to respond is between within three and seven working days.

6.1.5 *Feedback of Grievance*

Once a grievance has been resolved, the complainant shall be invited to give feedback about the resolution process. They may be asked to indicate their level of satisfaction with the mitigation measures once such measures have been implemented. In all cases, the aggrieved must be aware of the outcome of his/her complaint. If the complainant is anonymous, information on resolution of the complaint shall be posted on the relevant village bulletin boards.

Following the resolution decision, the GTRM database shall be updated to reflect the status, on-going redress measures and the perception of the aggrieved in regard to these measures.

6.1.6 *Close-out*

Close-out reports are generated upon completion of the grievance resolution process. Reviewing the information logged in the GTRM database, External Relations—working with the SOL field team and other managers engaged in the grievance resolution process—generate a summary write-up of the resolution process. Close-out reports should:

- Contain details of the duration of time it took for each step of the grievance resolution process;
- List resolution measures agreed-upon and describe the implementation process;
- Provide an evaluation of the resolution process by External Relations;

- Provide feedback from the aggrieved on the resolution process;
- If appeals were registered, indicate the cause for dissatisfaction with the implementation of the initial resolution measures and explain what was done differently during the appeals resolution process; and
- Reflect on lessons learned.

6.1.7 *Resources and Responsibilities*

The External Relation Department are responsible for managing grievances -the key individual within the department is Bapak Hindustan Sitompul who is responsible for each step of SOL's Grievance Mechanism. Should the grievance be escalated beyond site decision makers SOL's senior management will take responsibility for closing out the grievance.

6.1.8 *Grievance Mechanism Disclosure*

SOL has prepared a simple grievance mechanism and provided contact details and information material to the affected communities. The details of the mechanism were disclosed to the local communities during the land acquisition socialization activities between April 30 and May 7 2013.

Future disclosure of the grievance mechanism will be integral to effective public consultation and strategic engagement. This will include disclosing to the following stakeholders:

- Local Community Centres;
- Village Heads Offices;
- Municipal and Central Government Offices;
- Local Universities or Academic Research Centres; and
- Offices of Local NGOs and Community-Based Organisations.

7 LEGAL FRAMEWORK

7.1 PRINCIPLES AND OBJECTIVES FOR LAND ACQUISITION

7.1.1 National Regulation

Law No. 5 of 1960, known as the Basic Agrarian Law or UUPA (*Undang Undang Pokok Agraria*) is the legal basis for land rights in Indonesia. The purpose of this law was to create a uniform national system for land law and land rights, based on customary laws and the utilisation of customary law norms, concepts, principle, systems and institutions¹. Replacement of land affected by business activities is regulated by the Regulation of the Minister of Agrarian Affairs No. 2 of 1993 regarding Procedures to Obtain Location Permits and Land Titles for a Company within the Framework of Capital Investment, and the Decree of the Minister of Agrarian Affairs No. 21 of 1994 regarding Procedures to Obtain Land Titles for a Company within the Framework of Capital Investment.

Government of Indonesia (GoI) regulations do not specifically address the issue of physical and economic displacement as outlined in IFC PS 5 (IFC, 2012) or compensation with regards to private project developments.

Key regulations relevant to land compensation and resettlement issues for the SOL include those as outlined in Table VII-1.

Table VII-1 Indonesian National Regulations Applicable Land Acquisition

Topic	Regulation	Citation
Land Rights	Law No. 5 of 1960 regarding Basic Agrarian Law: <ul style="list-style-type: none">Establishes rights to land that can be granted to individuals or institutions. Government Regulation No. 40 of 1996 regarding Right of Cultivation, Right to Build, and Right to Use of Land: <ul style="list-style-type: none">Further development of Chapter II, article 16 of Law No. 5 of 1960Explains the requirements for granting Land RightsIdentifies the relevant authorities and responsibilities of all concerned partiesDefines the status of land and the objects on it, and the changes to status that occur when the land rights expire.	Article 16 point 1 Chapter III: Right to Build Chapter IV: Right to Use
Location Permit and Land Acquisition	Regulation of the Ministry for Agrarian Affairs No. 2 of 1993 regarding Procedures to Obtain Location Permits and Land Titles for a Company within the Framework of Capital Investment. Decree of the Ministry for Agrarian Affairs No. 21 of 1994 regarding Procedures to Obtain Land Titles for a Company within the Framework of Capital Investment.	Chapter II: Location Permit Chapter III: Land Acquisition Chapter II: Land Acquisition through the

¹ UUPA regulates rights to land through the issuance of a Land Certificate by BPN, of which there are: - Property rights, hereditary rights; the strongest and fullest rights that may belong to people regarding land.-Right of cultivation (*Hak Guna Usaha* – HGU); the right to use of State land for agricultural enterprises, fisheries and animal husbandry. - Right to build (*Hak Guna Bangunan* – HGB); the right to build on State land. - Right to use (*Hak Pakai*); the rights granted to one party to use the land for any purpose.

<i>Topic</i>	<i>Regulation</i>	<i>Citation</i>
		Transfer of Rights
Location Permit	<p>Regulation of the Ministry for Agrarian Affairs No. 2 of 1999 regarding Location Permit:</p> <ul style="list-style-type: none"> Regulates the maximum area that can be owned, the permit period, procedures to provide location permits, and the rights and obligations of owners. <p>Decree of the Ministry for Agrarian Affairs No. 22 of 1993 regarding Guidelines for Granting Location Permits in the Framework of the Implementation of Reg. No. 2/1993</p> <ul style="list-style-type: none"> Addresses land compensation requirements and procedures. <p>Announcement of the State Minister for Agrarian Affairs/Head of BPN, No. 460-3697 of Dec.26, 1995.</p> <ul style="list-style-type: none"> This announcement prohibits any Company from releasing land without previously obtaining a Location Permit. 	Articles 4, 5, 6, 8. Appendix -
Land Use Permit	Law No. 51 of 1960 regarding Prohibition of Use of Land Without Permission from the Owner.	Article 2
Land Registration	<p>Government Regulation No. 24 of 1997 regarding Land Registration.</p> <p>Regulation of the Minister for Agrarian Affairs/Head of BPN No. 3 of 1997 regarding the Implementing Provisions of Government Regulation No. 24 of 1997 regarding Land Registration:</p> <ul style="list-style-type: none"> Responsible legislation for planning, the implementation of land parcel mapping measurements, and all land acquisition phases/processes. 	Article 24 -
Compensation	The legal basis for location permit mechanism is stipulated in the Head of National Land Agency Regulation No. 2 Year 1999. Private Business entities may impellent land procurement through direct negotiation with land owners on a 'willing seller-willing buyer' basis.	-
Land Issues	Regulation No. 5 of 1999 regarding Community Communal Rights Issues; Guidelines for Settling Customary Law	-

7.1.2 *Information, Consultation and Disclosure*

SOL is committed to enforce all applicable laws and regulations of the Indonesian Government. The below summarises the relevant articles and paragraphs in the laws and regulations in relation to public consultation and disclosure that SOL will comply with:

- Act No. 32 Year 2009 regarding Environmental Protection and Management:
- Outlines requirements for public involvement and information disclosure during the AMDAL process.
- Outlines the importance of social and environmental resources and values and delegates responsibility to project proponents to protect and preserve these values.
- Requires project proponents to conduct stakeholder engagement during project scoping.

- Requires project proponents to obtain community input into the project risk assessment process and definition of the project social zone of impact.
- Minister of Environment Regulation No. 17 Year 2012 regarding Guidelines for Community Involvement in the Process of Environmental Impact Assessment and Environmental Permits.
- Outlines requirements for community involvement and information disclosure during the AMDAL process and Environmental Permits.
- Requires all development projects to involve the community - providing information in a transparent and accountable manner, equality among parties, resolving problems fairly and wisely, coordinating and communicating across all parties.

7.2 *ASIAN DEVELOPMENT BANK (ADB)*¹

The ADB's SPS and Public Communications Policy emphasise the importance of consultation and public participation in development projects, particularly with those people who are likely to experience social impacts as a result. The consultation and public participation process must be substantive and meaningful. It should be performed at the initial phase of the project, through open and transparent procedures and without coercion. The ADB also emphasise the importance of involving stakeholders in the decision-making stages of the project. Stages may include the design, impact assessment, mitigation planning, and implementation phases.

The ADB SR define clients' roles and responsibilities for project management – including requirements for information disclosure.

Details of consultation and disclosure requirements for each of these SR are as to:

- Carry out meaningful consultation with affected people and facilitate their informed participation;
- Ensure women's participation in consultation;
- Involve stakeholders, including affected people and concerned Non-governmental organisations (NGOs), early in the project preparation process and ensure that their views and concerns are made known to and understood by decision makers and taken into account; and
- Continue consultations with stakeholders throughout project implementation as necessary to address issues related to the environmental assessment.

The Resettlement Plan (RP) has been prepared and formulated to meet Indonesian Laws and ADB Safeguard Policy Statements 2009. It contains estimates of the Project Affected Households (PAH), types of impact and compensation procedures. The key objective of the RP is to guide SOL's future

¹ <http://www.adb.org/documents/safeguard-policy-statement>

Land Acquisition Process to support compliance with Indonesian Law and ADB and IFC guidelines and policies.

The key principles for land acquisition include:

- Land acquisition will be avoided or at least minimized;
- Compensation will ensure to maintain pre-project living standards of Displaced Persons (DPs);
- DPs will be fully consulted and informed on compensation options;
- DPs socio-cultural institutions will be applied;
- Land acquisition procedures will be equally apply to women and men;
- Lack of formal title will not prevent compensation rights under the entitlements matrix;
- Land acquisition will be contained and executed as an integral part of the Project and budgets for LAR will be included in the Project costs;
- Impact to structures or building will be avoided or minimized; and
- All Land acquisition and compensation payments will be completed and endorsed by ADB prior to civil works commencement in the impact area.

The ADB Safeguard Policy Statement 2009 applies to losses due to both to physical and economic displacement caused by involuntary acquisition of land and is based on the following principles:

- Involuntary resettlement should be avoided wherever feasible;
- Where population displacement is unavoidable, it should be minimized by providing viable livelihood options;
- Replacing what is lost: if individuals or a community must lose all or part of their land, means of livelihood, or social support systems, so that a project might proceed, they will be compensated and assisted through replacement of land, housing, infrastructure, resources, income sources, and services, in cash or kind, so that their economic and social circumstances will be at least restored to the pre-project level. All compensation is based on the principle of replacement cost;
- Each involuntary resettlement is conceived and executed as part of a development project or program. ADB and executing agencies or project sponsors, during project preparation, assess opportunities for Displaced Persons (DP)s to share project benefits. The affected people need to be provided with sufficient resources and opportunities to re-establish their livelihoods and homes as soon as possible, with time-bound action in coordination with the civil works;
- DPs are to be fully informed and closely consulted. DPs are to be consulted on compensation and/or resettlement options, including relocation sites and socioeconomic rehabilitation. Pertinent resettlement information is to be disclosed to the affected people at key points, and specific opportunities

provided for them to participate in choosing, planning, and implementation options. Grievance redress mechanisms for affected people are to be established. Where DPs are vulnerable, resettlement planning decisions will be preceded by a social preparation phase to enhance their participation in negotiation, planning, and implementation;

- Social and cultural institutions: institutions of the DPs, and, where relevant, of their hosts, are to be protected and supported. DPs are to be assisted to integrate economically and socially into host communities so that adverse impacts on the host communities are minimized and social harmony is promoted;
- No formal title: indigenous groups, ethnic minorities, pastoralists, people who claim for such land without formal legal rights, and others, who may have usufruct or customary rights to affected land or other resources, often have no formal legal title to their lands. The absence of a formal legal title to land is not a barrier to ADB policy entitlements. DPs who neither have formal legal rights nor recognized or recognizable claims to land should be compensated for all non-land assets and for other improvements to the land;
- Identification: DPs are to be identified and recorded as early as possible in order to establish their eligibility through a population record or census that serves as an eligibility cut-off date, preferably at the project identification stage, to prevent a subsequent influx of encroachers or others who wish to take advantage of such benefits;
- The poorest: particular attention must be paid to the needs of the poorest affected people, and vulnerable groups that may be at high risk of impoverishment. This may include those without legal title to land or other assets, households headed by females, the elderly or disabled and other vulnerable groups, particularly indigenous peoples. Appropriate assistance must be provided to help them improve their socio-economic status;
- The full resettlement costs are to be included in the presentation of the project costs and benefits. This includes costs for compensation, relocation and rehabilitation, social preparation and livelihood programs as well as the incremental benefits over the without project situation (which are included in the presentation of project costs and benefits). The budget also includes costs for planning, management, supervision, monitoring and evaluation, land taxes, land fees, and physical and price contingencies. Where loans include subprojects, components or investments prepared only after project approval and loans through financial intermediaries that are likely to cause involuntary resettlement, sufficient contingency allowance must be allocated for resettlement prior to approval of the loan. Similarly, resettlement plans should also reflect the timeframe for resettlement planning and implementation;
- Eligible costs of compensation: relocation and rehabilitation may be considered for inclusion in the ADB loan financing for the project, if requested, to assure timely availability of the required resources and to

ensure compliance with involuntary resettlement procedures during implementation; and

- Compensation and rehabilitation is to be provided before the land is acquired.

7.3 *JAPAN BANK FOR INTERNATIONAL COOPERATION (JBIC) GUIDELINES FOR CONFIRMATION OF ENVIRONMENTAL AND SOCIAL CONSIDERATIONS*

JBIC's Guidelines state the following of relevance for consideration for the Project:

- People to be resettled involuntarily and people whose means of livelihood will be hindered or lost must be sufficiently compensated and supported by the project proponents, etc. in a timely manner. Prior compensation, at full replacement cost, must be provided as much as possible.
- The project proponents must make efforts to enable the people affected by the project, to improve their standard of living, income opportunities and production levels, or at least to restore them to pre-project levels; and
- Appropriate participation by the people affected and their communities must be promoted in planning, implementation and monitoring of involuntary resettlement plans and measures against the loss of their means of livelihood. In addition, appropriate and accessible grievance mechanisms must be established for the people affected and their communities.

In addition JBIC assess whether the Project meets the requirements of the IFC, as discussed below.

7.3.1 *International Finance Corporation (IFC)*¹

7.3.1.1 *IFC Performance Standards (PS)*

The IFC has adopted policy requirements and guidelines (IFC PS) relevant to public consultation and disclosure to ensure projects are implemented in an environmentally and socially responsible manner.

The IFC's Policy on Social and Environmental Sustainability highlights the need for community engagement and broad community support. Specifically, it states that the *IFC is committed to working with the private sector to put into practice processes of community engagement that ensure the free, prior, and informed consultation of the affected communities ... leading to broad community support for the project within the affected communities...* The IFC's definition of broad community support is *a collection of expressions by the affected communities, through individuals or their recognized representatives, in support of the project.*

¹

http://www.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/IFC+Sustainability+Sustainability+Framework/Sustainability+Framework+-+2012/Performance+Standards+and+Guidance+Notes+2012/

The IFC PSs on Social and Environmental Sustainability define clients' roles and responsibilities for project management—including requirements for information disclosure. There are a total of eight PSs and PS 1: Assessment and Management of Environmental and Social Risks and Impacts; and PS 5: Land Acquisition and Involuntary Resettlement are relevant to this RP.

PS 1 establishes the importance of effective community engagement through disclosure of project-related information and consultation with local communities on matters that directly affect them. Community engagement is defined as *an on-going process involving the client's disclosure of information, free of external manipulation, interference, or coercion, and intimidation, and conducted on the basis of timely, relevant, understandable and accessible information.*

PS 5 requires consultation on matters associated with land acquisition and involuntary resettlement and evidence of informed participation with the affected persons and communities in the decision-making processes. It stipulates that consultation *will continue during the implementation, monitoring, and evaluation of compensation payment and resettlement.*

IFC policies on resettlement and compensation for land use loss applicable to the SOL are covered primarily by Performance Standard 5 (PS 5): Land Acquisition and Involuntary Resettlement. Key PS 5 principles applicable include the following:

- Involuntary resettlement should be avoided whenever possible; 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;
- If involuntary resettlement is unavoidable, either as a result of a negotiated settlement or expropriation, 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. Involuntary resettlement should be conceived as an opportunity for improving the livelihoods of the affected people and undertaken accordingly;
- Where involuntary resettlement is unavoidable, all people affected by it should be compensated fully and fairly for lost assets, with special consideration given to vulnerable populations;
- The livelihoods and standards of living of displaced persons should be improved or at least restored;
- All people affected by involuntary resettlement should be consulted and involved in resettlement planning to ensure that the mitigation of adverse effects as well as the benefits of resettlement are appropriate and sustainable;
- Compensation for lost assets should be calculated on a replacement cost basis;

- Living conditions among displaced persons should be improved through provision of adequate housing with security of tenure¹ at resettlement sites;
- All efforts should be made to explore feasible alternative project designs to avoid any physical relocation of Indigenous Peoples from their communally held traditional or customary lands under use; and
- The client will offer affected communities at least compensation and due process available to those with full legal title to land in the case of commercial development of their land under national laws, together with culturally appropriate development opportunities; land-based compensation or compensation in-kind will be offered in lieu of compensation case where feasible.

Other relevant PS 5 policy points can be seen in Table VII-2.

¹ A resettlement site offers security of tenure if it protects the resettled person from forced evictions.

Table VII-2 Applicable IFC Compensation Framework Requirements

<i>Topic</i>	<i>Regulation</i>	<i>Citation</i>
Avoid/ Minimize involuntary resettlement	To avoid or at least minimize involuntary resettlement wherever feasible by exploring alternative project designs	PS 5, Objectives
Mitigation Methods	To mitigate adverse social and economic impacts from land acquisition or restrictions on affected persons' use of land 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	PS 5, Objectives
Income Restoration	To improve or at least restore the livelihoods and standards of living of displaced persons	PS 5, Objectives
Replacement Cost	<p>Compensation for land and other assets should be calculated at the market value plus the transaction costs related to restoring the assets.</p> <p>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, as provided in this Performance Standard.</p>	<p>GN 5, G3</p> <p>PS 5, para. 8</p>
Compensation for those with customary claims to land	Those who suffer negative social and economic impacts as a result of the acquisition of land or land use rights for a project may range from those having legally recognized rights or claims to the land, to those with customary claims to land, and those with no legally recognized claims.	GN 5, G3;
Non-land acquisition economic displacement compensation	In the event of potential adverse economic, social or environmental impacts by project activities other than land acquisition, the client's Social and Environmental Assessment process under Performance Standard 1 should address how these impacts will be avoided, minimized, mitigated or compensated for.	GN 5, G10
Entitlements for poor and vulnerable groups	The plan will be designed to mitigate the negative impacts of displacement, identify development opportunities, and establish the entitlements of all categories of affected persons... with particular attention paid to the needs of the poor and the vulnerable (see Performance Standard 1, paragraph 12).	PS 5, para 12
Entitlements: income restoration	Provide additional targeted assistance (e.g., credit facilities, training, or job opportunities) and opportunities to improve or at least restore their income earning capacity, production levels, and standards of living to economically displaced persons whose livelihoods or income levels are adversely affected. Provide transitional support to economically displaced persons, as necessary, based on a reasonable estimate of the time required to restore their income earning capacity, production levels, and standards of living	PS 5, para 20

In addition, the following PS 5 principles are also applicable for the land acquisition and involuntary resettlement.

- The proposed Project should engage with affected communities, including host communities, through the process of stakeholder engagement. Disclosure of relevant information and participation of affected communities and persons should continue during the planning, implementation, monitoring, and evaluation of compensation payments, livelihood restoration activities, and resettlement to achieve outcomes that are consistent with the objectives of the performance standard;
- Pay particular attention to the needs of vulnerable groups, especially those below the poverty line, the landless, the elderly, women and children, and indigenous peoples, and those without legal title to land, and ensure their participation in consultations; and
- Grievance mechanism should be established as early as possible in the project development phase. This will allow the Project 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.

7.3.1.2 *Policy on Disclosure of Information*

The 2012 IFC Policy on Disclosure of Information is a 13-page document outlining the scope of materials that the IFC makes publically available—either on a routine basis or upon request. This disclosure policy is intended to reflect the IFC’s commitment to transparent business practices in-line with its Policy on Social and Environmental Sustainability and the PSs.

In accordance with the prescripts of IFC’s PSs, the disclosure policy requires that IFC clients self-disclose information to project-affected parties about all types of adverse environmental and social impacts that could potentially result from the project, as well as the client’s plan to mitigate or eliminate these impacts.

7.4 **GAP ANALYSIS**

There are similarities between the objectives and approaches as well as substantial overlaps between the ADB SPS SR2, IFC Performance Standard 5 and the Government of Indonesia’s (GOI) land compensation and land acquisition regulations. The key differences include:

1. ADB SPS 2 requires the compensation value to be calculated at full replacement cost which includes: (i) fair market value; (ii) transaction cost; (iii) interest accrued; (iv) transitional and restoration cost, and (v) other applicable payments. Provisions on land compensation values in the President Decree No. 65 Year 2006 and Regulation of Head of Land National Agency (BPN) No. 3 Year 2007 include:

- The value for land compensation uses the real value, by considering the selling value of the taxable object in the year of compensation (i.e. government tax value/ NJOP) as well as the following aspects:
 - land location;
 - land status;
 - land use; and
 - other factors influencing the land price;
 - The values for plants and structure compensation are estimated by the government agency responsible in the 2 areas, and in accordance to the standard value stipulated in the applicable regional legislation.
2. The land owners who have neither formal legal rights nor recognised or recognisable claims or customary claims to the land but without full legal title (non-title) to be eligible for compensation for use of the land, for lost assets such as crops, irrigation infrastructure, and other improvements made to the land (but not for the land) at full replacement cost.

As regulated by the President Decree No. 65 Year 2006 and Regulation of Head of Land National Agency (BPN) No. 3 Year 2007, the following people are eligible for the compensation:

- Legitimate land owners or their heirs;
- For endowment (*waqaf*) land, compensation given to the Nazhir, i.e. the mandated person responsible for the land use and management as mandated by the previous land owner;
- The legitimate holder of right to use the land; and
- When any customary asset is affected, compensation can be provided in the form of replacement assets through the development of public facilities.

Indonesian legislation does not specifically regulate how the non-titled land right holder is eligible for compensation.

3. In case of compensation for structures, GOI regulations (KepMen ESDM No. 975 K Year 1999&Permen ESDM No.01) applies depreciation to structures whereas ADB SPS does not apply depreciation when calculating the compensation rate for structures and assets.
4. ADB SPS 2 requires qualified and experienced experts to undertake the valuation of acquired assets. In applying this method of valuation, depreciation of structures and assets should not be taken into account.
5. ADB SPS 2 require land owners who suffer economic displacement, a comprehensive income and livelihood rehabilitation program, supported by an adequate budget, to be in place to help the displaced persons improve, or at least restore, their income and livelihoods. Preference in the form of compensation is given to the displaced person, including replacement land.

The Indonesian regulation stipulates that compensation can be provided in the form of:

- cash money;
- replacement land;
- housing resettlement;
- combination from two or more options above;
- for customary asset: development of public facilities or any other forms useful for the local welfare; and
- other forms agreed by all related parties.

It does not stipulate the project to compensate the livelihood restoration of the displaced person; however it requires the determination of the form and value of compensation should be obtained through consultation process.

6. Where cash compensation for land is provided to affected people whose livelihoods are land based, non-land-based options built around opportunities for employment or self-employment should be provided in addition to cash compensation for land and other assets lost; this is not defined in the Indonesian regulation;
7. ADB SPS requires special measures to accomplish income restoration and provide support, when necessary, for affected vulnerable households; this is not regulated by Indonesian law;
8. A full census should be carried out to collect appropriate socio-economic baseline data to identify the persons who will be displaced by the project;
9. Disclosure of relevant information, consultation, and participation of affected communities and persons SOL will continue during the planning, implementation, monitoring and evaluation of compensation payments and livelihood restoration activities;

Provisions for disclosure of information and consultation are stipulated in the President Decree No. 65 Year 2006, as follows:

- Disclosure of information conducted to explain about the project objective, benefit for community, as well as to obtain the community approval or willingness on the land to be acquired for the project needs;
- When objections with regards to the Project are recorded, additional disclosure and consultation sessions should be conducted;
- Consultation is also conducted in stages to determine the form and value of compensation;
- Separated consultation to be conducted when any objection to the form and value of compensation is recorded.

The Indonesian Decree does not regulate the continuity of the consultation from planning to post-compensation.

10. The grievance mechanism should allow the Project to receive and address specific concerns 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. As such the resolution process should involve adequate consultation with the affected people; while the Regulation of Head of BPN No. 3 Year 2007 indicates the grievance to be handled through formal channels; i.e. regional government and courts.
11. Where land is acquired through negotiated settlement wherein an adequate and fair price is offered for land and/or other assets, ADB SPS SR2 requires that the borrower/client engage an independent external party to document the negotiation and settlement processes whereas this arrangement is not required under GOI regulations.

The regulation of Head of BPN No. 3 Year 2007 stipulates there should be an independent external party involved during the assessment of compensation value, rather than during negotiation process.

12. SOL will not issue notice to proceed for any civil works contract (or will not allow any construction activities) until (i) payment has been fully disbursed to PAP/PAH; (ii) already-compensated PAP/PAH have cleared the acquired land in a timely manner; and (iii) that the area is free from any encumbrances.

The regulation of Head of BPN No. 3 Year 2007 indicates a project physical development can be started once the compensation payment and the release of land right process have been completed.

8 ENTITLEMENTS, ASSISTANCE AND BENEFITS

This Chapter describes the following compensation activities to define PAHs/PAPs entitlements and eligibility and resettlement assistance measures (including an entitlement matrix). It also sets out the valuing and disbursing compensation for land, structure and crops and other assets.

8.1 PROCESS OF LAND SURVEY, ASSET INVENTORY AND CENSUS

Land for this project is being procured through direct negotiated settlement under the “Izin Lokasi”, or location permit mechanism. Under this *Izin Lokasi* mechanism, the Project holds no right to expropriate land owners from their land. Land acquisition is to be done based on negotiation and agreed price with land owners. The steps in procuring land for this Project is as follows:

Step 1. As stipulated in the Head of National Land Agency Regulation No. 2/1999, the first step in this mechanism is to first obtain location permit from the local government governing project location.

Step 2. The next task is to identify the Project’s adverse impacts and communities that will be affected by undertaking a land survey and mapping the different types of land according to use and potential impacts by the Project. This supports planning in order to identify features such as population settlements, infrastructure, natural vegetation, land use patterns, natural water sources, etc. The ultimate goal of this RP is to enhance, or at least restore, the livelihoods of all PAHs/PAPs in real terms relative to pre-project levels; and to improve the standards of living of the displaced poor and other vulnerable groups.

Step 3. Once this land survey is undertaken, SOL will undertake an inventory of affected assets to gather data of all lost assets. The survey will account for land acquisition, loss of physical assets and loss of income, either temporary or permanent, resulting from displacement of household members from employment or income generating resources i.e. agricultural, fishery, etc. The collective assets, such as natural water resources, livestock grazing area, irrigation system and community structures will be recorded separately.

Step 4. After the asset inventory, SOL will undertake the census that will cover 100% of land owners; this is undertaken by:

- Enumerating and collecting basic information on the affected communities;
- Registering the affected population by locality;
- Establishing a list of legitimate PAHs/PAPs before the Project’s onset that counters spurious claims from those moving into the Project area solely in anticipation of Project benefits; and
- Providing a baseline for monitoring and evaluation.

The purpose of the survey is to identify the nature and significance of project impacts, also to collect gender-disaggregated data to address gender issues. The

census will provide a demographic overview of the population, and will cover people's assets and main sources of livelihood and provide gender-disaggregated socioeconomic data. Such data will be important to determine if special actions should compose a part of the RP to address the resettlement-related needs of female PAPs.

Step 5. Based on the results of mapping, asset inventory, socio-economic surveys and census, an updated resettlement plan will be prepared by SOL for Lenders' after finalisation of detailed engineering design.

8.2 *COMPENSATION RATE*

Compensation will be disbursed by the Project to pay the PAHs/PAPs for the loss of physical assets, i.e. land, plants, structure and crops, also other assets, revenue and income resulting from economic displacement or physical relocation whether these losses are temporary or permanent. Through a negotiated settlement, an adequate and fair price for land and/or other assets is expected will be offered to PAHs/PAPs. The price, i.e. the compensation rate should be made at full replacement cost. Full replacement cost is the cost of replacing an affected asset of the same or better quality in the current land and/or housing market. After acceptable compensation rates are established, they are applied to RP inventory of losses for all households and enterprises affected by the Project.

The valuation methodology for the land compensation was based on the sub-district office reference for PLN (IDR 50,000 per m²) in 2010 and also current land market prices (with no crops or plants) in the Pahae Julu (IDR 35,000 per m²). The compensation for land (65,000IDR/m²) was not based on its productivity or type of land.

Consultations with the village leaders indicate that the current average price for paddy land and rice is 73,000IDR/m². SOL are offering 125,000IDR/m² which considers that 1 m² of rice paddy equals 20 clumps at 1,500IDR per clump (for 2 harvests. Therefore the land price offered is considered above market replacement value.

The valuation for plants was undertaken by the Agriculture Agency in the North Tapanuli Regency (who update their rates annually). The list of compensation prices for plants is categorised by three types: (i) Seeds, (ii) Unproductive plants, and (iii) Productive plants including fruit-bearing trees. The compensation rate offered for plants is considered reasonable as the Agriculture Agency based the rate on the current market price of each type of plant and depending on the age and remaining productive life. The price is based on the age of plants reflecting the type/category (seeds, unproductive and productive); the compensation rate is based on the age of plants (current/actual condition/type of land) as agreed with the land owners. The rate was released on 10 August 2009 by the Agricultural Agency values. Based

on the current market, the cost of rubber seeds is 5,000.00IDR¹; hence SOL are offering compensation at double the value despite using 2009 values.

The compensation rate offered for plants is considered reasonable as the Agriculture Agency based the rate on the current market price. The rate was released on 10 August 2009 by the Agricultural Agency values. Based on the current market, the cost of rubber seeds is 5,000.00IDR²; hence SOL are offering compensation at double the value despite using 2009 values.

As per Indonesian Regulations (KepMen ESDM No. 975 K Year 1999& Permen ESDM No.01) the rate for an old house 700,000IDR/ m² and for a new house 1,300,000IDR/m². Compensation for structures will be based on replacement value on a per square meter basis inclusive of the current cost of materials plus labour and mutually agreed with the structure owner.

8.2.1 *Entitlement Matrix*

This section defines Project Affected Household entitlements and eligibility and describes resettlement assistance measures. SOL will provide the entitlements to the project affected people according to the specifications in Table VIII-1 Entitlement Matrix of this Resettlement Plan.

Compensation to land owners who have lost access to land as a result of project land acquisitions, whether or not they have legal title to the land including those with heritage land claims to the affected land.

Compensation to land owners who have lost plants and structures or any built assets on land lost as a result of project land acquisitions, including those with heritage land claims to the affected land.

Compensation and Resettlement Assistance to land owners who have lost housing as a result of project land acquisition, including those with heritage land claims to the affected land.

Income Restoration to land owners whose incomes have been significantly affected by loss of access to land as a result of project land acquisition, whether or not they have legal title to the land, including with heritage land claims to the affected land

Transition Assistance to land owners who have special social categories which render them more vulnerable to social and economic displacement and also who has lost of access to land as a result of project LAQ.

¹ <http://bibitkaret.com/kenapa-bibitkaret-com>

² <http://bibitkaret.com/kenapa-bibitkaret-com>

Table VIII-1 Entitlement Matrix

No	Type of Loss	Types of Land Owners	Entitlement	Details
1	Loss of land	<ul style="list-style-type: none"> ▪ Legal owners ▪ Land owners with heritage land rights 	Compensation at replacement cost	<ul style="list-style-type: none"> • Appropriate price/compensation as mutually agreed with the land owners • This value is all inclusive of the market price land value plus additional transaction costs. • 60 days' notice for agricultural lands to harvest standing seasonal crops. If notice cannot be given, compensation for share of crops will be provided • Additional compensation for vulnerable households or support to find and negotiate for replacement land • Payment of all taxes and administrative costs will be borne by SOL
2	Loss of trees, crops, perennials	Owners and beneficiaries of land use	<p>Compensation based on agriculture agency. (agriculture agency issues rates on an annual basis.</p> <p>The price is based on the age of plants reflecting the type/category (seeds, unproductive and productive); the compensation rate is based on the age of plants (current/actual condition/type of land) as agreed with the land owners.</p>	<ul style="list-style-type: none"> • Cash compensation for the loss of trees, crops, perennials • 60 days advance notice to land owners to harvest fruits, standing crops, and remove trees, if desired
3	Loss of structure and business	Property owners	<ul style="list-style-type: none"> ▪ Compensation at replacement value, including lost assets ▪ Moving assistance 	<ul style="list-style-type: none"> • Appropriate price/compensation as mutually agreed with the land owners • Moving assistance in lump sum payment
4	Significant loss of income	Land owners with significant loss of income due to loss of land use	Priority for vocational training and BDS, and Project employment	<ul style="list-style-type: none"> • Prioritise employment offer from SOL (or Project contractor) Agriculture and livelihood restoration are components of the ISP
5	Moderate loss of income	Land owners with moderate loss of income due to loss of land use	Priority for Project employment	<ul style="list-style-type: none"> • Prioritise employment offer from SOL (or Project contractor)
6	Losses experienced by vulnerable groups	Vulnerable house-holds including households headed by women, elderly,	Additional assistance to households according to vulnerability levels	<ul style="list-style-type: none"> • Employment offer from SOL (or Project contractor) for 24 months • Priority for CDP Health and Education components • Priority for CDP components agriculture and livelihood

No	Type of Loss	Types of Land Owners	Entitlement	Details
		very poor or those with disabled or many children		restoration
6	Non-land economic displacement	Households at risk of income loss	<ul style="list-style-type: none"> ▪ Priority for Agriculture and livelihood restoration 	<ul style="list-style-type: none"> • Agriculture and livelihood restoration are components of the Community Development Plan • SOL will give employment preferences to these land owners households, if appropriate
8	Land Owners whose lands within T/L ROW	<ul style="list-style-type: none"> ▪ Legal owners ▪ Land owners with heritage land rights 	Compensation at easement fee of 10% current land value of land for tower bases without deductions for taxes and administration cost.	<ul style="list-style-type: none"> • Cash compensation 10% of IDR 65,000 per m² for the loss of the use of land at replacement cost.

8.2.2 Way of Compensation Disbursement

A detailed timetable for delivery of entitlements will be established in the updated RP. PAHs/PAPs may have multiple entitlements, so it is advisable for compensation payment to be paid out in full to allow PAHs/PAPs to purchase replacement land, prepare the farm land plot or to construct new house/shops. The disbursement of compensation to PAHs/PAPs enables SOL to determine if payments are being used for the PAHs/PAPs intended purposes, if not SOL should adjust the compensation framework accordingly. A compensation timetable can be linked to the overall Schedule of RP implementation, that can be served as well as implementation milestones for the purposes of RP monitoring and evaluation.

8.2.3 Cut-Off Date

9 ESTABLISHING A CUT-OFF DATE ENSURES ALL PROJECT AFFECTED PEOPLES UNDERSTAND THE DATE OF COMPLETION OF THE CENSUS AND ASSETS INVENTORY OF PERSONS AFFECTED BY THE PROJECT. THE CUT-OFF DATE IS NORMALLY SET BY LAND ACQUISITION TEAM AS PROCEDURES TO ESTABLISH PAHs/PAPs WHO ARE ELIGIBLE TO RECEIVE COMPENSATION AND RESETTLEMENT ASSISTANCE BY THE PROJECT. WHEN PERSONS OCCUPY THE PROJECT AREA/BUILD NEW STRUCTURES OR GROW NEW CROPS AFTER CUT-OFF DATE THESE NEW ASSETS ARE NOT ELIGIBLE FOR COMPENSATION AND/OR RESETTLEMENT ASSISTANCE. THE CENSUS IS LIKELY TO COMMENCE IN JUNE 2014 HENCE THE FINAL DAY OF THE CENSUS SHOULD BE ESTABLISHED AS THE CUT-OFF DATE FOR ELIGIBILITY AND ENTITLEMENT. THE CUT-OFF DATE SHOULD BE WELL PUBLICISED IN THE COMMUNITY AND AFFECTED PEOPLE SHOULD BE GIVEN ADEQUATE TIME TO HARVEST ANY CROPS ON CULTIVATED LAND, DISMANTLE AND TRANSFER FIXED ASSETS OR STRUCTURES, AMONG

OTHER TASKS INCLUDING ANY CULTURAL OR RELIGIOUS CEREMONIES.¹INCOME RESTORATION AND REHABILITATION

9.1 *LIVELIHOOD RESTORATION*

The livelihood restoration strategy will adopt a broader concept of livelihood restoration than that required by local legislations. It will promote both income restoration and the social development processes which enable resettled people to maintain and improve their income levels over time. The strategy will be based on the following principles:

- The project will play the lead role in implementing the livelihood restoration strategy for resettled households through planning, finance, implementation and monitoring the strategy.
- The Project will aim to obtain support from local government on this.
- Livelihood restoration will require attention to both resettled households' incomes and to the social factors – including social cohesion – which serve to sustain their standards of living over time.
- Planning for livelihood restoration will require coordination with government development priorities; training, infrastructure and service provision. It will also require an understanding of regional economic conditions and the markets for goods, services and labour which will provide opportunities for resettled households' business development and employment.
- The Project will be able to provide long-term employment opportunities for only a small proportion of resettled households. SOL has developed a draft Recruitment Plan to ensure local communities participate in the Project (see Annex D: Volume III: Indigenous Peoples Plan).
- The Project will, however, provide a greater number of short-term employment opportunities during construction, which will be important in maintaining affected households' incomes during the period immediately following resettlement. It will also promote broader economic development in the region, which is expected to create increased demand for goods and services.
- Where possible, the livelihood restoration strategy will be integrated with broader ISP activities of the project, to ensure synergies in achieving cost efficiencies and development outcomes in both programs.
- The strategy will pay particular attention to the needs of vulnerable land

¹ The cut-off date could not be implemented in timely manner, so the census for all landowners who have been compensated from September 2013-February 2014 will be conducted in April 2014. For the landowners of T/L footprint tower the cut off date will be done in June 2014.

owners (e.g. those losing 100% of their land or those who will be left with only unviable land).

9.1.1 *Methodology for Preparing the Livelihood Restoration Strategy*

Since the livelihood restoration will be implemented based on existing government programs and services, the livelihood restoration strategy will be developed in consultation with local governments, and in consultation with the affected communities. Livelihood restoration integrates three elements, which are summarized below.

9.1.1.1 *Analysis of Government Programs and Priorities*

A review of existing governmental measures and resources will be conducted to understand local context. Those opportunities might include government's business development and training programs; infrastructure development; social service provision and poverty alleviation strategies. This means the livelihood restoration strategy must be integrated into government planning and budgeting processes. It therefore requires assessment of the government resources and capacities available to support the Project's livelihood restoration needs, and of areas where further resources and capacity development may be required.

9.1.1.2 *Economic Assessment*

An assessment of local economic conditions is required to understand patterns of growth in the local economy and demand for labour, goods and services, which provide income-generating opportunities for resettled people. Data on government economic planning, economic trends and forecasts, sectoral development, local business opportunities and constraints fed into this assessment. Project's economic contribution, local content and employment strategies, as well as ISP activities, are also relevant.

9.1.1.3 *Livelihood Restoration Planning*

Based on the above tasks, the Project will develop an outline livelihood restoration strategy and action plan, consistent with the ADB requirements and local legislation; and based on preliminary consultation with government authorities and representatives of affected households. These livelihood programs will be linked to the social programs in the IPP which is provided in Table 1X-1.

Table IX-1 Tentative Livelihood Restoration Action Plan (as per the ISP)

<i>Planned Activities</i>	<i>Target Beneficiaries</i>	<i>Duration</i>	<i>Resources</i>	<i>Partner</i>
Agriculture and livelihood restoration (IDR 200,000,000 / annum)				
Training on agricultural matters (ex: Productivity of land, Agricultural business development etc.)	Land owners, affected communities and wider regency	Construction & Operation Stage (Long-term, > 5 years)	SOL	Agricultural Office, Agricultural Consultant, NGOs focusing on Agriculture/Farmers
Provision of Crop seeds	Affected communities in particular those who have lost >10% of productive assets	Construction & Operation Stage (mid-term, 3 to 5 years)	SOL	Agricultural Office
Entrepreneurship skills and financial literacy Training	Priority for Significantly Affected and vulnerable Landowners	Pre-Construction & Construction Stage (short-term, first 2 years)	SOL	Consultant , Related CSOs/NGOs, Village Development Board (BPD), Head of Villages, PKK (Family Welfare program)
Capital aid (microcredit) for business development	Priority for Significantly Affected and vulnerable Landowners	Pre-Construction & Construction Stage (short-term, first 2 years)	SOL	Consultant , Related CSOs/NGOs, Village Development Board (BPD), Head of Villages, PKK (Family Welfare program)
Training for women (sewing, food processing, beauty/salon)	Land owners, affected communities	Construction & Operation Stage (Long-term, > 5 years)	SOL & Contractors	Consultant , Related CSOs/NGOs, Village Development Board (BPD), Head of Villages, PKK (Family Welfare program)
Training for men (automotive, electrical engineering, construction related matters etc.)	Land owners, affected communities	Pre-construction , Construction & Operation Stage (Long-term, > 5 years)	SOL & Contractors	Consultant , Related CSOs/NGOs, Village Development Board (BPD), Head of Villages
Employment - SOL will make efforts to meet the following employment targets.				
Recruitment of unskilled workers	IP comprise of at least 30% unskilled workers from the affected area	Construction Phase	SOL, Contractor and	Related CSOs/NGOs, Adat (custom/ community)

<i>Planned Activities</i>	<i>Target Beneficiaries</i>	<i>Duration</i>	<i>Resources</i>	<i>Partner</i>
	<p>(Pahae Jae and Pahae Julu) and the North Tapanuli Regency during construction stage between 2013-2017.</p> <p>Women comprise at least 30% of unskilled labor for services provided during construction between 2013-2017</p>		subcontractor	leaders, Village Development Board
Vocational Training of local community	Priority training of working age member of significantly affected land owners family	Pre-Construction, Construction and Operations Phases	SOL	Related CSOs/NGOs, Adat (custom/community) leaders, Village Development Board
Recruitment of semi-skilled workers	<p>Women comprise at least 20% of only the technical/laboratory and administrative positions during operations by 2020^a</p> <p>Indigenous Peoples comprise 20% of the semi-skilled labor from the affected area (Pahae Jae & Pahae Julu) and the North Tapanuli Regency during operations by 2020</p>	Operations	SOL	Related CSOs/NGOs, Adat (custom/community) leaders, Village Development Board

10 RESETTLEMENT BUDGET AND FINANCING PLAN

An estimated budget of IDR 33,800,000,000 is allocated for procurement of land through negotiated settlement. This excludes the easement fee for the COI, budget for **trees** (fruit-bearing and timber) and **crops** (rice paddy, perennial and standing) which will be determined following the detailed census and asset inventory. Income restoration activities and transition assistance for vulnerable groups will be provided within the scope of the IPP budget for which a budget of IDR200,000,000 per annum is allocated.

The detailed budget for the Resettlement Plan will be prepared by SOL following the census and asset inventory in October 2013. The budget will be as follows: (i) detailed costs of land acquisition, livelihood and income restoration, (ii) source of funding, (iii) administrative cost, including staff training, (iv) monitoring cost, and (v) arrangement costs for approval and responsibilities is with SOL for RP, the flow of funds and contingency arrangements. SOL will ensure timely fund's disbursement for RP implementation and will prepare all the necessary plans. The assistance cost will be allocated and disbursed prior to financial close. A contingency of up to 15% of total amount will be applied.

Table X-1 provides a template for resettlement budget and cost estimates that should be adjusted based on final asset inventory and prices set by the agricultural agency at the time of acquisition.

Table X-1 Tentative Resettlement Budget and Financing

<i>Item</i>	<i>Unit Rates (IDR)</i>	<i>Total Quantity</i>	<i>Estimated Amount (IDR)</i>	<i>Source of Funding</i>
A. Compensation for Acquisition of Private Properties				
Land (at replacement cost)	65,000/m ²	52	33,800,000,000	SOL Funding
Trees (fruit-bearing and timber) and Crops (rice paddy, perennial and standing)	List of Compensation Rate for Trees and Crops	TBC	TBC	SOL Funding
Easement fee for land within the COI	6,500/m ² or 10% of land price for towers	Approximately 32ha	208,000,000	SOL Funding
B. Livelihood Restoration				
Income Restoration for claimants experiencing significant/moderate income loss	TBC	TBC	TBC	Income Restoration activities will be provided within the scope of the CSR Program Planning budget

<i>Item</i>	<i>Unit Rates (IDR)</i>	<i>Total Quantity</i>	<i>Estimated Amount (IDR)</i>	<i>Source of Funding</i>
Transition Assistance for vulnerable households	TBC	TBC	TBC	Transition Assistance will be provided within the scope of the CSR Program Planning budget
C. Support Implementation {Please provide estimates based on current rates for salaries, surveys, etc}				
Planning and Negotiations	-	-	60,000,000	SOL Funding
Management, Administration and Staff Training	-	-	266,400,000	SOL Funding
Budget for Consultation Activities and management of Grievance Mechanism			60,000,000	SOL Funding
Independent Monitoring & Evaluation Consultancy (incl. verification, meetings, coordination & travel)	Lump Sum	Lump Sum	1,285,000,000	SOL Funding
Land Surveys and Plan Inventories	-	52	TBC	SOL Funding
BPN Certification	Lump Sum	52	TBC	SOL Funding
Sub-Total				
D. Total Costs				
Sub-Total (IDR)			TBC	
Contingency (15% of the total)			TBC	
Grand total (IDR)			TBC	

11 INSTITUTIONAL ARRANGEMENTS

The institutions responsible for the delivery, coordination and implementation of all entitlement policy activities, income restoration programs and special measures for vulnerable groups related to the SOL Resettlement Plan are outlined in Table XI-1.

Table XI-1 Responsible Institutions for delivery of entitlements

Type of Loss	Types of Land owners	Entitlement	Institutions	
			Within SOL	Outside SOL
Loss of use of land by land owner	Legal owners Land owners with heritage land rights	Compensation at replacement cost <i>site</i> .	External Affairs Department	Village Government officials, particularly the Village Head <i>Bupati</i> (Head of Regency)
Physical displacement	Legal owners Land owners with heritage land rights	Relocation assistance sufficient to restore standards of living at an adequate alternative level	External Affairs Department	Village Government officials, particularly the Village Head <i>Bupati</i> (Head of Regency)
Loss of trees, crops, perennials	Owners and beneficiaries of land use	Compensation at market value	External Affairs Department	Village Government officials, particularly the Village Head <i>Bupati</i> (Head of Regency)
Loss of structures	Legal owners Land owners with heritage land rights	Compensation at full replacement cost	External Affairs Department	Village Government officials, particularly the Village Head <i>Bupati</i> (Head of Regency)
Significant loss of income	Land owners with significant loss of income due to loss of land use	Priority for vocational training and BDS, and Project employment	External Affairs Department Human Resources Department Communications Department	Village Government officials, particularly the Village Head
Moderate loss of income	Land owners with moderate loss of income due to loss of land use	Priority for Project employment	External Affairs Department Human Resources Department	Village Government officials, particularly the Village Head

Type of Loss	Types of Land owners	Entitlement	Institutions	
			Within SOL	Outside SOL
Losses experienced by vulnerable groups	Vulnerable households including households headed by women, elderly, very poor, or those with disabled or many children	Additional assistance to households according to vulnerability levels	External Affairs Department Human Resources Department	Village Government officials, particularly the Village Head Village Women's Organisation (PKK) Village-level Community Health Centre Assistance Office (<i>Puskesmas Pembantu</i>)
Non-land economic displacement	Farmers at risk of income loss	Priority for vocational training and BDS (Business Development Service) or Community Development Plan	Communications Department Human Resources Department	Village Government officials, particularly the Village Head

The RP should set up the organisational framework for who will be responsible for the roles for resettlement activities. Figures XI-1 and Figure XI-2 illustrate SOL's overall and RP Organisational Frameworks. Figure IX-2 presents how SOL will assist in preparation, implementation and monitoring of RP and to coordinate with the relevant government agency that those aspects of resettlement can be facilitated more efficiently by SOL and other entities such as NGOs, Consultant and Contractors. This structure is likely to change over the next few months of planning and preparation and therefore will be updated in this RP.

Figure XI-1 SOL's Organisational Structure

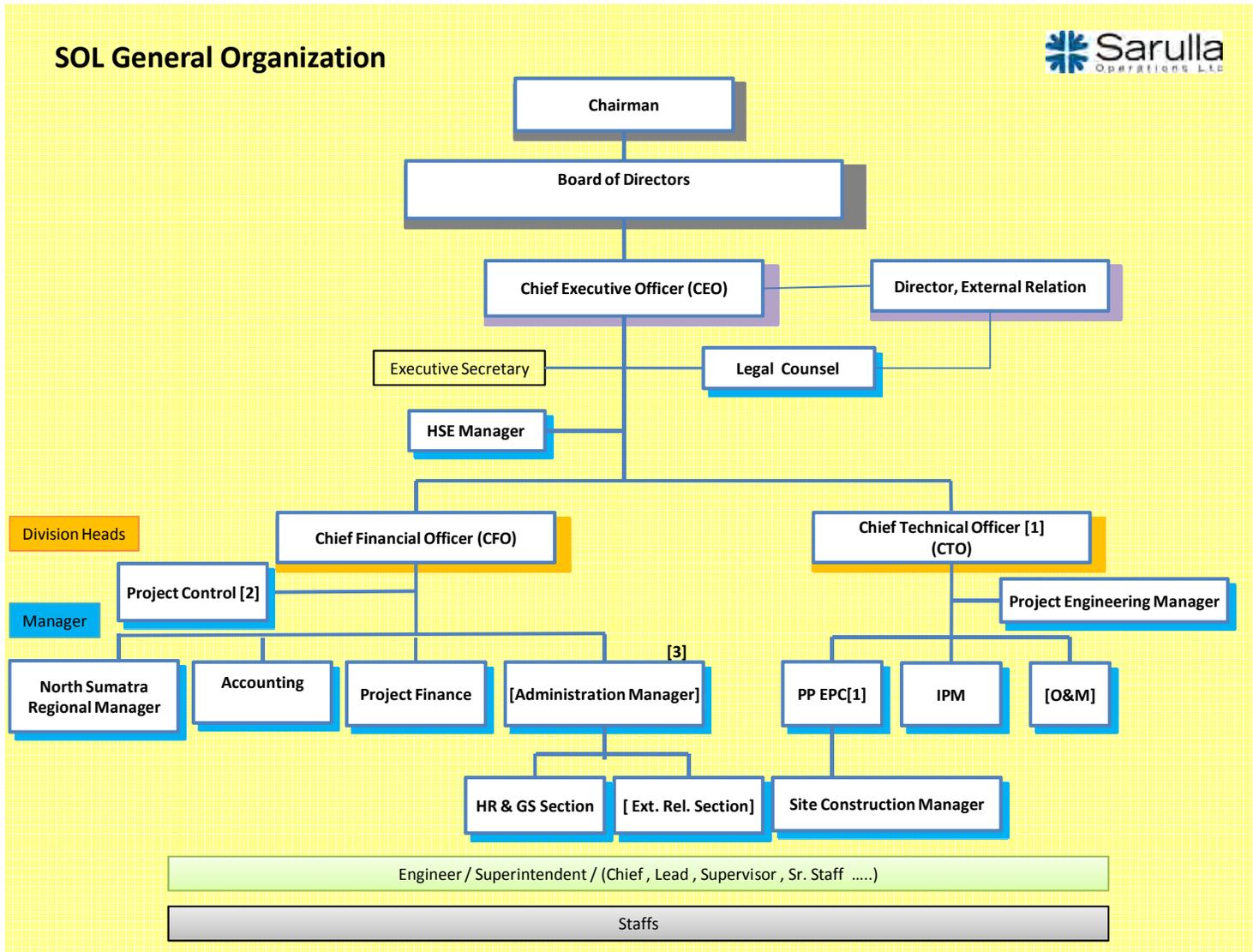
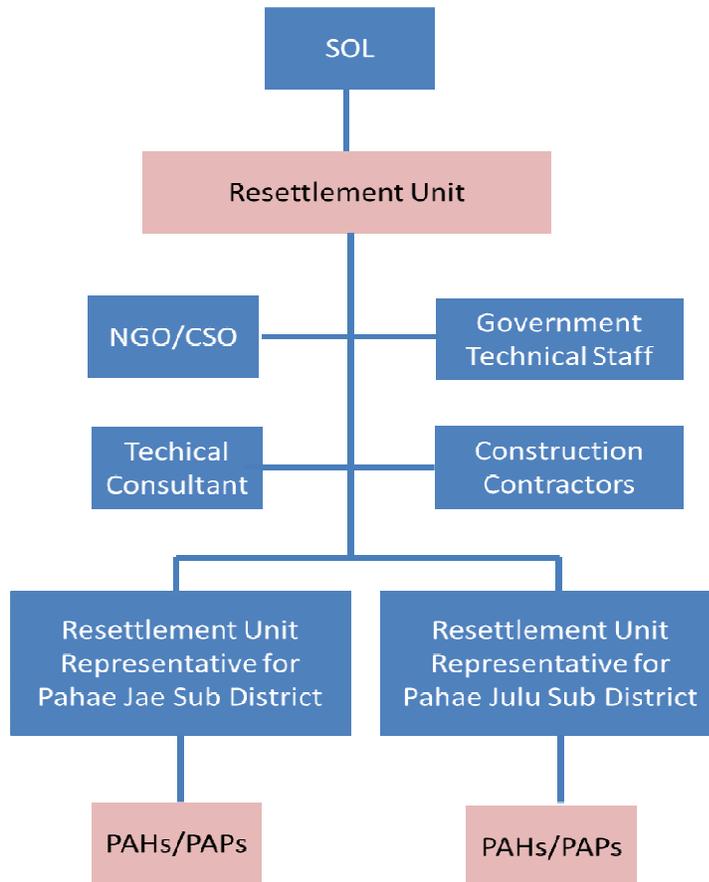


Figure IX-2 presents SOL's resourcing for the planning and implementation of the RP. The Resettlement Unit refers to SOL's Land Acquisition team who are responsible for the overall socialisation and negotiation activities. The external relations team is responsible for stakeholder's coordination and communication. Currently the IPP (and ISP) and RP will be implemented by SOL's Land Acquisition team and External relations team.

Figure XI-2 Organisational Framework for Resettlement Management



12 ***IMPLEMENTATION SCHEDULE***

The RP provides the implementation time schedule showing how PAHs/PAPs will be provided for before demolition begins (Table XII-1).

Table XII-1 Estimated Implementation Schedule of Resettlement Plan

No	Task	Start Date	2013				2014											
			Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Mei	June	July	Aug	Sept	Oct	Nov	Dec
1	Public Notification of Land Acquisition		■															
2	Land Survey, Census and Assets Inventory																	
	Land Survey		■															
	Asset Inventory and Census			■														
	Disclosure of Land Survey Results and Compensation			■														
	Survey of Tombs, Wells, Spring and Collective Assets			■														
3	Relocation and Rehabilitation Planning																	
	Livelihood Restoration Planning				■													
4	Addendum Social Compliance Audit Report and Corrective Action Plan	5 May 2014			■													
	Updating of the RAP	May 2014							■	■								
	Disclosure of key information (summary RP)	May 2014							■	■								
	Lenders' review and approval of updated RP	June-July 2014									■	■						
5	Compensation Payment								■	■	■	■						
	Payment for Demolition of Crops and Land Attachments								■	■	■	■						
	Payment for Land Acquisition								■	■	■	■						
	Payment for Transitional Allowance to Affected Persons								■	■	■	■						

No	Task	Start Date	2013				2014											
			Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Mei	June	July	Aug	Sept	Oct	Nov	Dec
	Compensation for Other Collective Asset (i.e. Tomb, etc.)																	
6	Livelihood Restoration Implementation																	
7	Internal Monitoring																	
8	External Monitoring																	
	Recruitment of External Monitor	06/14																
	1 st External Monitoring	12/14																
	2 nd External Monitoring	06/15																
	3 rd External Monitoring	01/16																
	4 th External Monitoring	06/16																
	Livelihood Restoration Survey	11/17																
	Resettlement Completion Audit	01/18																
	Resettlement Completion Audit Final Report	03/18																

13 *MONITORING AND REPORTING*

The Monitoring and Evaluation (M&E) mechanism provides the basis to assess the overall success of the land acquisition and resettlement and the effectiveness of the various processes and measures. This mechanism is based on two components; internal monitoring and external evaluations.

These two processes will run simultaneously – the internal monitoring process will run as part of day to day resettlement activities and will be used to ensure that the resettlement is meeting the objectives outlined in the Plan. The external evaluations are designed to provide a third party, objective assessment to ensure that the project is meeting international standards for resettlement, by restoring and where possible improving livelihoods of the resettled population.

13.1 *INTERNAL MONITORING PROCESS*

The overall objectives and tasks of the internal monitoring process are to:

- Identify suitable indicators for issues to be monitored;
- Measure progress against indicators at appropriate intervals, and analyse data against a pre-resettlement baseline; and
- Set up a system to regularly respond to M&E findings by adapting existing measures or by modifying implementation processes.

This monitoring process will be used to analyse progress and change at regular intervals. It should be linked to the various stages of the implementation of this plan.

13.1.1 *Issues to be monitored*

The monitoring programme will have a strong component for monitoring of the displaced and vulnerable ineligible families. It will also have a strong component for monitoring of people who have customary/traditional claims for land and other assets. For example if a person has put forward a claim (of being a customary land owner) the monitoring process will have to capture the progress on the investigation done and the process followed to verify his/her claims. This process is critical to address the dissatisfaction and discontent amongst the people who feel that their claims and interests were not addressed in the vetting process.

The monitoring component is intrinsically linked to the progress in land survey and physical demarcation of the area. The monitoring process will lay special emphasis on the families that are disadvantaged/vulnerable and cannot cope economically. It will be the responsibility of the project to pay particular attention to the needs/concerns of this group of people and take appropriate measures to rehabilitate them. The list below provides a list of some monitoring indicators that could be examined as a part of the process:

- No of vulnerable households and their status;
- Skill levels in the community especially amongst the affected Project affected families and how it has changed over a period of time;
- Literacy levels with focus of female and child literacy;
- Standard of living quantified by asset ownership, quality of house, access to amenities (clean drinking water, sanitation, roads, electricity etc.);
- Land ownership/user rights of affected families;
- Occupation/livelihood profile and changes therein;
- Influx and out-migration;
- Work participation rate of male and females;
- Occupational pattern of the family - number of family members in occupations and nature of that occupation and income generated from it;
- Average annual income levels of households;
- Nature of traditional/customary rights used for livelihood generation if any
- Total landownership at the family/household level (private, traditional, customary);
- Proportion of landless, agricultural labourers, sharecroppers;
- Type of housing/commercial structure value;
- Personal access to durable assets and any movable assets;
- Ownership of livestock;
- Access to common property resources;
- Access/arrangement/adequacy of physical infrastructure (road, electricity, drinking water, sanitation, telecommunication, etc.); and
- Access/arrangement/adequacy of social infrastructure (education, health, credit sources, markets, skill development, play grounds, worship places, etc.).

The monitoring mechanism will not only focus on the physical progress of resettlement but also look at the processes, methods and procedures being followed in achieving the goals of resettlement. It will follow the spirit and intent behind the resettlement programme and has to be sensitive to the needs and demands of the affected families. The importance and significance of the process is as important as the outcome of the resettlement programme. Potential indicators which could be monitored to assess satisfaction and success on such issues would include (but not be limited to):

- Have the families formed new cultural and social links?
- What are the problems faced day to day due to the move. How have their lives changed?
- Quality of housing/services;
- Resolution of grievance;
- PAPs satisfaction with the resettlement programme;
- Restoration of livelihood activities; and
- Approach of staff/officials handling the resettlement programme.

13.1.2 *Measuring Progress against Indicators*

The monitoring will develop a common system for monitoring indicators both during and following resettlement. A typical monitoring database will typically include (but not be limited to):

- Activity (e.g. resettlement tasks);
- Target date for completion;
- Progress to date (e.g. 60%);
- Progress in the last month (e.g. 20 households shifted);
- Target for this month;
- Reasons for delay, if any; and
- Action to be taken, including specific responsibilities.

13.1.3 *Reporting*

Consolidated internal monthly reports with key findings from the on-going monitoring will be prepared and key findings discussed and suitable actions taken. Any issues that arise from the monitoring that have not been addressed and require intervention will be discussed by all the parties concerned. This monthly progress review will aim to ensure that important issues are immediately rectified. SOL will prepare semi-annual monitoring reports on RP implementation and submit this to Lenders for review and public disclosure on ADB website. SOL will prepare a resettlement completion report at the end of the RP implementation period.

13.2 *EXTERNAL MONITORING PROCESS*

In addition to the internal monitoring process, external assessment of the resettlement will be undertaken through an external expert (either a consultancy firm or a nongovernment organization) comprised of well qualified social experts. This external expert will carry out two reviews annually, focusing on the assessment of compliance with social commitments contained in Indonesian legislation, ADB, JBIC and IFC's Performance Policy and Standards, in the ESIA and its attached action plans. The external expert

will act as the independent third party to document the disclosure of information (valuations, plans etc.), land acquisition, negotiation and settlement processes to ensure that the process is fully transparent. The external monitor will also carry out a socio-economic survey every two years from the start date of RP implementation. The external monitoring process will be based on:

Process indicators that measure effectiveness of processes (consultation, grievance) and inputs like people, equipment and materials and identify areas where improvements to existing processes are required. Process indicators include:

- Transparency of the implementation process;
- Adequacy of staff and the capacity of the implementation agencies;
- Compliance of the RP;
- Effectiveness of the Grievance Process;
- Adequacy and effectiveness of Public Consultation process; and
- Effectiveness of the Internal Monitoring Mechanism.

Outcome indicators that assess the effectiveness of the resettlement and changes that have occurred to the communities' standard of living. The most appropriate outcome indicators will need to be determined as part of the monitoring process. The following lists a sample of potential indicators that could be used:

- Assets:
 - Reconstruction of housing (if required)
 - Change in housing size/number of rooms
 - Change in House quality
 - Change in asset ownership (farm equipment, livestock)
- Livelihoods:
 - Change in the number of unemployed
 - Shift in occupations/stability of income sources
 - Change in income per household
 - Change in skill levels
- Expenditure:
 - Change in expenditure patterns
 - Expenditure on health, education, food, entertainment
- Access to Infrastructure:

- Change in access to community facilities:
- Change in access to health care, education, transport etc.
- Increase/decrease in access to health care centres, markets
- Networks:
 - Change in community/household interactions
 - Increase/decrease in emotional bonding/attachment

A detailed terms of reference for external monitoring, taking account the external monitoring and third party validation in the SSCAR CAP, IPP and this RAP, will be agreed with Lenders for the construction and operations phases of the Project. Lenders will be involved in the selection of external monitor.

13.2.1 Resettlement Completion Audit

The purpose of the Resettlement Completion Audit is to verify the project's compliance with ADB, JBIC and IFC Standards and Policies as well as Indonesian Legislation. Following receipt of the resettlement completion report from SOL, external expert undertake a resettlement audit which will have the following specific objectives:

General assessment of the implementation of the CAP for those significantly affected by prior land acquisition covered in the CAP and RAP against the objectives of the SPS SR2 on Involuntary Resettlement and methods set forth in the RAP;

Assessment of compliance of implementation with laws, regulations and safeguard policies (PS5); Assessment of the fairness, adequacy and promptness of the compensation and resettlement procedures as implemented;

Evaluation of the impact of the compensation and resettlement program on livelihood restoration, measured through incomes and standards of living, with an emphasis on the "no worse-off if not better-off" requirement; and

Identification of potential corrective actions necessary to mitigate the negative impacts of the program, if any, and to enhance positive impacts.

The Completion Audit will be based on documents and materials generated by internal and external monitoring, field assessment with affected people.