Social Compliance Audit Report and Corrective action Plan

Project Number: 42916 1 February 2015

Sarulla Geothermal Power Development Project (Republic of Indonesia)

Prepared by Sarulla Operations Limited for the Asian Development Bank

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FINAL REPORT

Volume IV: Social Safeguards Compliance Audit Report (SSCAR) and Corrective Action Plan

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

> North Tapanuli Regency North Sumatera Province

> > February 2015

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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
BPN	National Land Agency
BPS	Central Statistic Bureau
CAP	Corrective Action Plan
CSR	Corporate Social Responsibility
EIA	Environmental Impact Assessment
EPC	Engineering Procurement Contracting
EPFIs	Equator Principles Financing Institutions
ERM	Environmental Resources Management
ESC	Energy Sales Contract
FGDs	Focus Group Discussions
FI	Financial Intermediary
FPIC	Free, Prior, and Informed Consent
GPS	Global Positioning System
GTRM	Grievance Tracking and Redress Mechanism
HIV	Human Immunodeficiency Virus
HR Dept.	Human Resources Department
ICP	Informed Consultation and Participation
IEC	Information Education Consultation
IFC	International Finance Corporation
IPPs	Independent Power Producers
IPP	Indigenous Peoples Plan
IPs	Indigenous Peoples
JOC	Joint Operation Contract
KPIs	Key Performance Indicators
LAQ	Land Acquisition
LPC	Land Procurement Committee
MOE	Ministry Of Environment

MW	Mega Watt
NIL	Namora I Langit
NGOs	Non-Governmental Organisation
PAH	Project Affected Household
PGE	Pertamina Geothermal Energy
PLN	PT. Perusahaan Listrik Negara
PS	Performance Standards
RoW	Right of Way
SIL	Silangkitang
SOL	Sarulla Operations Limited
SPS	Safeguard Policy Statement
SR	Safeguard Requirements
SSCAR	Social Safeguards Compliance Audit Report
UNSG	Unocal North Sumatera Geothermal
USU	Universitas Sumatera Utara

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

Item	Contents		
Project Name	Sarulla Geothermal Power Project		
Location	North Sumatra, Indonesia		
Capacity	(*)		
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: (*) months after financial close NIL-1: (*) months after financial close NIL-2: (*) months after financial close		

* This information has been removed as it falls within exceptions to disclosure specified in paragraph 97, (cite which item for exception) of ADB's Public Communications Policy (2011)

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 REPORT

The Project has the following approvals under Indonesian environmental regulations:

- ANDAL, RKL/RPL Sarulla geothermal field development (PLN, 2005). Approved November 2005;
- ANDAL, RKL/RPL Sarulla Geothermal 330 MW Capacity. Approved August 2009 (disclosed on ADB's website for 120 days); and
- Addendum ANDAL, RKL/RPL 2013 (approval Q1 2014 4 February 2014).

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 conduct a land acquisition process and regulatory review to develop a Social Safeguards Compliance Audit Report (SSCAR). As the prior land acquisition process was undertaken by PERTAMINA/ UNOCAL the process was reviewed against national requirements at the time of the acquisition (prior to 1994). Therefore this Report has been developed considering the principles of the ADB's Safeguard Requirement 2 (Involuntary Resettlement Safeguards), JBIC Social Requirements and the IFC's Performance Standard 5 (Land Acquisition and Involuntary Resettlement). It is intended to meet the requirements for documenting the negotiation and settlement processes and identifying past or present concerns related to impacts on involuntary resettlement.

This report forms part of five (5) Volumes 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 (SSCAR) (this report); and
- Volume V: Resettlement Plan.

ES1.3 REPORT CONTENTS

This SSCAR presents socio-economic information, gathered by UNOCAL and SOL; along with ERM's audit findings on the impacted land owners. It also assesses the compliance of the land acquisition process (with national and ADB/JBIC/IFC standards) and provides corrective actions were deemed necessary. More specifically the audit summarises:

- UNOCAL and SOL's consultation, good faith negotiations and participative activities;
- Status of the land acquisition and compensation payments;
- Socio-economic data of the SOL landowners;
- Identified impacts as a result of the land acquisition process; and
- Corrective actions required to meet national (for UNOCAL land owners) and ADB/JBIC/IFC (for SOL land owners).

ES2 PROJECT DEVELOPMENT OVERVIEW

The Project was initiated by Unocal North Sumatera Geothermal (UNSG) in 1993. An extensive exploration activity was conducted in geology, geochemistry, geophysics investigations, and certain infrastructure development including well pad and its access road and followed by drilling activity starting from 1994 to 1998. SOL's 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 a combined capacity 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.

Drilling activities for 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 new well pad locations. A total of (*) production wells, (*) reinjection wells will be developed from 2 well pads at SIL and 5 well pads at NIL. The NIL new well pads are located on farmland and mixed forest areas.

ES3 SSCAR FINDINGS

UNOCAL conducted a land acquisition process between 1994 and 1995. (The land now belongs to PGE whereby SOL is leasing the land for the Project activities over the next 30 years). A total of 575 land parcels were acquired amounting to 673,795m² (379 which SOL has acquired totalling 475,283m²).

As of 3 October 2013, SOL has largely completed the land acquisition process in the SIL area with payment to land owners undertaken by SOL including compensation for land and crops and plants. SOL acquired a total of 349 land parcels involving 210 land owners.¹ There are 24 female landowners and 186 male landowners who have had land acquired by SOL. Of the 210 landowners, 151 are in the NIL area and 59 are in the SIL area. SOL has also obtained government owned lands, namely forestry land consisting of production and convertible forest production in the NIL area ~ 20.9 Ha (30 land owners).

As of April 2014, SOL has acquired a total of 811 land parcels involving 437 land owners. There are 63 female landowners and 374 male landowners who have land acquired by SOL. Of the 437 landowners, 321 are in the NIL area and 116 are in the SIL area.

UNOCAL and SOL undertook socialisation and consultation activities in relation to the land acquisition process where the process and compensation value (land, plants and crops) were discussed and agreed; along with the grievance mechanism.

¹ Based on additional data provided by SOL in January 2014, 210 landowners (186 males, and 24 females) have been paid as of 3 October 2013. These comprised 151 landowners from NIL and 59 from SIL, with one landowner owning plots of land from NIL and SIL.

The land owners were free to decide whether to agree or reject the compensation price offered. If they agreed with the compensation price for land and plants, each land owner signed a letter of statement as confirmation of agreement. After receiving the signed letter of statement, every land owner was required to submit land ownership documentation along with a legal letter confirming land ownership.

The technical process of how the land and plant compensation would be paid was then explained; circulating an invitation letter to inform them of the compensation payment dates. Payment was then made on the dates agreed. Land owners received their compensation and signed a release letter in front of the attorney. They then received the money from SOL; BNI was the representative bank paying the compensation.

ES3.1 UNOCAL COMPLIANCE

The SOL Geothermal Project was initially managed by PERTAMINA and therefore considered a development project for public interest required to adhere to the Presidential Decree No. 55 Year 1993. The compensation framework required the following provisions:

- Compensation provided (based on real selling values) for affected assets, i.e. land, structure, plants, and any other objects attached to land;
- Compensation can be provided in the form of cash money, replacement land, housing resettlement, or combination of money and replacement asset;
- When any customary asset is affected, compensation can be provided in the form of replacement asset through the development of public facilities; and
- The final decision to determine the form and value of compensation should be obtained through a consultation process, which then is legalized through a decree letter issued by the land procurement committee (LPC/PPT).

Land measurements and an inventory were conducted by the LPC/PPT where village heads were given responsibility to invite all land owners to witness the measurement, identify land boundaries, and calculate plants attached to their land. The process to estimate the compensation value was then conducted by the LPC/PPT.

Compensation for the affected plantation land was compensated at IDR 5,500/m², paddy field at IDR 8,500/m² and plantation values were stipulated through a decree letter issued by the Head of Agricultural Agency. This estimation was used as a basis for the land price consultation with the affected land owners.

The audit identified that a socialization meeting was conducted by the LPC/PPT to inform the land owners of the project plan for land acquisition. This was followed by a series of consultations for land measurement and inventory. The result of the measurements was also publicly disclosed, as shown in the Letter of Announcement. This process allowed any objections on the measurement and inventory to be raised within a month after the disclosure.

Good faith negotiation principles were used when determining the compensation value; when the first round of consultations did not reach an agreement, additional rounds of consultations were then conducted. In addition grievances could be submitted by the land owner to UNOCAL.

A number of outstanding issues remain after the Project was transferred to SOL including 26 land parcels and a permanent structure not being compensated for. Furthermore cultivation is still on-going on the Pertamina/ UNOCAL acquired lands. SOL has closed out these issues.

Given no outstanding issues remain and considering the audit findings the Pertamina/UNOCAL land acquisition process has complied with Indonesian regulation on the land procurement for the development of public interest.

ES3.2 SOL COMPLIANCE

Compliance has been considered based on the principles of the ADB's Safeguard Requirement 2 (Involuntary Resettlement Safeguards), JBIC Social Requirements and the IFC's Performance Standard 5 (Land Acquisition and Involuntary Resettlement).

SOL's land acquisition team conducted the negotiation process through holding several socialization and negotiation meetings with all the land owners in a culturally and gender sensitive manner. During these sessions the negotiated settlement concept was adopted to ensure no pressure was placed on the land owners to accept the offered compensation land price of IDR 65,000 per m². If the land owners did not agree to sell the land, the Project sought to re-route.

The valuation methodology for the land compensation was based on the sub-district office reference for PLN (*)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 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 IDR 73,000 per m². SOL is offering IDR 125,000/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.

Only one temporary structure was acquired and the compensation price was agreed through negotiations with the land owner (*). The compensation rate offered for plants is considered reasonable as they were based on the Agriculture Agency in the North Tapanuli Regency 2009 rates which are still considered higher than 2013 market rates.

* *This information has been removed as it falls within exceptions to disclosure specified in paragraph* 97, (cite which item for exception) of ADB's Public Communications Policy (2011) It was identified during the audit that a timely and effective Grievance Mechanism was already being implemented by SOL; with responsibility lying with the external relations department. Grievances were raised to the department by land owners through verbal and written channels. However the majority of grievances have been handled verbally with little documentation recorded. Therefore it is unclear how many grievances in total have been submitted or addressed to date.

Of the 150 households surveyed 79 households lost more than 50% of their land; 51 households 10-49% of their land and 20 land owners lost less than 10% of their land. Therefore the majority of PAHs lost a significant portion (>10%) of the land used for income for income generating purposes. No robust data was available on the change of household income or loss of income at the time of the audit as those compensated were still cultivating their land.

ES4 CORRECTIVE ACTIONS

As a result of this review a number of corrective actions are recommended to be implemented by SOL (**Table ES-2**). These actions aim to ensure all PAHs livelihoods are restored to an equal or higher level than before the land acquisition process commenced as well as support SOL in adhering to the ADB's SPS and JBIC requirements as well as the IFC's Performance Standard (PS 5).

Table ES-2	Corrective Action Plan for SOL
------------	---------------------------------------

Issues/Topics	Corrective Actions		Deliverable
Insufficient impact assessment	The database of resettlement impacts requires updating. Impacts from other project components i.e. transmission line ROW, Laydown, Road 5, WJP 1N, etc. should be captured in the Resettlement Plan.	i. ii.	Land Census Report Resettlement Plan
Currently, the compensation for structures is based on negotiation	SOL should prepare a list of compensation rates for any potentially affected structures. SOL to ensure the compensation rate meets market value of the structures, land and crops	i. ii.	List of compensation rates for structures List of compensation records for structures, land and crops
SOL has a short term plan for PAPs to restore their livelihood	SOL to undertake a Livelihood Restoration Plan that should be prepared based on a Needs Assessment in each project affected village. The PAH needs assessment will be undertaken in Q1 of 2014; a detailed livelihood program will be developed and submitted to ADB.	i.	Budget for Livelihood Restoration Planning
Date for land owners to stop using their land	The legal date for land owners to stop using their land should at least 1 month after the compensation is paid. This will give sufficient time for land owners to harvest their crops.	i.	Management Time
The grievance mechanism is already in place, however there is no written documentation available	SOL to prepare comprehensive documentation for all grievances raised by PAHs, in particular if raised by vulnerable groups such as female headed households.	i.	Grievance Records
Monitoring and Evaluation	SOL to prepare internal monitoring (submission of quarterly reports)	i.	Internal Monitoring Report
	External monitoring (submission of semi- annual reports)	i.	External Monitoring Report
	Post-resettlement evaluation (e.g. 6 months, 18 months, 36 months post the land acquisition process.	i.	Evaluation Report

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 owned 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 undermet. With traditional fossil fuels widely developed, the Indonesian 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.

SOL commissioned Environmental Resources Management (ERM) to support the Project in the preparation of this Social Safeguards Compliance Audit Report. The SSCAR is one of a number of studies to provide additional information to the Lenders further to the ESIA conducted under the Indonesian environmental regulatory approvals process (AMDAL, 2009²).

This report forms one of five (5) Volumes 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;
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- Volume IV: Social Safeguards Compliance Audit Report and Corrective Action Plan (SSCAR) (this report); and
- Volume V: Resettlement Plan.

The SSCAR describes both land acquisition processes that have been undertaken by the Project, first by UNOCAL in the mid 1990's and then more recently by SOL (which is still on-going).

1.3 STRUCTURE OF THE SSCAR

This report is structured as follows:

- Chapter 1: Introduction;
- Chapter 2: Project Description;
- Chapter 3: Scope, Methodology and Execution of the Audit;
- Chapter 4: Findings of the Audit;
- Chapter 5: Status of UNOCAL Compliance;
- Chapter 6: Status of SOL Compliance; and
- Chapter 7: Corrective Measures.

² The regulatory ESIA (ANDAL) report is available on ADB's website <u>http://www.adb.org/projects/42916-014/documents</u>

2 **PROJECT DESCRIPTION**

2.1 DEVELOPMENT HISTORY

This Chapter provides a summary of the key aspects of the Project of relevance to this report. A full Project description is provided in Volume II: Environmental and Social Impact Assessment (ESIA) Addendum, Chapter 2. 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.

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.

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.

2.3 DEVELOPMENT PLAN

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.

The development plan for the Sarulla geothermal field and 330 MW combined 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; and
- 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 Silangkitang field (SIL) has three (3) existing well pads developed by 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; and
- 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 meter 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; and
- SIL 3 located at the south of SIL 1, in Pardomuan Nainggolan Village.

SIL 1 has (*).

SIL 2 (*).

SIL 3 pad has (*).

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; and
- 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).

(*)

The following permanent wells will be drilled on the following new well pads:

Table 2-1Number of Wells be Drilled on New Well Pads

No	Location	Number of wells to be drilled (*)
1	NIL-1n	
2	NIL-2n	

3	WJP-1n	
4	WJR-1n	
5	WJR-2	

Source: SOL Data, 2013

<u>* This information has been removed as it falls within exceptions to disclosure specified in paragraph</u> <u>97, (cite which item for exception) of ADB's Public Communications Policy (2011)</u>

The power plant locations for both SIL and NIL will be at plantation areas. SIL is situated approximately 500 meter from the nearest residential area whilst NIL is located at least 1km far from a residential area. The development plan for Silangkitang (SIL) and Namora I Langit (NIL) geothermal fields is shown in **Figure 2-1**.

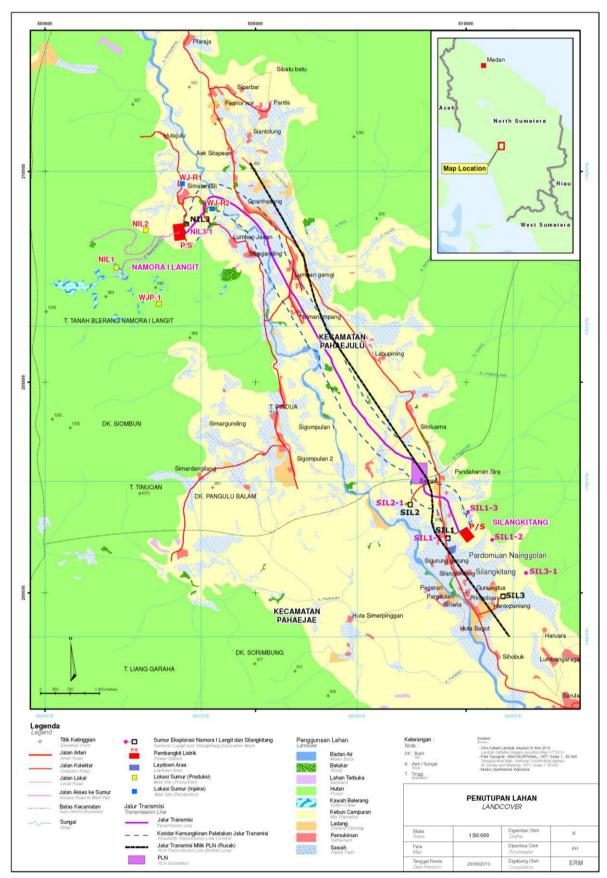


Figure 2-1 Development Plan for Silangkitang (SIL) and Namora I Langit (NIL) Geothermal Fields

The project schedule for the development of Sarulla 330 MW power plant at SIL and NIL is displayed in **Table 2-2**.

Table 2-2Project Schedule for The Development of Sarulla 330 MW PowerPlant at Silangkitang (SIL) and Namora I Langit (NIL)

Time				Month			
Activity	0	+10	+20	+30	+40	+50	>50
Preconstruction	_		ĺ				
Construction							
SIL							
NIL 1						_	
NIL 2	ĵ,			i.			
Operation							
SIL				-			_
NIL 1	5.			4	8		
NIL 2						_	

2.4 SUMMARY OF PROJECT COMPONENTS

Table 2-3 and **Table 2-4** summarise the Project Components and also show the status of those components. **Table 2-5** and **Table 2-6** present the temporary intake canal/pipe RoW details at NIL to the well pads.

2.4.1 *Project Components*

The Project is divided into two areas: Silangkitang (SIL) Area and Namora I Langit (NIL) Area and requires a total of total 130.6 Ha of land (see Table 2-7). This land will be allocated for project components such as power generation facilities, geothermal wells with relevant equipment, access roads, steam and brine pipelines, quarry areas, temporary storage and temporary worker camps (during construction phase), and transmission line 150Kv. The acquired land is largely rice paddy fields and a small proportion of rubber and cacao plantations. The acquired land is known as 'tanah keluarga' or family land which is similar to most of the land in the Pahae Jae and Pahae Julu Sub Districts. Acquired land that is privately owned by individual families (heritage land) is neither registered nor legally certified with the National Land Agency (BPN). To date the Project has completed land acquisition activities in the SIL area for the brine injection line covering two areas (SIL 1 and SIL 2). The total acquired land for SIL 1 is approximately (*) and for SIL 2 to Batang Toru River about (*). Figure 2-2 and Figure 2-3 presents the SIL and NIL areas with details of the Project components, name of land owners and GPS coordinates to show the Project location.

Table 2-3SIL Project Components (*)

	Component	Existing	Plan
Power Plant			
Well pad (SIL-1	1)		
	and reinjection)		
(ioi productioi	and religection		
Well pad (SIL-2	2)		
(for reinjection))		
Well pad (SIL-3	3)		
(for reinjection)			
	to Power plant		
Access roads	to SIL-2		
	to SIL-3		
Pipeline			
Transmission li	ine		
Water intake st	ation (temporary)		

Component	Existing	Plan
Site office		
Well pad (SIL-D)		
Laydown area		
Water well (operation use)		

Table 2-4NIL Project Components (*)

Component	Existing	Plan
Power Plant		
Well pad (NIL-1)		

С	omponent	Existing	Plan
Well pad (NIL-2)			
Well pad (NIL-3)			
Well pad (NIL-1n)		
Well pad (NIL-2n)			
Well pad (WJP-1n) (for production)			
Well pad (WJR-1n) (for reinjection)			
Well pad (WJR-2r (for reinjection)	h)		
Access roads	to Power plant		
	to NIL-1n		
	to NIL-2n		
	to WJP-1n		
	to WJR-1n		
	to WJR-2n		
Pipeline			

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Component	Existing	Plan
Transmission line		
Disposal area		
Laydown area		
Camp site		
Water well (operation use)		

I on oth from	Insulation thickness(Inch) Total(Inch) Convert into meter egulated clearance noulder one side	To NIL-1	To NIL-2	To WJP-1	To WJR-1	To WJR-2
Length from Power plant(Approx. m)						
	Pipe Diameter(Inch)					
	Space between pipe(Inch)					
Pipeline Detail						
	Insulation thickness(Inch)					
	Tatal(Iral)					
	Convert into meter					
Regulated clearance						
Shoulder one side						
Shoulder other side						
Ditch(both total)	Ditch(both total)					
Road width						
Total ROW(m) at least						

Table 2-5Temporary Intake Canal/Pipe RoW (*)

Table 2-6Approximate Water Pipe Length(*)

Location	m
Hamiltion Bridge to WJR-2(m)	
WJR-2 to WJR-1(m)	
WJR-2 to NIL-3(m)	
NIL-3 to NIL-1(m)	
NIL-3 to NIL-2(m)	
NIL-3 to WJP-1(m)	

<u>* This information has been removed as it falls within exceptions to disclosure specified in paragraph 97, (cite which item for exception) of ADB's Public Communications Policy (2011)</u>

2.5 **PROJECT LAND ACQUISITION**

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 126.6 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 2-7**. To date, SOL has acquired approximately (*) of land in SIL for Brine Injection Line and it will be used for the Well test activity. The remaining estimated required land (as listed in the **Table 2-7**) is still being acquired.

No	Project Component	Estimate	ed Area Required (ir	u m ²)	Current Land Use (in m ²)		
NO		Government Land	Private Land	Total	Government Land	Private Land	Total
			NIL				·
1	Main Access Road (Road 1 & 1A)						
2	Well Pad NIL 2n & Access Road						
3	Disposal 1 & 2 & Access Road						
4	Borrow Area						
5	WJR 1n & Access Road						
6	Power Plant & Access Road						
7	Laydown						
8	Road 5						
9	WJP 1						
10	NIL1 Exp & Access Road						
11	WJR 2n & Access Road						
11	T/L Tower						
12	T/L RoW						
	Subtotal m ² and hectares						
			SIL				
11	Brine Injection Line (SIL 1-SIL 2)						
12	SIL 2 to Batang Toru River						
13	Disposal for Power Plant						
14	Borrow Area						
15	Well Pad SIL 1						
16	Power Plant						
17	SIL 2 Expansion & Access Road						
18	Laydown 1						
19	Laydown 2						
20	T/L Tower						
21	T/L RoW						
	Subtotal m ² and hectares						
	GRANDTOTAL	128,857	1,137,109	1,265,966	6,577	929,733	936,310

Table 2-7Land Use Plan and Area Required for SIL and NIL (*)

Source: SOL Data, 2013

SARULLA GEOTHERMAL DEVELOPMENT SSCAR & CAP

* This information has been removed as it falls within exceptions to disclosure specified in paragraph 97, (cite which item for exception) of ADB's Public Communications Policy (2011)

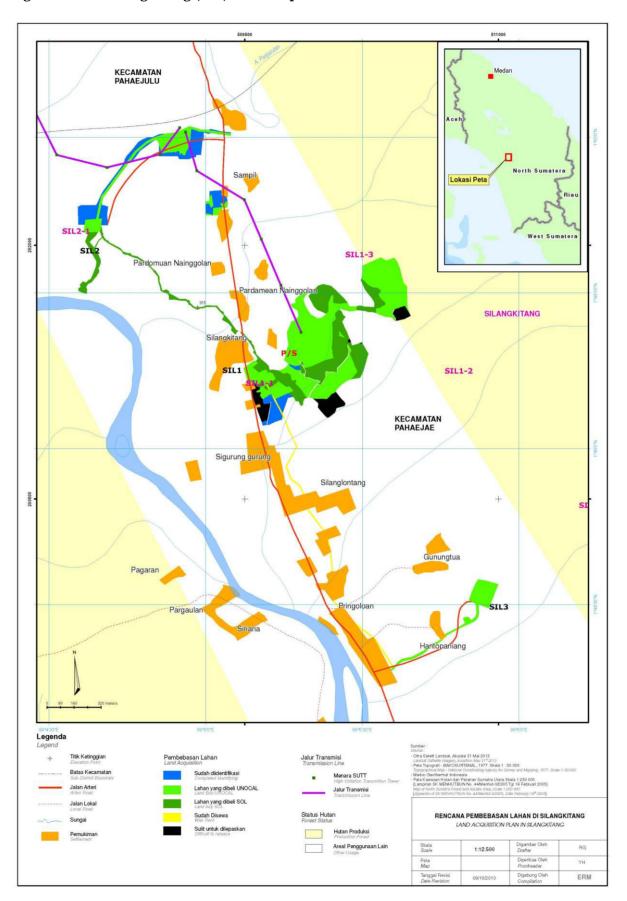


Figure 2-2 Silangkitang (SIL) Area Map

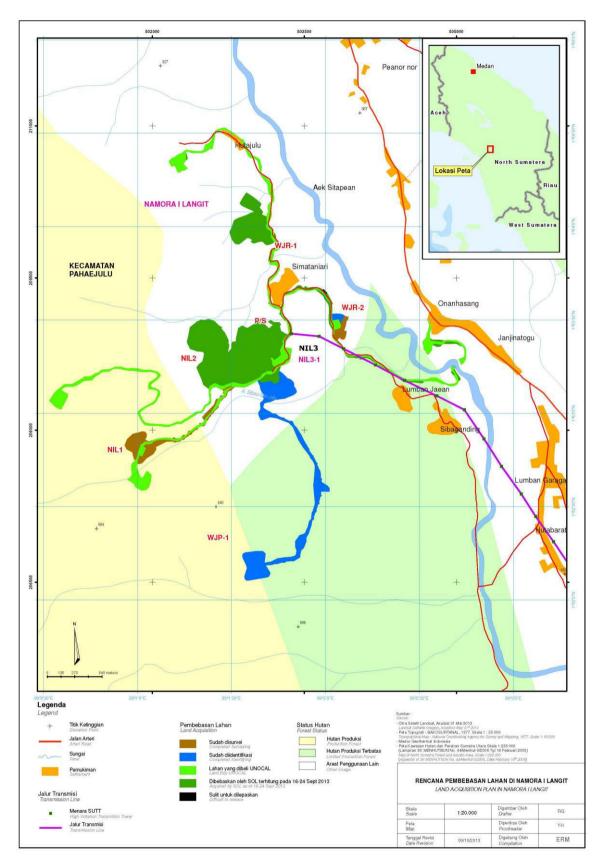


Figure 2-3 Namora I Langit (NIL) Area Map

2.5.1 Project Socialization

The following consultation activities were conducted to socialize the development of Sarulla geothermal field and 330 MW power plant:

- Project socialization at Silangkitang on 5th February 2008;
- Public consultation in relation to AMDAL preparation in Pahae Julu on 28th March 2008;
- Project socialization with government institutions in Tarutung on 6th May 2008;
- Project socialization regarding land acquisition process for reinjection route on 6th June 2008;
- Socialization/Seminar of Sarulla project to local NGOs groups, local communities and local Governments representatives, 25th June 2008;
- Socialization of well work over activity in Silangkitang on 15th July 2008;
- Well work over ceremony in Silangkitang on 15th August 2008;
- Dialogue forum with local communities and local NGO IMARUPA & IARRP on 11th Jan 2011;
- Discussion/Meeting with local communities, representatives of North Tapanuli Local Government and IMARUPA/IARRP on 24th March 2011;
- Project and AMDAL socialization/explanation in 11 villages on 23rd March 2011, 15th-18th April 2011;
- Project and AMDAL socialization to land owners in Pahae Jae & Pahae Julu on 6th-7th May 2013.
- While for socialization activities related land with land acquisition, SOL has conducted the following activities:
- Socialization on land acquisition to brine Injection line land owners on 25th November 2009;
- Negotiation meetings for Brine Injection line on 9th December 2010, 19th January 2011, and 24th March 2011;
- Socialization meetings for land acquisition with land owners in Pahae Jae and Pahae Julu on 30th April 2013, 1st-2nd May 2013, 6th-7th May 2013, 17th June 2013, 10th July 2013, 6th September 2013, 17th October 2013, 9th November 2013, 12th November 2013, 18th December 2013, 20th-21st February 2014.

2.5.2 Land Acquisition

SOL will construct, operate and maintain a power plant at 330 MW total installed capacity. To fulfil the capacity, three unit power plants will be constructed where each will generate approximately 110 MW. The first unit will be built at SIL and another two units at NIL.

2.5.2.1 Power Plant

The land required for the power plant construction is already 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 will be built at NIL where each will have a capacity of 110 MW (a total of 330 MW). The amount of land required for the power plants is approximately (*) for SIL and (*) for NIL.

2.5.2.2 Transmission Line Construction between SIL and NIL

The land required to build the transmission towers is not yet purchased. The plan is not to use productive land, cemetery or residential areas. The process will be conducted using direct negotiations and agreements between land owners and SOL, facilitated by the government of North Tapanuli Regency.

The purchased land will be used as platforms for transmission towers. Land under the transmission lines will not be purchased instead an easement fee of 10% of the value of land for the towers will be paid. Measures will be taken to avoid displacement of housing within the transmission line corridor of impact. Approximately 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 (*), and the total of land required for (*) towers is (*) ha. Estimated total land requirement for the transmission line is about (*) ha.

Figure 2-2 and **Figure 2-3** illustrate the land acquisition status to date. The green boundary shows that process is complete at SIL 2, SIL 4 and SIL D and at NIL 1, 2, 3 and 4 (undertaken by UNOCAL).

* *This information has been removed as it falls within exceptions to disclosure specified in paragraph* 97, (cite which item for exception) of ADB's Public Communications Policy (2011)

3 SCOPE, METHODOLOGY AND EXECUTION OF AUDIT

3.1 Use of This Report

The SSCAR is a requirement by ADB to determine whether SOL's actions were in accordance with ADB's safeguard principles and requirements for borrowers/clients and to address outstanding compliance issues and identify and plan appropriate measures. The report content includes:

- A review of Indonesian (for UNOCAL lands) and international regulations(for SOL lands) regarding land acquisition;
- A description of the land acquisition process undertaken by UNOCAL and SOL;
- A socio-economic profile of the SOL affected households surveyed during fieldwork;
- A summary of key findings during the survey and audit; and
- A set of recommendations or corrective action plan.

The SSCAR describes both land acquisition processes that have been undertaken by the Project, first by UNOCAL in the mid 1990's and then more recently by SOL (which is still on-going). This scope of the SCAR assesses the compliance status of the land acquisition process undertaken by SOL against the requirements of ADB Safeguards Policy Statement 2009, JBIC social expectations and IFC Performance Standard 5.

3.2 APPLICABLE STANDARDS GOVERNING LAND ACQUISITION

3.2.1 Indonesian Laws/Regulations

In Indonesia there are two mechanisms used in land procurement. Those two mechanisms are differentiated by the implementer of land procurement. The first mechanism is through "Penetapan Lokasi", or location designation, which is regulated in law No. 2 year 2012 on land procurement for development of public interest projects and its implementing regulation, Presidential regulation No. 71 year 2012. These regulations replace the previous regulation, presidential regulation No. 36 year 2005 which was the legal basis for implementation of land acquisition through the Penetapan Lokasi mechanism. Penetapan Lokasi regulates the process of land procurement for development in the public's interest (which means projects undertaken and initiated by governmental institutions or entities using the state or local government budget) and stipulates the establishment of land procurement committee ("LPC") as the implementer of land acquisition. This committee is appointed by a local government (provincial or regency) in which the project is located. The Land Procurement team (LPC), as the representative of the state, conducts the land acquisition process and directly negotiates compensation for the land with land owners. SOL, as a private entity, is not entitled to utilise this Penetapan Lokasi mechanism.

The second mechanism is called "*Izin Lokasi*", or location permit mechanism. The legal basis for this mechanism is stipulated in the Head of National Land Agency Regulation No. 2 year 1999 which sets out the location permit procedure for private business entities in acquiring land. This regulation states that land procurement for projects executed by private entities may be undertaken by the private entities directly and private business entities must first obtain location permit from the local government governing project location. Under the location permit mechanism, private business entities may implement land procurement through a direct negotiated settlement basis. The entire process of land acquisition is conducted by private business entity (in this project, SOL) while the local government's role is to facilitate and to monitor the process.

For land acquisition, the Project utilised the second mechanism of "*Izin Lokasi*", or location permit mechanism because the Project is executed by a project entity funded by private financing. 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 an agreed price with land owners.

3.2.2 International Processes and Standards

This SSCAR is intended to meet the requirements for documenting the Project's land negotiation and settlement processes and identifying past or present concerns related to potential impacts from involuntary resettlement.

The following International standards apply to land acquisition and involuntary resettlement (economic/physical).

3.2.2.1 Asian Development Bank (ADB) Safeguard Policies

ADB's Safeguard Policy Statement (SPS) 2009³, governs the environmental and social safeguards of ADB's operations and articulates the safeguard policy principles for three key safeguard areas:

- Environmental safeguards (SPS, Appendix 1);
- Involuntary resettlement safeguards (SPS, Appendix 2); and
- Indigenous Peoples safeguards (SPS, Appendix 3).

The SPS 2009 applies to all ADB-supported projects reviewed by ADB's management after 20 January 2010. The objective of the SPS is to ensure the environmental and social soundness and sustainability of projects and to support the integration of those considerations into the project decision-making process.

The overarching SPS statement on ADB's Commitment and Policy Principles states that the ADB's safeguards have the following objectives:

³ <u>http://www.adb.org/documents/safeguard-policy-statement?ref=site/safeguards/publications</u>

- Avoid adverse impacts of projects on the environment and affected people, where possible;
- Minimise, mitigate, and/or compensate for adverse project impacts on the environment and affected people when avoidance is not possible; and
- Help borrowers/clients to strengthen their safeguard systems and develop the capacity to manage environmental and social risks.

The SPS uses a categorisation system to reflect the significance of a project's potential environmental impacts. A project's category is determined by the category of its most environmentally and socially sensitive component, including direct, indirect, cumulative, and induced impacts in the project's area of influence.

The involuntary resettlement social safeguard categories for proposed projects are as follows:

- Category A: Project is likely to have significant involuntary resettlement impacts. A resettlement plan, which includes assessment of social impacts, is required.
- Category B: Project includes involuntary resettlement impacts that are not deemed significant. A resettlement plan, which includes assessment of social impacts, is required.
- Category C: Project has no involuntary resettlement impacts. No further action is required.

In 2008, ADB's Chief Compliance Officer approved a Category B/C for the involuntary resettlement safeguard category ranking for the Sarulla Geothermal and Power Plant Development Project. Stating there was no associated involuntary resettlement; however considering that the project requires the acquisition of land currently used for livelihood and other purposes by the local people, a resettlement plan is required.

In May 2013, an ADB Safeguards Specialist team visited the proposed Project location. Following an extensive site visit and meetings with the local community, ADB elevated the category rating to a Category A due to:

- People losing 10% or more of productive assets;
- Potential feeling of other landowners that they may have no choice but to sell because the surrounding areas have been bought by the Project (UNOCAL, SOL);
- Potential feeling that remaining land at the project site is no longer viable; and
- Potential for economic displacement of ethnic minorities.

3.2.2.2 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:

• Involuntary resettlement and loss of means of livelihood are to be avoided

where feasible, exploring all viable alternatives. When, after such examination, it is proved unfeasible, effective measures to minimize impact and to compensate for losses must be agreed upon with the people who will be affected;

- 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.

3.2.2.3 The International Finance Corporation (IFC) Performance Standards

- IFC Performance Standard (PS) 5 refers to Land Acquisition and Involuntary Resettlement. Under PS 5, physical and/or economic displacement resulting from land-related transactions are defined as resulting from the following transactions:
- Land rights or land use rights acquired through expropriation or other compulsory procedures in accordance with the legal system of the host country;
- Land rights or land use rights acquired through negotiated settlements with property owners or those with legal rights to the land if failure to reach settlement would have resulted in expropriation or other compulsory procedures;
- Project situations where involuntary restrictions on land use and access to natural resources cause a community or groups within a community to lose access to resource usage where they have traditional or recognizable usage rights;
- Certain project situations requiring evictions of people occupying land without formal, traditional, or recognizable usage rights; or
- Restriction on access to land or use of other resources including communal property and natural resources such as marine and aquatic resources, timber and non-timber forest products, freshwater, medicinal plants, hunting and gathering grounds and grazing and cropping areas.

PS 5 states that where project impacts on land, assets, or access to assets become significantly adverse at any stage of the project IFC advises on the application of the

standard. There is no physical resettlement associated with the Project but land acquisition due to the Project may result in the economic displacement (loss of access to resources necessary for income generation or as means of livelihood) of individuals or communities, including those considered of vulnerable status. The IFC requires the avoidance of economic displacement or to minimise impacts on individuals or communities through appropriate measures such as fair compensation and improving livelihoods and living conditions.

3.3 METHODOLOGY OF AUDIT

ERM was commissioned to conduct a land acquisition process and regulatory review to develop a Social Compliance Audit Report (this Report). The reference framework and standards by which land acquisition is being assessed is different between the land acquired by SOL and PERTAMINA/UNOCAL.

Prior land acquisition process by PERTAMINA/UNOCAL was reviewed against national requirements at the time of the acquisition (prior to 1994). Due to the absence of UNOCAL socio-economic baseline data of the affected land owners, an assessment on legacy issues or people who have been made poor or vulnerable because of the land acquisition cannot be conducted.

The land acquisition process conducted by SOL has been reviewed against the ADB Safeguard Policy Statements (SPS) 2009 requirements and the IFC Performance Standards (namely PS 5). It is intended to meet the requirements for documenting the negotiation and settlement processes and identifying past or present concerns related to impacts on involuntary resettlement. An assessment has been conducted to identify how those whose lands were acquired were affected by the project land acquisition, whether the process has resulted in any land owners becoming vulnerable, and whether there are any non-compliances which require corrective action. The task was also undertaken to close out any identified outstanding issues and to help improve the public consultation and grievance mechanism. Any corrective measures will be incorporated into the SOL Integrated Social Program (ISP).

3.3.1 Desktop Review of Documents

ERM collected and reviewed relevant documentation on the land acquisition process, compensation framework, grievance mechanism and public consultation undertaken to-date. Relevant international, national, provincial and regional regulations were also reviewed.

3.3.2 Field Investigations

3.3.2.1 Land Owner Interviews

ERM conducted interviews with the aim of reaching 100% of the land owners involved in the acquisition process. This was undertaken using a questionnaire which identified the land owners and facilitated the audit of the land acquisition

process done by SOL. The questions aimed to characterize the socio-economic profile of the land owners prior to and after the land acquisition. The questionnaire provided information on the identity of the land owner, the quantity and character of the lost assets and whether the displacement was physical and/or economic. It also identified and quantified the outcome of the land acquisition, based on the living conditions and livelihood of the affected people, to evaluate whether they had been significantly impacted.

3.3.2.2 Village Head and Clan Leader Interviews

ERM also conducted in-depth interviews with village heads and clan leaders to understand the history of land ownership in the village as well as community livelihoods in villages surrounding the SOL Project activities.

3.3.3 Limitations

A number of general limitations were identified during the undertaking of this study:

- 1. Data Quality: There was limited available socio-economic baseline data on the land acquisition affected people (land owners) to inform the study.
- 2. Timeframe: Time limitations when conducting the primary research (due to the Project deliverable deadline) impacted the depth of the report.
- 3. Limited access to the adequate land acquisition related documentation and information, in particular in relation to the acquisition process undertaken by UNOCAL. As a result a complete review of the land acquisition process could not be conducted.
- 4. Limited access to UNOCAL's asset loss inventory, value calculations and compensation prices. Therefore quantification of asset loss considering the socio-economic conditions of claimants could not be conducted properly.
- 5. The team was unable to survey 100% of the land owners. Some land owners refused to participate in the study survey due to concerns around privacy issues. Other land owners had moved away from the Project area with no known forwarding address.

Given the above issues, ERM has presented the results of the study undertaken todate, recognising that some gaps in the analysis remain to be completed. ERM has also provided recommendations on how to address these gaps as part of the corrective action plan.

3.4 EXECUTION OF AUDIT

The audit was carried out between June 2013, August 2013 and updated on April 2014. The work was conducted by ERM with support from the University of North Sumatera Utara (Universitas Sumatera Utara/USU) Team. The schedule of the audit is presented in Table 3-1.

Date	Action	ERM/USU Team	SOL Team
24 June – 6 July 2013	Land census for 80% of land owners involved in SOL's LAQ Process	Adis N R Prima Dewi Mery Purnamasarie USU Team	Muhammad Rum Marlan Sitompul Alden Sitompul Industan Sitompul
24 June – 6 July 2013	In-depth interviews with village heads and clan/community leaders	Mery Purnamasarie USU Team	Muhammad Rum Marlan Sitompul Alden Sitompul Industan Sitompul
August 2013	In-depth interviews with SOL's LAQ Team	Adis N R Prima Dewi	Petrus Gunawan Muhammad Rum Marlan Sitompul Alden Sitompul Industan Sitompul
August 2013	Document Review	Adis N R Prima Dewi	Melva Samosir
2-14 April 2014	In-depth interviews with SOL's LAQ Team	Adis N R Prima Dewi	Petrus Gunawan Johannes Sagala Marlan Sitompul Alden Sitompul Industan Sitompul

Table 3-1Schedule of Execution of Audit

4 FINDINGS OF THE AUDIT

4.1 **OVERVIEW**

This section of the Social Compliance Audit Report (SCAR) provides the compliance status of the land acquisition process undertaken by SOL against the requirements of ADB Safeguards Policy Statement 2009, JBIC social expectations and IFC Performance Standard 5.

The audit includes reviewing the methodology adopted in order to acquire the land and considers the approach for setting compensation rates for land and plants.

4.2 PROJECT LAND ACQUISITION STATUS

4.2.1 *Prior Land Acquisition by UNOCAL*

UNOCAL conducted a land acquisition process between 1994 and 1995. The land now belongs to Pertamina Geothermal Energy (PGE) whereby SOL is leasing the land for the Project activities over the next 30 years. **Table 4-1** presents the chronology of UNOCAL's land acquisition process. **Table 4-2** summarises the UNOCAL land owners.

Date	Land Acquisition Process
July – August 1994	Land acquisition application process by Pertamina- UNOCAL to North Tapanuli Government
December 1994	Land measurement and plantation inventory by BPN (Land agency) of North Tapanuli together with Pertamina – UNOCAL, Head of Villages and land owners
January 1995	First land price negotiation – no agreement reached
February 1995	Second land price negotiation – no agreement reached
March 1995	Third land price negotiation – agreement reached
April 1995	Land payment to all owners

Table 4-1 UNOCAL Land Acquisition Chronology

Source: SOL Primary Data, 2013

Table 4-2UNOCAL Land Owners

	UNOCAL Acquired La			
Project Component	Location	Land Parcel	Land Area (m²)(*)	Note
NIL				
	Onan Hasang	32		This includes
NILs A	Sibaganding	38		area NILs A
	Lumban Jaean	58		Batang Toru

	UNOCAL Acquired Land						
Project Component	Location	Land Parcel	Land Area (m²)(*)	Note			
	Simataniari	39		where the Batang Toru bridge will be built			
NILs B	Lumban Jaean	36					
NILs C	Lumban Jaean	11					
NILn A	Simataniari	79					
SIL				·			
SIL 1	Silangkitang	9					
CH DC	Silangkitang	13					
SIL 2C	Sigurung-gurung	14					
SIL 3	Pardomuan Nainggolan	26					
SIL 4	Silangkitang	7					
SIL 5	Pardomuan Naenggolan	8					
SIL X	Silangkitang	9		There are 26 land parcels which were previously planned to be acquired by UNOCAL and have been acquired and compensated by SOL			
Others				1			
	Rina Bolak	33	-				
SIA A	Sialaman Julu	50	-	These areas,			
07.4 P	Labuan Rasoki	8		located in			
SIA B	Sialaman Julu	40		Tapanuli			
SBE 1	Aek Horsik	21	-	Selatan, are not in the			
CDF 2	Pringgonan	1		scope of SOL			
SBE 2	Padang Bujur	29		Project area			
SIP 2	Purbatua Paranjulu	6 8	-				
TOTAL				1			
	al UNOCAL acquired land	575					
	acquired land within SOL Project Area brmation has been removed as it falls within exce						

<u>* This information has been removed as it falls within exceptions to disclosure specified in paragraph</u> <u>97, (cite which item for exception) of ADB's Public Communications Policy (2011)</u>

4.2.2 Land Acquisition Completed by SOL

As of 3 October 2013, SOL has largely completed the land acquisition process in SIL and NIL areas with payment to land owners done by SOL including compensation for land and plants (there are a total of 210 land owners). **4 Table 4-3** shows the chronology SOL's land acquisition to date.

Date	Land Acquisition Process
Jan – April 2009	Preparation for location permit document application and Location permit application process to North Tapanuli Government
May 2009	Location permit issued by North Tapanuli Government
June – July 2009	Land survey and staking by SOL/BPN (National Land Agency)
November 2009	Socialization to all land owners conducted by SOL & BPN
May 2010	Location permit was expired, new location permit was re-applied to North Tapanuli
November 2010	New location permit was issued by Bupati of North Tapanuli
December 2010	First land price negotiation with land owners – no agreement reached
January 2011	Second negotiation with land owners; no agreement reached
March 2011	Third negotiation with land owners – Land price agreed by both Land owners and SOL
February 2012 – on going	Land Payment to Land owners

Table 4-3SOL Land Acquisition Chronology

Source: SOL Primary Data, 2013

SOL also obtained government owned lands, namely forestry land. It consists of production and convertible forest production in the NIL area ~ 20.9 Ha. Some landowners have owned land within the forestry area passed down through heritage (this was confirmed by the clans and villages leaders). The list of land owners in the forestry area (30 in total) is provided in Annex A.

4.3 SOL'S ACQUISITION PROCESS

The key stages in SOL's land acquisition process for the SIL and NIL areas are based on the Sarulla Geothermal Project Land Acquisition Manual (

⁴ Based on additional data provided by SOL when finalizing this audit report in January 2014, 210 landowners paid (134 male and 17 female)have been paid as of 3 October 2013. These comprised 151 landowners from NIL and 59 from SIL, with one landowner owning plots of land from NIL and SIL.

Figure 4-1).

Figure 4-1 LAQ Undertaken by SOL



Table 4-4 summarizes the SOL's Land Acquisition at the time of the SSCAR audit. As of April 2014, SOL acquired a total of 811 land parcels involving 437 land owners. There are 63 female landowners and 374 male landowners who have land acquired by SOL. Of the 437 landowners, 321 are in the NIL area and 116 are in the SIL area.

Out of 126.6 ha of land required by the project and for which location permits have been obtained, 93.6 ha were acquired as of October 2014 and 487 landowners have been compensated. Compensation payments are done for the remaining landowners (NIL 1N and 4A Expansion, WJR 2N and Access Road, Road 4A Expansion, WJP 1N, Road 5, Laydown and Tower Footprint). The right of way is also required for the transmission line have not been obtained, the land owners for Road 5 and WJP 1N will be covered in the RP.

No	Area Name	Required/	and/ROW Acquired (in 1.m)	Date/Month Compensatio n Paid	Total Land Parce	Total Landowners		ners	Current Status	Remarks
		Required	Acquired		ls	Male	Female	Total		
				NII						
1	Main Access Road (Road 1 & 1A)			16-19 Sept 13	151	56	11	67	-	On schedule
2	Well Pad NIL 2n & Access Road			16-19 Sept 13	5	3	0	3	-	On schedule
3	Disposal 1 & 2 & Access Road			16-19 Sept 13	53	18	2	20	-	On schedule
4	Borrow Area			16-19 Sept 13	41	17	3	20	-	On schedule
5	WJR 1N & Access Road			16-19 Sept 13	13	6	3	9	-	On schedule
6	Power Plant & Access Road			16-19 Sept 13	52	18	2	20	-	On schedule
7	Laydown			3 Oct 13	9	6	0	6	-	On schedule
8	Road 5 and WJP (WJP)			3 Oct 13	23	11	1	12	-	On schedule
9	NIL1 Exp & Access Road			20 Feb 14	22	7	0	7	-	On schedule
10	WJR 2N & Access Road			20 Feb 14	21	11	0	11	-	On schedule
11	T/L Tower			20-21 Feb 14	47	34	13	47	-	On schedule
12	T/L RoW			22-24 Feb 14	203	116	39	155	-	On schedule
	TOTAL				640	303	74	377		
				SIL						
12	Brine Injection Line (SIL 1- SIL 2)			28 Feb 12	66	29	6	35	-	On schedule
13	SIL 2 to Batang Toru River			3-Okt 12	8	4	0	4	-	On schedule
14	Disposal For Power Plan			30-Jul 13	7	1	10	2	-	On schedule
15	Borrow Area			30-Jul-13	5	4	0	4	-	On schedule

Table 4-4SOL's Land Acquisition Process (*)

SARULLA GEOTHERMAL DEVELOPMENT SSCAR & CAP

SARULLA OPERATIONS LIMITED (SOL)

No	Area Name	Required/	Ind/ROW Acquired (in I.m)	Date/Month Compensatio n Paid	Total Land Parce	Total Landowners		Total Landowners		Current Status	Remarks
		Required	Acquired		ls Is	Male	Female	Total			
16	Well Pad SIL 1			30-Jul-13	7	6	0	6	-	On schedule	
17	Power Plant			30-Jul-13	31	11	1	12	-	On schedule	
18	SIL 2 Expansion & Access Road			16 Oct 13	31	14	2	16	-	On schedule	
19	Laydown 1			16 Oct 13	9	8	1	9	-	On schedule	
20	Laydown 2			16 Oct 13	10	6	0	6	-	On schedule	
21	T/L Tower			20-21 Feb 14	9	9	0	9	-	On schedule	
22	T/L RoW			22-24 Oct 14	50	31	15	7	-	On schedule	
	TOTAL				233	123	35	110			
	Grand Total	1,265,966	936,310		873	426	109	487			

Source: SOL Data, April 2014

* This information has been removed as it falls within exceptions to disclosure specified in paragraph 97, (cite which item for exception) of ADB's Public Communications Policy (2011)

A summary of the steps undertaken in the land acquisition process conducted by SOL is provided in the subsequent sections of this Chapter.

• Step 1 – Survey and identification of land owners

SOL's surveyor conducted an initial survey using a theodolite to mark the land that will be acquired by SOL with precision. After completing the initial survey, SOL's land acquisition team met with the village heads and clan/community leaders to understand the land ownership in the area. This enabled the team to properly identify the correct land owners. (Only clan members utilise these lands; the audit indicated that no squatters or agricultural workers used the land with or without permission from the landowners). After the land owners were identified the team conducted a survey with the land owners, sub-district and village officers and the agriculture agency officer to measure the land and clearly identify the land boundaries and number of plants.



Figure 4-2 Initial Land Acquisition Socialisation Activities

• Step 2 – Socialization and negotiation with land owners

After the survey was completed the land acquisition team invited the land owners to attend a socialisation and negotiation meeting. Prior to this meeting, SOL released the initial entitlements matrix which detailed the total land size, boundaries and number of plants for each plot of land. During the socialisation and negotiation meeting SOL offered compensation prices as follows:

- a) Plant prices were based on age and productivity and referred to prices set by the agriculture agency in the North Tapanuli Regency for 2009/2010 (these are updated annually)(Annex B) and are considered above current market prices; and
- b) Land prices were based on current market values for similar land in the Pahae Jae Sub-District.



Figure 4-3 Socialization and Negotiation with Land Owners

• Step 3 - Confirmation on land width and number of plants

During step 3 SOL released the situation map and plant inventory for each plot of land to the land owners. This was then reviewed and approved by the land owners who checked the land size, number of plants lost, and the compensation price offered by SOL. The land owners were free to decide whether to agree or reject the compensation price offered. If they agreed with the compensation price for land and plants, each land owner signed a letter of statement as confirmation of agreement. No third party validation was involved to oversee transactions were on a willing basis however the signing of the letter of statement was legalised by the village head and SOL's land acquisition team.



Figure 4-4 Signing of the Letter of Statement

• Step 4 – Checking of documentation and legality of letter of land ownership

After receiving the signed letter of statement, every land owner was required to submit land ownership documentation along with a legal letter confirming land ownership i.e. an agreement letter from family members or letter of statement from the village head, etc. The team then reviewed the documents provided.

• Step 5 – Meeting preparation for compensation payment

In order to compensate the land owners SOL's land acquisition team invited them to attend a meeting where they explained the technical process of how the land and plant compensation would be paid. The team also circulated the invitation letter to each land owner to inform them of the compensation payment dates.

• Step 6 – Compensation payment for land and plants

SOL's land acquisition team conducted the compensation payment meeting on the dates agreed. These meetings were attended by the land owners and their family, SOL's land acquisition team, the sub-district and village heads, the sector police head, the *danramil* (military) head, the PLN head at the provincial level, the attorney and bank officer. In sequence, the land owners received their compensation and signed a release letter in front of the attorney. They then received the money from SOL; BNI was the representative bank paying the compensation.

Figure 4-5 Evidence of Compensation Payment



4.3.1 Status Land Acquisition by SOL up to August 2013

SOL's on-going land acquisition is related to project components located in the NIL and SIL area. The remaining NIL areas to be acquired are shown in **Table 4-5**.

Area Name	Date/Month Action	Total Land Owners	Current Status
Tower Footprint	Feb-14	28	Landowners for tower footprint in NIL and SIL Area have been compensated
Transmission Line RoW	Oct-Nov 14	140	The remaining potential land owners for the T/L ROW in NIL and SIL Area have been identified, surveyed and have been compensated.
Laydown	Oct-13	6	The land owners have been compensated.
NIL 1N and Road 4A Expansion	Oct-12	7	The land owners have been compensated.
WJR 2N and Access Road	Dec-13	11	The land owners have been compensated.
WJR 1N and Road 6, 6B	Oct-12	9	The land owners have been compensated, 2 land owner has not been paid
Borrow Area (Pit)	Sep-13	20	The land owners have been compensated. 1 land owner has not been paid due to family dispute
Disposal 1 and 2, Road 3A	Sep-13	20	The land owner has been compensated
Road 1 and 1A	Sep-13	67	The land owners have been compensated. 6 land owner has not been paid due to family dispute
NIL 2N and Road 3B	Sep-13	3	The land owner has been compensated
Power Plant and Road 2, 3	Sep-13	20	The land owner has been compensated
Road 5 and WJP	Oct-12	12	The land owner has been compensated

Table 4-5Status of Land Acquisition Activities

Source: SOL Primary Data, April 2014

4.4 METHODOLOGY FOR ACQUIRING LAND AND APPROACH FOR ARRIVING AT COMPENSATION RATES

4.4.1 Validation of Acquisition of Land is Through Negotiated Settlement

SOL's land acquisition team conducted the negotiation process through holding several socialization and negotiation meetings with all the land owners. During these sessions the negotiated settlement concept was adopted by SOL to ensure no pressure was placed on the land owners to accept the offered compensation land price of IDR 65,000 per m². If the land owners did not agree to sell the land, the Project sought to re-route (see **Figure 4-6**).

Disagreements were largely related to the following:

1. Uncertainties regarding the land boundaries and ownership such as in the WJR 2 area;

- 2. Internal problems among family members around who has ownership of the land that will be acquired by SOL:
 - one family member did not agree about the compensation price, and hence bargained a higher price (this occurred in the area of Access Road 1 and 1A).
 - conflict related to the division of land compensation amongst the household (this also happened in the area of the Access Road 1 and 1A).



Figure 4-6 Project Design Re-Routing

4.4.2 Valuation Methodology of Compensation for Land, Structures, Crops and Trees

The valuation methodology for the land compensation (IDR 65,000 per m²) was based on the sub-district office reference for PLN(*) 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 was not based on its productivity or type of land. The price of IDR 65,000 per m² was for all land types. This was at the request of the land owners in order to not create jealousy.

* *This information has been removed as it falls within exceptions to disclosure specified in paragraph* 97, (cite which item for exception) of ADB's Public Communications Policy (2011)

As per discussions with the village and sub district heads, there was no increase in the compensation price offered for land between 2010 and 2013. This was because the sale and purchase of land is very rare in the Pahae Jae and Pahae Julu Sub Districts. However, the compensation price offered by SOL is still higher than that paid in the village or sub district (23% from sub district office reference and 46% at village level).

Consultations with the village leaders indicate that the current average price for paddy land and rice is 73,000 per m². Therefore given that 1 m² of rice paddy equals 20 clumps and SOL are offering 1,500 per clump (unproductive plants as the majority of land acquired by SOL was immature paddy) the total compensation price for paddy land (considered the highest quality) is:

2 harvests x20 clumps x 1,500IDR+65,000IDR =125,000IDR/m²

This is 52,000 IDR/m² above the current selling price of 73,000 IDR.

Only one temporary structure (**Figure 4-7**) has been acquired and the compensation price was agreed through negotiations with the land owner who received IDR 1,000,000.00. The compensation made on 30 July 2013 for Ibu Roma Sihombing. The purpose for acquiring the land was for the Power Plant Area.

Figure 4-7 Temporary Structure Acquired



The Indonesian Regulations (KepMen ESDM No. 975 K Year 1999& Permen ESDM No. 01) provide the following compensation rates for structures: for an old house 700,000IDR per m² and for a new house 1,300,000IDR per m². ADB SPS SR2 and IFC PS require that structures are compensated at replacement cost and without deduction for depreciation. SOL will calculate the cost of replacing a structure at current rates for labour and materials.

The valuation for plants was undertaken by the Agriculture Agency in the North Tapanuli Regency. **Table 4-6** presents the list of compensation prices for plants by three types: (i) Seeds, (ii) Unproductive plants, and (iii) Productive plants. 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 5,000.00IDR⁵; hence SOL is offering compensation at double the value despite using 2009 values.

No	Type of Plant	Age Plant - less than 6 months/Seeds (IDR)	Unproductive Plant (IDR)	Productive Plant (IDR)
1	Karet/Rubber	10,000.00	37,200.00	750,000.00
2	Kelapa/Coconut	25,000.00	32,000.00	350,000.00
3	Durian	35,000.00	295,000.00	750,000.00
4	Rambutan	7,500.00	20,000.00	75,000.00
5	Mangga/Mango	12,500.00	25,000.00	65,000.00
6	Nangka/Jackfruit	12,500.00	25,000.00	65,000.00
7	Jeruk/Orange	12,500.00	25,000.00	65,000.00
8	Padi/Rice paddy	0.00	1,500.00	2,500.00
9	Pisang/Banana	11,500.00	15,000.00	25,000.00
10	Pinang	7,000.00	20,000.00	75,000.00
11	Kopi Robusta/Robusta Coffee	7,000.00	13,000.00	100,000.00
12	Cokelat/Cacao	8,000.00	25,000.00	220,000.00
13	Cengkeh/Clove	17,500.00	25,000.00	250,000.000
14	Jengkol	5,000.00	20,000.00	50,000.00
15	Aren/Arenga/Sugar Palm	25,000.00	35,000.00	135,000.00
16	Asam/Tamarind	5,000.00	8,000.00	25,000.00
17	Langsat/Lansim Domesticum	12,500.00	35,000.00	125,000.00
18	Rambai/Baccaurea Motleyana	12,500.00	35,000.00	125,000.00
19	Manggis	12,500.00	35,000.00	125,000.00
20	Petai	7,500.00	20,000.00	75,000.00
21	Kayu sembarangan	25,000.00	50,000.00	250,000.00
22	Ubi kayu/Cassava	3,500.00	8,000.00	25,000.00
23	Salak	6,500.00	25,000.00	150,000.00
24	Jambu Air	6,000.00	15,000.00	75,000.00
25	Nenas/Pineapple	7,500.00	15,000.00	35,000.00
26	<i>Kemenyan</i> /Benzoin	12,000.00	15,000.00	450,000.00
27	Rumbia/Nipah	25,000.00	35,000.00	100,000.00
28	Bambu/Bamboo	7,500.00	15,000.00	75,000.00
29	Bambu Lemang	7,500.00	15,000.00	75,000.00
30	Sinim/Mallo	8,500.00	25,000.00	125,000.00
31	Alpukat/Avocado	10,000.00	40,000.00	250,000.00
32	Kulit Manis	7,500.00	12,000.00	200,000.00
33	Kemiri	25,000.00	50,000.00	250,000.00
34	Kopi Arabika/Arabica Coffee	10,000.00	75,000.00	350,000.00

Table 4-6List of Compensation Price for Plants (2009/2010)

⁵ <u>http://bibitkaret.com/kenapa-bibitkaret-com</u>

No	Type of Plant	Age Plant - less than 6 months/Seeds (IDR)	Unproductive Plant (IDR)	Productive Plant (IDR)
35	Sirsak	8,000.00	25,000.00	50,000.00
36	Kincung	1,500.00	20,000.00	50,000.00
37	Duku	12,000.00	35,000.00	150,000.00
38	Pepaya/Papaya	10,000.00	25,000.00	30,000.00
39	Kueni	12,500.00	55,000.00	100,000.00
40	Tiung	12,500.00	25,000.00	125,000.00
41	Rimbang	5,000.00	7,500.00	10,000.00
	Total	469,000.00	1,334,200.00	6,377,500.00

Source: Agriculture Agency North Tapanuli Regency, 10 August 2009 Note: 1 m² rice paddy = 20 clumps

The replacement costs were paid to the land owners for land, temporary structures, crops and trees. People who also rented the land were compensated for their lost crops. SOL confirmed that no administration costs were deducted, and all taxes and registration fees were paid by SOL.

4.5 CONSULTATION, GOOD FAITH NEGOTIATION AND PARTICIPATION ACTIVITIES

4.5.1 *Process Documentation*

SOL conducted consultation with the land owners at the beginning of the land acquisition process. The socialization was recorded in the form of meeting minutes, attendance lists and photographs. (The UNOCAL land acquisition process was not covered in the audit due to a lack of data available).

It was identified during the audit that SOL had already conducted the initial survey, inventory, confirmation, negotiation and payment using culturally sensitive consultation methods i. e. the use of the Batak language and involvement of Bataks as facilitators. During the consultation, the Batak facilitators played an important role communicating with the Batak land owners to ensure they understood the process.

SOL has engaged and hired staff to act as field coordinators for Project affected people (PAP). The field coordinators have been appointed for each sub-district, one coordinator for Pahae Jae Sub District and one for Pahae Julu Sub District. The contact information provided by SOL is as follows:

PLTP Sarulla Project

Office: Ex PLN – UNOCAL Office, Silangkitang Village Pahae Jae Sub District, North Tapanuli Regency, North Sumatera Province Mobile Phone : +62 821 6197 8146

Area	Officer's Name	Mobile Phone #
Pahae Julu (NIL)	Marlan Sitompul	+62 853 0633 0238
Pahae Jae (SIL)	Alden Sitompul	+62 812 6398 7846

Contact Person : Industan Sitompul who is supported by two external relation officers

The public consultation activities undertaken are summarised in the **Table 4-7**. SOL has conducted socialisation and negotiation as evidence to demonstrate the implementation of good faith negotiations and fully participative activities.

 Table 4-7
 Public Consultations Activities undertaken for LAQ Process

Activities	Date	Stakeholders/attendees	Description
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 on land acquisition to brine injection line land owners	25 th November 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
1 st negotiation meeting for Brine Injection line – land owners	9 th December 2010	Land owners, Head of Villages, Head of Sub district	Meeting/negotiation on land price
2 nd negotiation meeting for Brine Injection line – land owners	19 th January 2011	Land owners, Head of Villages, Head of Sub district	Meeting/negotiation on land price
3 rd 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 acquis activities and impact to land		tion of land measurement and r mor I Langit (NIL) Area	number of plants, project
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
^{3rd} 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	Explanation on Project plan and activities and its impacts and

Activities	Date	Stakeholders/attendees	Description
		districts	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 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
Socialization on land acquisition/confirmation of land measurement and number of plants, project activities and impact to land owners in NIL Area	17 th June 2013	SOL Staff, Sibaganding Village Head, Lumban Jaean Village Head and Sub District Head	Explanation on Project plan and activities and its impacts and confirmation of land measurement and number of plants.
Socialization on land acquisition/confirmation of land measurement and number of plants, project activities and impact to land owners in SIL Area	10 th July 2013	SOL Staff, Silangkitang Village Head, Sigurung- gurung Village Head, Land Owners.	Explanation on Project plan and activities and its impacts and confirmation of land measurement and number of plants
Signing situation map, inventory result, nominative and agreement letter on purchase area for SIL 3, Laydown 1,2 and Disposal for Drilling	6 th September 2013	SOL Staff, Pahae Jae Sub District Head	Land Owners signed the situation map, inventory result, nominative and agreement letter.
Socialization on land acquisition/confirmation of land measurement and number of plants, project activities and impact to land owners in NIL Area	17 th October 2013	SOL Staff, Sibaganding Village Head, Lumban Jaean Village Head, Simataniari Village Head and Sub District Head	Explanation on Project plan and activities and its impacts and confirmation of land measurement and number of plants
Socialization on land acquisition/confirmation of land measurement and number of plants, project activities and impact to land owners in NIL Area	9 th November 2013	SOL Staff, Sibaganding Village Head, Lumban Jaean Village Head, Simataniari Village Head and Sub District Head	Explanation on Project plan and activities and its impacts and confirmation of land measurement and number of plants
Socialization with land owners's Tower Footprint Area in NIL and SIL Area	12 th November 2013	SOL Staff, Pahae Jae Sub District Head, Pahae Julu Sub District Head, Sigurung-gurung Village Head, Silangkitang Village	Explanation on Project plan and activities and requested to support from community leaders

Activities	Date	Stakeholders/attendees	Description
		Head, Hutabarat Village Head, Sitoluama Village Head, Sibaganding Village Head and Lumban Jaean Village Head	and land owners.
Socialization on land acquisition/confirmation of land measurement and number of plants, project activities and impact to land owners in NIL Area related to Tower Footprint	18 th Desember 2013	SOL Staff, Pahae Jae Sub District Head, Pahae Julu Sub District Head, Simanampang Village Head, Lontung Dolok Village Head, Hutabarat Village Head, Sitoluama Village Head, Silangkitang Village Head, Sigurung-gurung Village Head and Onan Hasang Village Head	Explanation on Project plan and activities and requested to support from community leaders and land owners.
Land and Plants Compensation for Tower Footprint in SIL and NIL Area	20 th February 2014	SOL Staff, Simanampang Village Head, Sitoluama Village Head, Silangkitang Village Head, Sigurung- gurung Village Head, Representative from Pahae Julu Sub District Office, Representative from Pahae Jae Sub District Office, Pahae Jae Police Head, Pahae Jae Army Head, Attorney, Land Owners	Land Acquisition Payment Process
Land and Plants Compensation for Tower Footprint in NIL Area	21 st February 2014	SOL Staff, Sibaganding Village Head, Lumban Jaean Village Head, Simataniari Village Head, Hutabarat Village Head, Simanampang Village Head, Lontung Dolok Village Head, Pahae Julu Sub District Head, Pahae Julu Police Head, Pahae Julu Army Head, Attorney and Land Owners	Land Acquisition Payment Process

Source: SOL Primary Data, 2014

4.5.2 Good Faith Negotiations to Resolve Major Disagreement

The land owners initially raised concerns and complaints during the public consultation activities undertaken for the land acquisition process. **Table 4-8** summarises the comments and queries from the land owners during these consultation sessions. Overall, there were no major disagreements raised by the land owners regarding SOL's land acquisition process.

SOL has indicated that there are no unresolved or legacy issues remaining regarding compensation payments for UNOCAL or SOL activities undertaken to date and no PAPs have withdrawn from the LAQ process.

The land owner has the right to submit concerns or disagreements via SOL's

external relations department (three people in total). **Figure 4-8** shows a land owner inquiring if remaining land can be acquired by SOL, because it is considered unviable as farmland for rice paddy cultivation (with total size less than 100 m²). In cases where unviable land (i.e. equal to or below 400m²) was identified, SOL acquired the remaining land; there are 85 landowners. Nine (9) land owners have had 100% of their land acquired.

During public consultation for the AMDAL which was done in 28 March 2008, in Pahae Julu, North Tapanuli, it was identified that there were no negative perceptions. Participants included camat, village head and community. The communities' concerns focussed on the impacts from SOL activities in the villages surrounding site.

Figure 4-8 A Land Owner Raising a Concern during Consultations



SOL engaged in an extended process of negotiation (**Figure 4-9**). At the start of the socialization process there were negative community perceptions regarding the compensation price for land with many land owners not willing to accept the compensation price offered. However, SOL ensured adequate time was left for the land owners to decide if they wanted to accept this price or withdraw from the land acquisition process.

Figure 4-9 SOL's Negotiation Process Schedule

SARULLA

2 weeks after initial socialization	2 weeks after SOL offered compensation price	2 weeks prior to confirm data about land size and number of plants
Initial socialization to provide adequate information to land owners re. land and plants to be acquired by SOL	SOL offered the compensation price for land and plants based on initial survey done together with land owners and other key parties i.e. sub district head, village head, clan leader, etc.	Confirmation on width and number of plants. Land owners must sign off the situation map and plant inventory. * before attend to SOL re. confirmation data, SOL send to land owners data
* land owner have time to think whether to sell or not	* land owner have time to think about the price offered by SOL whether agree or not	about inventory of plants and width of land. land owner have time to check on their land whether it is correct or not

Domicile	Comments/Queries	SOL's Responses	
Simataniari Village	EIA (AMDAL) needs to be explained to villagers in Simataniari.	Socialization on AMDAL document had been conducted in 2011. The project is fully committed to disseminate the AMDAL document throughout the project area.	
	During UNOCAL era, some community members claim activities caused damage to their water line. They are requesting SOL fix it.	SOL noted this issue and will further investigate the location because this is from UNOCAL era. Best solution will be sought by SOL's team.	
Sibaganding Village	When the project operates, will the water from Aek Acimun river keeps running to Sibaganding village?	Yes, water will still run from Aek Acimun to Sibaganding Village.	
Sibaganding Village	The local recruitment process should involve candidates from Sibaganding and Simataniari Village. The process should be fair and positions should not only be temporary but permanent	The project will recruit local man power based on their skills and information from the Jakarta office, within the near future; the project will have socialization on recruitment of workers in the Sarulla area	
Simataniari Village	Results of the plantation inventory, calculations and the situation map should be shared with the village after the price is agreed and payments made.	SOL noted this and it will be shared after the price is agreed and payments are made to all land owners.	
Sibaganding	Access road to the village needs to be improved	SOL noted the concerns and will further study the condition of the access road and the waterline. The presence of the project in this area will not cause any harms to the local communities.	
Village	Waterline to the rice field needs to be improved		
	Local people to be recruited in accordance with their skill	will not cause any namis to the local communities.	
-	Propose that his land located on the right side is not to be wholly acquired by the project	This request had been addressed and responded as per request as this was discussed during the land survey and measurement	
-	A situation map for each land to be acquired to be prepared.	SOL has prepared and made situation maps for all land to be acquired	
	Invitation for land negotiation to be prepared at least a week before the event so that owners residing outside of Sarulla area may have time to prepare and attend the meeting	SOL noted this and all activities will be informed well in advance and ensure that land owners residing outside of Sarulla attend the negotiation.	
	AMDAL document should be available at the village	It will be shared with the Head of Village and available at the village office	
-	What if the land doesn't belong to me?	As long as there is power of attorney letter from the land owner, then it will not be an issue.	

Table 4-8Summary of Comments and Queries from Land Owners during Land Acquisition Socialization

Domicile	Comments/Queries	SOL's Responses
-	Representative from one land owner asked SOL to also acquire the remaining land that he has including one grave area	SOL could not acquire the grave area, but will check the location for the remaining land.
-	Requested SOL to acquire their remaining land	SOL will first check and study the location of the remaining land
-	After signing the situation map and plantation inventory today, do we lose our right on the land?	No, because no payment is made and after the signing of situation map and plantation inventory, land owners still have full rights to their land.
Onan Hasang, Simataniari, Lumbajaean, Sibaganding	In Silangkitang SOL has acquisition land at a price of Rp 65.000 in 2011 so why for now SOL want to acquisition land at a price of Rp. 40.000?	Negotiation expected could find a quick decision
-	The land owner will not accept the price offer if based on NGOP price.	We should consider the positive impact of the presence of the project
-	The land that will be acquired should have an equal price with Silangkitang, and how about the price of the land if it's has been certified? For trees that will be acquired, it is still possible for the wood to be used by the land owner?	The plants that grow in the land acquired will be able to be used by their owners.
-	SOL is expected to be frank about the price of land acquisition given by the company	The land acquisition system that will conduct by SOL very different with UNOCAL, which was using location determination system. The nominal to be received by the land owner will not be reduced. Let's think about the positive impact of the SOL project in the future.
-	Land acquisition system established by UNOCAL was very long- winded. We are not willing to be continuously fooled and why is our land treated differently than Silangkitang?	-
-	Please explain the negative impact of the Sarulla project to the local community.	There will no negative impact of the project because all will be conducted properly.
-	The price of the land as in Silangkitang and the price of plants are not based on the price list of the Tarutung Agricultural bureau.	There will no deception on the land acquisition and the plants grown.
-	The land price offer by the land owners is IDR 100.000,-per m ² .	After have coordination with the Jakarta office, the price approved by management is Rp. $50.000/$ m ² .

Domicile	Comments/Queries	SOL's Responses
-	The price of the land that proposed by company management of Jakarta cannot be accepted by the land owners.	After make coordination with company office in Jakarta, the last decision is Rp 55.000/M2 and SOL will not make price discrimination between the wetland and terrestrial.
-	The last price offered by the company is not acceptable for us. The land price expected by the land owners is Rp. 100.000,- per m ² for the wetland and Rp. 150.000,- per m ² for dry land.	-
-	The land price proposed Rp.65.000,-per m ² , like the price of Silangkitang.	-
-	One of the community leader of Simataniari village expected there should be a mutually beneficial agreement between the land owner and the company.	-
-	Let us think see how the positive impact of this company so let's we all together give a support to the company. We can propose the land price equal with the Silangkitang.	Please make the same perception for the land price among the land owners.
-	Let's we agree with each other for the land price is the same with Silangkitang before this meeting dissolved.	-
-	To conclude the meeting most of the participants expected the land price was the same as the price in Silangkitang in the amount of Rp 65,000- per m ² . A small portion of land owners in Onan Hasang, Lumban Jaean, and Sibaganding expected the land price was Rp. 80.000,- per m ² , while for Simataniari expected Rp 100.000,- per m ² , for dry land and Rp. 150.000,- per m ² , for wetland.	-
Silangkitang, Sigurung-gurung	The company should prioritize recruitment for land owners.	-
Sigurung-gurung	The applicant that intends to work in the company project will be given a reference letter from the local village head	-
Silangkitang and Sigurung-gurung	Please explain about the dry land and the wetland	For the pants-grow will be follow the agricultural bureau price list and for both of dry land and wetland price is Rp 65.000/M2.
-	If the price has been set up in previous months before, so we will agree with the price Rp 65.000, - per m ² .	-

Domicile	Comments/Queries	SOL's Responses
-	The rest of land that has not been plotted by SOL, proposed to be bought by SOL and be measured again	The surveyors will be deployed in the near future to ascertain the amount of rest land in the area.
-	The existing land disposal expected disposed to the brink of the rest land belong to local community.	We will be considered, because if discarded soil carelessly can result in landslides that can pollute the environment.
-	The price of dry land and wetland be expected to be revisited	For now the price of land cannot be revised any more
Silangkitang	Considering the land price cannot be changed anymore then let us together to unite the opinion to approve the replacement price of the land (IDR 65,000,- per m ²)	-
Sitoluama	Please make clearer information about the issue of free route, compensation, and employee recruitment. For store house is there also compensation?	The plants which are 3 meters high will be cut. The spread of tower footprint is 18 meters. Accordance with the provision of laws the house which is impacted by the project will be compensated.
-	The land price of tower footprint expected be paid on fair price because it's a productive land	Everything that exists in the tower footprint area will be compensated in accordance with the regulation of North Tapanuli government. Until now we have not yet established the price negotiation, so we will conduct land acquisition based on NJOP because we know that the local NJOP is low.
Sigurung-Gurung	The project footprint located on my land expected to be moved slightly. For the land price please be revised because inflation often happens.	For the movement of land, the team will visit the location first. For the productive plants all of them will be counted.
Sibaganding	Our land has been acquired twice, how the compensation for wet land? Our suggestion is for the rice plant in order to be paid for 70 years.	The SOL way to acquire land is by the system 20 clumps x 2 x Rp $1.500 = \text{Rp} 65.000/\text{M2}$. The suggestion from a man from Sibaganding cannot be approved because we have acquired the land many times already.
Lumban Jaean	Agree with the project development plan in this region	In the near future will be established a survey for land and plant grow, and we will inform when the survey will be conducted. For the land owner who struck by the ROW will be socialized by the ROW owner in the village.
Sitoluama	The land owner of tower footprint no 24 until now does not agree with the land acquisition	It will be examined in the field
Onan Hasang	We hope there will no more problem for the land borders that will be acquired by the company	For the land owner of tower footprint there will be socialization in each village

Domicile	Comments/Queries	SOL's Responses
Sitoluama	Why there are not the same spaces of each land that will be acquired for tower footprint?	The spaces of land for tower footprint is fluctuating according to condition on the filed
-	Because my land is not extensive it be better gathered with others	The coordinate points of each land has been registered is unlikely to be changed.
-	Because my property only slightly affected by the project footprint so it be better not be acquired	It will be the same, for the coordinate points have been registered for project footprint and are unlikely to be changed.
Sigurung-gurung	The land compensation payment process should be conducted transparently among the family members	All the family member expected to attend the land compensation process in order if problems appear so it can be resolved
Onan Hasang, Simataniari, Lumbajaean, Sibaganding	In Silangkitang SOL has acquisition land at a price of IDR 65.000 in 2011 so why for now SOL wants to acquire land at a price of IDR 40.000?	Negotiation expected could find a quick decision

Source: SOL Primary Data, 2013

4.5.3 Sensitivity of the Grievance Mechanism to Local Culture

It was identified during the audit that a timely and effective Grievance Mechanism was already being implemented by SOL; with responsibility lying with the external relations department. Grievances were raised to the department by land owners through verbal and written channels. SOL has two main contact points for grievances; one for the SIL area, the other for the NIL area.

SOL's external relations department also received grievances via the village head offices in the nine villages surrounding the SOL Project Site. These villages were Silangkitang, Sigurung-gurung, Pardomuan Nainggolan and Pardamaean Nainggolan (Pahae Jae Sub-District) and Janji Natogu, Onan Hasang, Sibaganding, Lumban Jaean and Simataniari (Pahae Julu Sub-District). The grievance form was submitted by the land owners through the village heads or external relations officer. **Figure 4-10** shows the grievance form provided by SOL.

External relations prioritised 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.

To date the majority of grievances have been handled verbally by SOL's external relations team with little documentation available. Therefore it is unclear how many grievances in total have been submitted or addressed to date. **Table 4-9** summarises the current grievance status.

Total #	Resolved	How has SOL addressed?	Outstanding
	1. Damage of irrigation channel due to the process of Brine Injection Line installation at SIL	1. SOL checked the location and after having discussions with local communities built an alternative irrigation channel during the installation of pipe line and also drainage. SOL will put the irrigation channel back to its track after the pipe line installation work completed.	Status: Done

Table 4-9Current Grievance Status (as of October 2013)

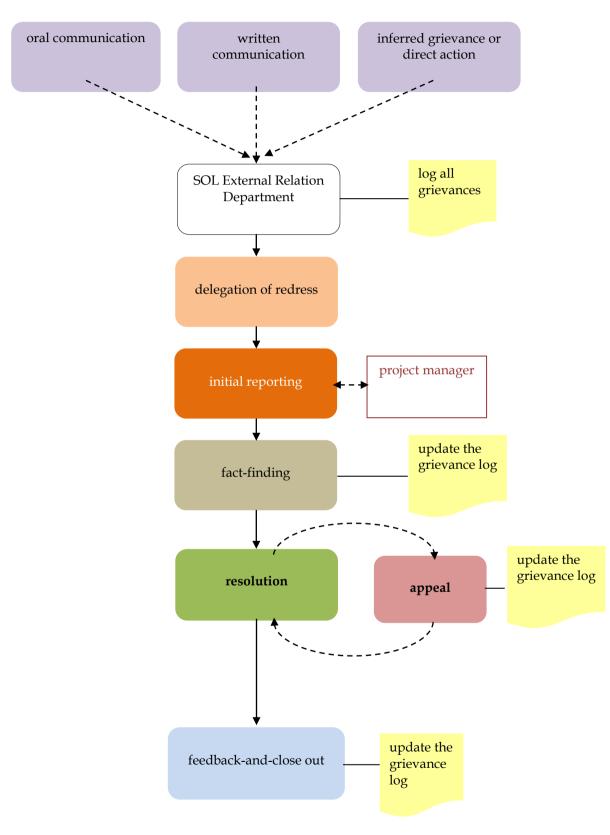
Total #	Resolved	How has SOL addressed?	Outstanding
	2. Damage on the irrigation channel in Hutajulu village (NIL) but this was from UNOCAL period not because SOL's activities because so far SOL doesn't have any activities in the area. The recent damage was due to the landslide caused by rain.	2. SOL team conducted checking to the field and decided that SOL will help to improve the irrigation through its CSR program. SOL will further coordinate and cooperate with the local communities for the implementation	Status: Checking – Done and the coordination & cooperation with local community will be conducted during CSR program implementation
	3. Damage (partly) on an irrigation pipe in a small village in Pardomuan Nainggolan Village not because of SOL's activity but due to the aging and vehicles usage.	3. SOL team conducted checking to the field and decided that SOL will help to improve the irrigation through its CSR program. SOL will further coordinate and cooperate with the local communities for the implementation	Status: Checking – Done and the coordination & cooperation with local community will be conducted during CSR program implementation
	4. Landslides on the access road to SIL 2 due to the rain thus it's difficult for local communities' vehicles to access their farm land area.	4. SOL checked the location and cleaned up the access road together with local communities since it's not only used by SOL but also local communities.	Status: Done

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Sarulla			
Grievance Form	Date:		
Reference Number			
Full Name			
Contact information	Address:		
	Telephone		
	Email:		
	it happen? Where did it happen?		
Who did it happen to? Wha	t is the result of the problem?) :		
What would be your suggestion	What would be your suggestion/recommendation to resolve the problem?		
Consent to disclose grievance-r	elated 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 4-11.

Figure 4-11 Quick Reference Guide to Grievance Mechanism



4.6 STATUS OF LAND ACQUISITION AND COMPENSATION PAYMENTS

4.6.1 Status of Payments

As of April 2014, out of a total of 116 landowners 92 from SIL have been compensated for their land parcels and plants. Two of the 92 land owners in the SIL area have not been compensated yet due to family disputes. Out of a total of 321 landowners from NIL 159 have been compensated for their land parcels and plants (four of these landowners have not been compensated again due to family disputes). SOL has acquired land for Main Access Road (Road 1 & 1A), Well Pad NIL 2N and Access Road, Disposal 1 & 2 and Access Road, Borrow Area, WJR 1N and Access Road, Power Plant and Access Road. For these components of the project, as of April 2014, 180 landowners had been identified. This number may increase during SOL's identification and survey process planned to be finalised in mid-late 2014.

	Name			Land area	Total	Total	Total	
No	Male	Female	Domicile	acquired (m²)	Compensation for Land	Compensation for Crops/ Trees acquired	Compensation (IDR)	Date Paid
					SIL AREA			
1			Sigurung-gurung	1.138	73.970.000	151.622.100	225.592.100	28-Feb-12
2			Sigurung-gurung	364	23.660.000	-	23.660.000	16-Oct-13
3			Silangkitang	121	7.865.000	-	7.865.000	16-Oct-13
4			Sigurung-gurung	2.276	156.455.000	257.149.300	413.604.300	28-Feb-12
5			Silangkitang	299	19.435.000	35.428.000	54.863.000	28-Feb-12
6			Sigurung-gurung	358	23.270.000	802.451.400	825.721.400	03-Okt-12
7			Silangkitang	279	18.135.000	-	18.135.000	16-Oct-13
8			Sigurung-gurung	1.789	116.285.000	-	116.285.000	16-Oct-13
9			Silangkitang	1.519	98.735.000	-	98.735.000	16-Oct-13
10			Sigurung-gurung	196	12.740.000	31.917.400	44.657.400	28-Feb-12
11			Sigurung-gurung	143	9.295.000	-	9.295.000	16-Oct-13
12			Sigurung-gurung	658	42.770.000	67.315.500	110.085.500	28-Feb-12
13			Silangkitang	4.384	254.960.000	304.856.600	559.816.600	30-Jul-13
14			Silangkitang					16-Oct-13

Table 4-10 All Landowners and Compensation Received Between February 2012 until April 2014 (*)

	Name			Land area	Total	Total	Total	
No	Male	Female	Domicile	acquired (m ²)	Compensation for Land	Compensation for Crops/ Trees acquired	Compensation (IDR)	Date Paid
				782	50.830.000	-	50.830.000	
15			Sigurung-gurung	2.073	134.745.000	9.061.600	143.806.600	30-Jul-13
16			Silangkitang	2.317	150.605.000	140.273.500	290.878.500	30-Jul-13
17			Sigurung-gurung	1.391	89.245.000	179.528.500	268.773.500	28-Feb-12
18			Silangkitang	1.409	91.585.000	-	91.585.000	16-Oct-13
19			Silangkitang	554	36.010.000	27.805.200	63.815.200	30-Jul-13
20			Silangkitang	5.697	370.305.000	-	370.305.000	16-Oct-13
21			Silangkitang	1.938	125.970.000	116.280.000	242.250.000	16-Oct-13
22			Sigurung-gurung	103	6.695.000	12.120.000	18.815.000	28-Feb-12
23			Silangkitang	417	27.105.000	24.647.500	51.752.500	28-Feb-12
24			Silangkitang	81	5.265.000	4.860.000	10.125.000	2014
25			Silangkitang	7.154	227.747.300	80.312.300	308.059.600	30-Jul-13
26			Silangkitang	2.531	164.515.000	-	164.515.000	16-Oct-13
27			Silangkitang	1.214	78.910.000	-	78.910.000	15-Nov-13
28			Silangkitang	869	56.485.000	-	56.485.000	16-Oct-13
29			Sigurung-gurung					16-Oct-13

	Name	2		Land area	Total	Total	Total	
No	Male	Female	Domicile	acquired (m ²)	Compensation for Land	Compensation for Crops/ Trees acquired	Compensation (IDR)	Date Paid
				232	15.080.000	-	15.080.000	
30			Silangkitang	258	16.770.000	6.188.800	22.958.800	28-Feb-12
31			Sigurung-gurung	2.456	117.195.000	-	117.195.000	16-Oct-13
32			Sigurung-gurung	90	5.850.000	4.518.400	10.368.400	28-Feb-12
33			Sigurung-gurung	495	32.175.000	12.250.000	44.425.000	28-Feb-12
34			Sigurung-gurung	365	23.725.000	23.205.600	46.930.600	28-Feb-12
35			Sigurung-gurung	685	4.940.000	9.600.000	14.540.000	28-Feb-12
36			Silangkitang	2.873	186.745.000	158.266.600	345.011.600	30-Jul-13
37			Sigurung-gurung	1.530	99.450.000	18.000.000	117.450.000	03-Okt-12
38			Sigurung-gurung	270	17.550.000	25.715.200	43.265.200	28-Feb-12
39			Sigurung-gurung	648	42.120.000	-	42.120.000	16-Oct-13
40			Silangkitang	2.525	164.125.000	36.011.300	200.136.300	30-Jul-13
41			Silangkitang	1.116	72.540.000	74.833.900	147.373.900	28-Feb-12
42			Silangkitang	7.760	504.400.000	294.046.600	798.446.600	30-Jul-13
43			Silangkitang	2.786	181.090.000	-	181.090.000	30-Jul-13

	Name	2		Land area	Total	Total	Total	
No	Male	Female	Domicile	acquired (m ²)	Compensation for Land	Compensation for Crops/ Trees acquired	Compensation (IDR)	Date Paid
44			Sigurung-gurung	2.468	160.420.000	-	160.420.000	16-Oct-13
45			Sigurung-gurung	2.691	174.915.000	-	174.915.000	16-Oct-13
46			Sigurung-gurung	2.384	154.960.000	613.360.000	768.320.000	28-Feb-12
47			Sigurung-gurung	81	5.265.000	2.984.400	8.249.400	28-Feb-12
48			Silangkitang	1.550	100.750.000	-	100.750.000	16-Oct-13
49			Sigurung-gurung	198	12.870.000	23.105.000	35.975.000	28-Feb-12
50			Silangkitang	4.243	275.795.000	-	275.795.000	16-Oct-13
51			Sigurung-gurung	609	39.585.000	21.574.400	61.159.400	28-Feb-12
52			Silangkitang	6.324	411.060.000	342.770.400	753.830.400	28-Feb-12
53			Sigurung-gurung	2.441	158.665.000	284.295.900	442.960.900	03-Okt-12
54			Silangkitang	1.677	109.005.000	-	109.005.000	16-Oct-13
55			Silangkitang	546	35.490.000	10.869.100	46.359.100	30-Jul-13
56			Silangkitang	566	36.790.000	-	36.790.000	16-Oct-13
57			Silangkitang	1.722	111.930.000	-	111.930.000	16-Oct-13
58			Silangkitang	382	24.830.000	1.097.048.100	1.121.878.100	30-Jul-13

	Nam	ıe		Land area	Total	Total	Total	
No	Male	Female	Domicile	acquired (m ²)	Compensation for Land	Compensation for Crops/ Trees acquired	Compensation (IDR)	Date Paid
59			Silangkitang	169	10.985.000	9.703.500	20.688.500	30-Jul-13
60			Silangkitang	390	25.350.000	-	25.350.000	16-Oct-13
61			Silangkitang	2.334	151.710.000	-	151.710.000	16-Oct-13
62			Sigurung-gurung	1.156	-	-	-	03-Apr-12
63			Silangkitang	3.160	3.160	3.160	6.319	30-Jul-13
64			Silangkitang	273	17.745.000	23.837.000	41.582.000	30-Jul-13
65			Silangkitang	535	34.775.000	-	34.775.000	28-Feb-12
66			Silangkitang	28	1.820.000	3.112.000	4.932.000	12-Feb-14
67			Silangkitang	404	26.260.000	-	26.260.000	16-Oct-13
68			Silangkitang	34.553	3.509.220.000	1.776.656.300	5.285.876.300	30-Jul-13
69			Silangkitang	2.951	191.165.000	92.207.900	283.372.900	30-Jul-13
70			Sigurung-gurung	479	31.135.000	60.657.400	91.792.400	28-Feb-12
71			Silangkitang	1.004	65.260.000	-	65.260.000	16-Oct-13
72			Sigurung-gurung	296	19.240.000	44.426.000	63.666.000	28-Feb-12
73			Silangkitang	21.678	1.060.350.365	512.718.765	1.573.069.130	30-Jul-13

	Nam	ie		Land area	Total	Total	Total	
No	Male	Female	Domicile	acquired (m ²)	Compensation for Land	Compensation for Crops/ Trees acquired	Compensation (IDR)	Date Paid
74			Silangkitang	1.938	125.970.000	-	125.970.000	30-Jul-13
75			Silangkitang	1.001	65.065.000	147.592.700	212.657.700	28-Feb-12
76			Silangkitang	991	64.415.000	92.240.000	156.655.000	30-Jul-13
77			Sigurung-gurung	512	33.280.000	-	33.280.000	16-Oct-13
78			Sigurung-gurung	1.920	124.800.000	214.630.900	339.430.900	28-Feb-12
79			Silangkitang	10.004	650.260.000	398.129.100	1.048.389.100	30-Jul-13
80			Silangkitang	4.286	197.535.000	173.219.800	370.754.800	30-Jul-13
81			Sigurung-gurung	202	13.130.000	23.055.000	36.185.000	28-Feb-12
82			Silangkitang	31	2.015.000	-	2.015.000	16-Oct-13
83			Silangkitang	57	3.705.000	-	3.705.000	16-Oct-13
84			Silangkitang	3.674	238.810.000	-	238.810.000	16-Oct-13
85			Sigurung-gurung	343	16.640.000	31.200.000	47.840.000	28-Feb-12
86			Sigurung-gurung	474	30.810.000	55.747.400	86.557.400	28-Feb-12
87			Sigurung-gurung	7.916	514.540.000	160.630.200	675.170.200	03-Okt-12
88			Sigurung-gurung	1.960	127.400.000	106.522.500	233.922.500	28-Feb-12

	Nam	ie		Land area	Total	Total	Total	
No	Male	Female	Domicile	acquired (m ²)	Compensation for Land	Compensation for Crops/ Trees acquired	Compensation (IDR)	Date Paid
89			Silangkitang	542	35.230.000	21.201.000	56.431.000	06-Jul-05
90			Sigurung-gurung	1.058	68.770.000	140.142.000	208.912.000	28-Feb-12
91			Silangkitang	121	7.865.000	7.260.000	15.125.000	12-Feb-14
92			Silangkitang	2.583	167.895.000	-	167.895.000	16-Oct-13
					NIL AREA			
1			Onan Hasang	900	58,500,000	66,503,000	125,003,000	Monday, September 16, 2013
2			Simataniari / Lumban Jaean	20,267	1,317,355,000	310,890,200	1,628,245,200	Monday, September 16, 2013
3			Simataniari / Lumban Jaean	21,433	1,393,145,000	828,380,500	2,221,525,500	Monday, September 16, 2013
4			Lumban Jaean dan Simataniari	1,530	99,450,000	61,558,800	161,008,800	Monday, September 16, 2013
5			Lumban Jaean dan Simataniari	129	8,385,000	7,740,000	16,125,000	Monday, September 16, 2013
6			Lumban Jaean dan Simataniari	270	17,550,000	5,070,000	22,620,000	Monday, September 16, 2013
7								
8			Lumbanjean, Sibaganding dan Simataniari	1,455	94,575,000	104,220,800	198,795,800	Wednesday, October 03, 2012
9			Onan Hasang	499	32,435,000	9,826,100	42,261,100	Monday, September 16, 2013
10			Simataniari	7,762	7,762	7,762	15,524	Monday, September 16, 2013
11			Lumban Jaean dan Simataniari	417	27,105,000	16,213,800	43,318,800	Monday, September 16, 2013

	Nam	e		Land area	Total	Total	Total	
No	Male	Female	Domicile	acquired (m ²)	Compensation for Land	Compensation for Crops/ Trees acquired	Compensation (IDR)	Date Paid
12			Simataniari	2,452	159,380,000	1,725,000	161,105,000	Monday, September 16, 2013
13			Simataniari / Lumban Jaean	549	35,685,000	50,795,000	86,480,000	Monday, September 16, 2013
14			Onan Hasang	1,182	52,780,000	31,980,700	84,760,700	Monday, September 16, 2013
15			Lumban Jaean	7,423	482,495,000	285,358,700	767,853,700	Wednesday, October 03, 2012
16			Lumban Jaean, Sibaganding dan Simataniari	11,823	768,495,000	59,156,000	827,651,000	Wednesday, October 03, 2012
17			Lumbanjean	1,116	72,540,000	9,625,000	82,165,000	Monday, September 16, 2013
18			Simataniari	2,642	165,165,000	18,200,000	183,365,000	Monday, September 16, 2013
19			Simataniari	5,336	346,840,000	91,883,400	438,723,400	Wednesday, September 18, 2013
20			Lumban Jaean dan Simataniari	543	35,295,000	3,935,000	39,230,000	Monday, September 16, 2013
21			Onan Hasang	238	15,470,000	3,264,400	18,734,400	Monday, September 16, 2013
22			Simataniari / Lumbanjean	1,466	95,290,000	27,136,000	122,426,000	Monday, September 16, 2013
23			Lumban Jaean dan Simataniari	3,799	246,935,000	142,050,800	388,985,800	Monday, September 16, 2013
24			Lumban Jaean	19,533	1,259,645,000	131,235,000	1,390,880,000	Wednesday, October 03, 2012
25			Simataniari	2,543	165,295,000	59,809,900	225,104,900	Monday, September 16, 2013
26			Onan Hasang	71	4,615,000	598,500	5,213,500	Monday, September 16, 2013
27			Lumban Jaean	15	975,000	4,649,000	5,624,000	Wednesday, October 03, 2012
28			Simataniari /	8,498	552,370,000	229,824,300	782,194,300	Monday, September 16, 2013

	Name			Land area	Total	Total	Total	
No	Male	Female	Domicile	acquired (m ²)	Compensation for Land	Compensation for Crops/ Trees acquired	Compensation (IDR)	Date Paid
			Lumban Jaean					
29			Simataniari	12,960	842,400,000	430,741,700	1,273,141,700	Monday, September 16, 2013
30			Simataniari	12,936	840,840,000	535,322,000	1,376,162,000	Monday, September 16, 2013
31			Simataniari	3,906	253,890,000	242,231,000	496,121,000	Thursday, September 19, 2013
32			Simataniari	2,337	151,905,000	104,954,500	256,859,500	Tuesday, September 17, 2013
33			Simataniari	20,337	1,321,905,000	503,289,700	1,825,194,700	Monday, September 16, 2013
34			Simataniari / Lumban Jaean	8,302	539,630,000	324,628,600	864,258,600	Monday, September 16, 2013
35			Simataniari	24,763	1,609,595,000	698,401,800	2,307,996,800	Monday, September 16, 2013
36			Sarulla	106	6,890,000	6,360,000	13,250,000	Monday, September 16, 2013
37			Simataniari / Lumban Jaean	15,592	1,013,480,000	1,278,656,200	2,292,136,200	Monday, September 16, 2013
38			Simataniari	1,021	66,365,000	61,260,000	127,625,000	Monday, September 16, 2013
39			Lumban Jaean	2,870	186,550,000	97,685,900	284,235,900	Monday, September 16, 2013
40			Simataniari dan Lumban Jaean	8,125	528,125,000	301,261,500	829,386,500	Monday, September 16, 2013
41			Sibaganding	97	6,305,000	2,816,500	9,121,500	Monday, September 16, 2013
42			Simataniari	1,091	70,915,000	11,984,500	82,899,500	Monday, September 16, 2013
43			Lumban Jaean	5,499	357,435,000	141,774,800	499,209,800	Monday, September 16, 2013
44			Lumban Jaean	29	1,885,000	1,740,000	3,625,000	Monday, September 16, 2013
45			Sibaganding	272	17,680,000	16,884,000	34,564,000	Monday, September 16, 2013

	Namo	e		Land area	Total	Total	Total	
No	Male	Female	Domicile	acquired (m ²)	Compensation for Land	Compensation for Crops/ Trees acquired	Compensation (IDR)	Date Paid
46			Simataniari	3,872	251,680,000	85,788,300	337,468,300	Monday, September 16, 2013
47			Simataniari	304	19,760,000	18,939,400	38,699,400	Monday, September 16, 2013
48			Lumbanjean	5,522	358,930,000	168,267,200	527,197,200	Monday, September 16, 2013
49			Simataniari	5,482	356,330,000	112,761,800	469,091,800	Monday, September 16, 2013
50			Simataniari	194	12,610,000	33,155,000	45,765,000	Monday, September 16, 2013
51			Simataniari dan Lumban Jaean	2,558	166,270,000	93,092,000	259,362,000	Monday, September 16, 2013
52			Onan Hasang	10,408	676,520,000	840,076,500	1,516,596,500	Monday, September 16, 2013
53			Lumban Jaean	13,047	848,055,000	878,744,900	1,726,799,900	Monday, September 16, 2013
54			Lumban Jaean dan Simataniari	1,417	26,975,000	12,908,230	39,883,230	Monday, September 16, 2013
55			Sibaganding	398	25,870,000	23,880,000	49,750,000	Monday, September 16, 2013
56			Onan Hasang	214	13,910,000	5,295,000	19,205,000	Monday, September 16, 2013
57			Sibagnding	4,564	296,855,000	213,499,600	510,354,600	Monday, September 16, 2013
58			Simataniari dan Lumban Jaean	291	18,915,000	14,526,200	33,441,200	Monday, September 16, 2013
59			Simataniari	20,706	1,345,890,000	399,608,500	1,745,498,500	Monday, September 16, 2013
60			Lumban Jaean	29,819	1,938,235,000	209,587,500	2,147,822,500	Wednesday, October 03, 2012
61			Lumban Jaean	5,899	383,435,000	110,787,900	494,222,900	Monday, September 16, 2013
62			Lumban Jaean	93	6,045,000	6,505,000	12,550,000	Monday, September 16, 2013
63								

	Nam	Name		Land area	Total	Total	Total	
No	Male	Female	Domicile	acquired (m ²)	Compensation for Land	Compensation for Crops/ Trees acquired	Compensation (IDR)	Date Paid
64			Simataniari	119	7,735,000	12,064,100	19,799,100	Monday, September 16, 2013
65			Sibaganding	675	43,875,000	36,146,600	80,021,600	Wednesday, October 03, 2012
66			Lumban Jaean, Sibaganding dan Simataniari	4,268	277,420,000	52,305,000	329,725,000	Wednesday, October 03, 2012
67			Lumban Jaean	482	31,330,000	53,365,000	84,695,000	Monday, September 16, 2013
68			Lumbanjean	7,269	472,485,000	183,384,600	655,869,600	Monday, September 16, 2013
69			Simataniari	70	4,550,000	2,584,000	7,134,000	Monday, September 16, 2013
70			Simataniari	30	1,950,000	3,000,000	4,950,000	Monday, September 16, 2013
71			Lumbanjean	1,436	93,340,000	29,699,500	123,039,500	Wednesday, October 03, 2012
72			Simataniari	557	36,205,000	39,760,000	75,965,000	Monday, September 16, 2013
73			Silangkitang	154	10,010,000	16,280,000	26,290,000	Friday, December 06, 2013
74			Simataniari	2,898	97,360,000	151,090,700	248,450,700	Wednesday, October 03, 2012
75			Simataniari	1,644	106,860,000	95,778,000	202,638,000	Monday, September 16, 2013
76			Sibaganding	6,173	401,245,000	197,875,800	599,120,800	Wednesday, October 03, 2012
77			Lumban Jaean	20,248	1,316,120,000	526,862,000	1,842,982,000	Monday, September 16, 2013
78			Lumban Jaean	219	14,235,000	13,322,000	27,557,000	Monday, September 16, 2013
79			Simataniari	3,835	249,275,000	231,331,000	480,606,000	Monday, September 16, 2013
80			Simataniari dan Lumban Jaean	10,384	674,960,000	302,038,500	976,998,500	Monday, September 16, 2013
81								

	Name			Land area	Total	Total	Total	
No	Male	Female	Domicile	acquired (m²)	Compensation for Land	Compensation for Crops/ Trees acquired	Compensation (IDR)	Date Paid
82			Simataniari	989	64,285,000	59,340,000	123,625,000	Monday, September 16, 2013
83			Lumban Jaean	109	7,085,000	650,000	7,735,000	Monday, September 16, 2013
84			Lumbanjean	1,715	111,475,000	41,550,000	153,025,000	Wednesday, October 03, 2012
85			Simataniari	4,513	293,345,000	207,467,900	500,812,900	Monday, September 16, 2013
86			Lumbanjean	8,531	358,475,000	257,170,200	615,645,200	Monday, September 16, 2013
87			Simataniari	5,021	326,365,000	282,673,900	609,038,900	Monday, September 16, 2013
88			Lumbanjean	10,365	673,920,000	250,914,400	924,834,400	Wednesday, October 03, 2012
89			Simataniari	3,237	210,405,000	180,518,000	390,923,000	Monday, September 16, 2013
90			Onan Hasang	4,969	322,985,000	214,667,200	537,652,200	Monday, September 16, 2013
91			Sibaganding	3,618	235,170,000	107,570,700	342,740,700	Wednesday, October 03, 2012
92			Sibaganding	259	16,835,000	16,360,000	33,195,000	Wednesday, October 03, 2012
93			Lumban Jaean	40	2,600,000	2,400,000	5,000,000	Monday, September 16, 2013
94			Sibaganding	78	5,070,000	4,680,000	9,750,000	Monday, September 16, 2013
95			Onan Hasang	628	40,820,000	18,180,000	59,000,000	Monday, September 16, 2013
96			Simataniari	9,531	619,515,000	203,246,100	822,761,100	Monday, September 16, 2013
97			Sibaganding	3,331	216,150,000	485,144,900	701,649,900	Monday, September 16, 2013
98			Simataniari	120	7,800,000	7,200,000	15,000,000	Monday, September 16, 2013
99			Simataniari	3,412	221,780,000	206,165,000	427,945,000	Monday, September 16, 2013
100			Simataniari	13,640	886,600,000	312,060,500	1,198,660,500	Monday, September 16, 2013

	Nam	ıe		Land area	Total	Total	Total		
No	Male	Male Female		acquired (m ²)	Compensation for Land	Compensation for Crops/ Trees acquired	Compensation (IDR)	Date Paid	
101			Onan Hasang	500	32,500,000		32,500,000	Monday, September 16, 2013	
102			Lumbanjean	9,027	586,755,000	293,927,200	880,682,200	Wednesday, October 03, 2012	
103			Simataniari	84	5,460,000	1,135,000	6,595,000	Monday, September 16, 2013	
104			Simataniari	11,730	763,750,000	328,220,000	1,091,970,000	Monday, September 16, 2013	
105			Sibaganding	1,675	108,875,000	17,351,000	126,226,000	Monday, September 16, 2013	
106			Simataniari	2,919	189,735,000	53,232,800	242,967,800	Monday, September 16, 2013	
107			Lumban Jaean	13,101	851,565,000	404,284,200	1,255,849,200	Monday, September 16, 2013	
108			Sibaganding	432	28,080,000	27,035,000	55,115,000	Monday, September 16, 2013	
109			Sibaganding	339	22,035,000	5,822,500	27,857,500	Monday, September 16, 2013	
110			Lumban Jaean	15,782	1,025,830,000	322,986,400	1,348,816,400	Monday, September 16, 2013	
111			Simataniari	2,137	138,905,000	80,583,800	219,488,800	Monday, September 16, 2013	
112			Sibaganding	1,129	73,385,000	68,117,000	141,502,000	Monday, September 16, 2013	
113			Onan Hasang	1,000	65,000,000	101,355,400	166,355,400	Monday, September 16, 2013	
114			Lumban Jaean	20,002	1,300,130,000	957,739,400	2,257,869,400	Monday, September 16, 2013	
115			Simataniari	14,267	927,355,000	324,416,500	1,251,771,500	Monday, September 16, 2013	
116			Simataniari	1,177	76,505,000	18,700,000	95,205,000	Monday, September 16, 2013	
117			Simataniari	6,771	440,115,000	450,858,100	890,973,100	Monday, September 16, 2013	
118			Lumbanjean	11,645	756,925,000	654,341,400	1,411,266,400	Monday, September 16, 2013	
119			Janji Natogu	1,538	99,970,000	27,285,000	127,255,000	Monday, September 16, 2013	

	Nam	Name		Land area	Total	Total	Total		
No	Male	Female	Domicile	acquired (m ²)	Compensation for Land	Compensation for Crops/ Trees acquired	Compensation (IDR)	Date Paid	
120			Lumban Jaean	308	20,020,000	16,630,000	36,650,000	Monday, September 16, 2013	
121			Lumban Jaean	222	14,430,000	13,846,600	28,276,600	Monday, September 16, 2013	
122			Simataniari	5,001	325,065,000	82,495,000	407,560,000	Monday, September 16, 2013	
123			Onan Hasang	1,364	13,520,000	13,730,000	27,250,000	Monday, September 16, 2013	
124			Lumban Jaean	112	7,280,000	7,400,000	14,680,000	Monday, September 16, 2013	
125			Sibaganding	2,250	53,950,000	11,817,500	65,767,500	Wednesday, October 03, 2012	
126			Simataniari	20,510	1,333,150,000	618,223,300	1,951,373,300	Monday, September 16, 2013	
127			Lumban Jaean	5,380	349,700,000	172,931,600	522,631,600	Tuesday, February 11, 2014	
128			Simataniari	397	25,805,000	23,820,000	49,625,000	Monday, September 16, 2013	
129			Onan Hasang	230	14,950,000	13,800,000	28,750,000	Monday, September 16, 2013	
130			Lumban Jaean	14,514	943,410,000	729,850,300	1,673,260,300	Monday, September 16, 2013	
131			Simataniari	31	2,015,000	1,860,000	3,875,000	Monday, September 16, 2013	
132			Lumban Jaean	805	52,325,000	21,930,500	74,255,500	Monday, September 16, 2013	
133			Simataniari	3,702	240,630,000	169,734,600	410,364,600	Monday, September 16, 2013	
134			Simataniari	4,376	284,440,000	250,091,700	534,531,700	Thursday, September 19, 2013	
135			Lumban Jaean	200	13,000,000	14,219,500	27,219,500	Monday, September 16, 2013	
136			Simataniari	572	37,180,000	34,320,000	71,500,000	Monday, September 16, 2013	
137			Lumban Jaean	762	49,530,000	46,885,500	96,415,500	Monday, September 16, 2013	
138			Simataniari	5,344	155,350,000	239,530,400	394,880,400	Monday, September 16, 2013	

	Name	2		Land area	Total	Total	Total		
No	Male	Female	Domicile	acquired (m ²)	Compensation for Land	Compensation for Crops/ Trees acquired	Compensation (IDR)	Date Paid	
139			Lumban Jaean	8,231	535,015,000	155,837,100	690,852,100	Thursday, October 03, 2013	
140			Lumbanjean, Sibaganding dan Simataniari	1,230	79,950,000	19,262,000	99,212,000	Wednesday, October 03, 2012	
141			Onan Hasang	75	4,875,000	13,006,000	17,881,000	Monday, September 16, 2013	
142			Sibaganding	1,337	86,905,000	51,590,700	138,495,700	Wednesday, October 03, 2012	
143			Simataniari	379	24,635,000	30,324,000	54,959,000	Monday, September 16, 2013	
144			Lumban Jaean	2,036	132,340,000	119,112,000	251,452,000	Wednesday, October 03, 2012	
145			Sibaganding	9,628	625,820,000	262,940,000	888,760,000	Monday, September 16, 2013	
146			Lumban Jaean, Sibaganding dan Simataniari	4,764	309,660,000	68,050,000	377,710,000	Wednesday, October 03, 2012	
147			Simataniari	1,114	72,410,000	66,840,000	139,250,000	Monday, September 16, 2013	
148			Simataniari	101	6,565,000	4,975,500	11,540,500	Monday, March 03, 2014	
149			Simataniari	703	45,695,000	43,776,500	89,471,500	Monday, September 16, 2013	
150			Lumban Jaean	110	7,150,000	6,600,000	13,750,000	Monday, September 16, 2013	
151			Lumban Jaean	1,166	75,790,000	139,123,700	214,913,700	Tuesday, September 17, 2013	
152			Simataniari	63	4,095,000	3,340,000	7,435,000	Monday, September 16, 2013	
153			Lumban Jaean	6,537	424,905,000	462,488,200	887,393,200	Monday, September 16, 2013	
154			Simataniari	12,349	802,685,000	820,620,600	1,623,305,600	Monday, September 16, 2013	

	Name			Land area	Total	Total	Total		
No	Male	Female	Domicile	acquired (m ²)	Compensation for Land	Compensation for Crops/ Trees acquired	Compensation (IDR)	Date Paid	
155			Lumbanjean dan Sibaganding	8,231	535,015,000	155,837,100	690,852,100	Wednesday, October 03, 2012	
156			Lumban Jaean	263	17,095,000	6,856,000	23,951,000	Monday, September 16, 2013	
157			Lumban Jaean	7,269	472,485,000	249,384,100	721,869,100	Monday, September 16, 2013	
158			Sibaganding	66	4,290,000	3,960,000	8,250,000	Monday, September 16, 2013	
159			Lumban Jaean	6,658	432,770,000	93,070,600	525,840,600	Monday, September 16, 2013	
			Total	649,840	44,362,392,665	25,206,949,865	69,569,342,530		

Source: SOL Primary Data, 2014

<u>* This information has been removed as it falls within exceptions to disclosure specified in paragraph 97, (cite which item for exception) of ADB's Public Communications Policy (2011)</u>

NT-	A man NTa man	Date/Month	Total Land	Current Chature
No	Area Name	Compensation Paid	Owners	Current Status
	1	SIL		
1	Brine Injection Line (SIL 1 to SIL 2)	February 2012	35	The land owners have been compensated.
2	Brine Injection Line (SIL 2 to Batang Toru River)	3 October 2012	4	The land owners have been compensated.
3	SIL 1 Expansion (Power Plant, Borrow and Disposal Area)	30 July 2013	6	The land owners have been compensated.
4	SIL 2 Expansion and Access Road	16 October 2013	16	The land owners have been compensated.
5	Well Pad SIL 1	30 July 2013	6	The land owners have been compensated.
6	Power Plant	30 July 2013	12	The land owners have been compensated.
7	Laydown 1	16 October 2013	9	The land owners have been compensated.
8	Laydown 2	16 October 2013	6	The land owners have been compensated.
9	T/L ROW and Tower	October-November 2014	22	The land owners have been compensated.
	·	NIL		
4	Tower Footprint and Transmission Line ROW	Feb-14	146	The initial survey for the tower footprint has been compensated The remaining potential land owners for the T/L ROW has been identified and surveyed, will be paid soonest.
5	Laydown		6	The land owners have been compensated.
6	NIL 1N and Road 4A Expansion	Oct-12	7	The land owners have been compensated.
7	WJR 2N and Access Road	Dec-13	11	The land owners have been compensated.
8	WJR 1N and Road 6, 6B	Oct-12	9	The land owners have been compensated, 2 land owner has not been paid
9	Borrow Area (Pit)	Sep-13	20	The land owners have been compensated. 1 land owner has not been paid due to family dispute
8	Disposal 1 and 2, Road 3A	Sep-13	20	The land owner has been compensated
9	Road 1 and 1A	Sep-13	67	The land owners have been compensated. 6 land owner has not been paid due to family dispute
10	NIL 2N and Road 3B	Sep-13	3	The land owner has been compensated

Table 4-11 Total Number of Project Affected Households

No	Area Name	Date/Month Compensation Paid	Total Land Owners	Current Status
11	Power Plant and Road 2, 3	Sep-13	20	The land owner has been compensated
12	Road 5 and WJP	Oct-12	12	The land owner has been compensated

Source: SOL Project Data 2013

Table 4-12 showed that as of April 2014 251 landowners have been fully paid. There are 116 land owners come from the Pahae Jae Sub District, and 321 land owners come from Pahae Julu Sub District. Of the 437 land owners, the survey identified 811 land parcels.

Of the original list of 437 land owners provided by SOL in April 2014 (see Annex D-1), the survey gathered data from 341 landowners; 96 land owners could not to be interviewed. This was either because they refused to participate in the survey or because they were not able to be contacted due to residing outside the village or they were not at home during the time of the site visit (**Table 4-13**). One land owner died, one was too unwell to participate in the survey, 14 landowners were not available, three people had representatives, 21 landowners did not want to be interviewed, and 56 land owners were residing outside the village.

Table 4-12	Project Affected Households (as of April 2014)
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Such District	Number of Lan	Total							
Sub-District	Fully Paid	Fully Paid Has not been paid as April 2014 ⁶							
Pahae Jae	92	24	116						
Pahae Julu	159	162	321						
Total	251	186	437						

Source: SOL and ERM Primary Data, April 2014

* 186 land owners consists of 6 land owners are still family dispute, 12 land owners for Access Road 5 and WJP 1N, 28 tower footprint's land owners and 140 T/L RoW land owners. All land owners for Access Road 5, WJP 1N, T/L RoW and towers footprint will be covered in RP document.

Table 4-13 Proje	ect Affected Households Surveyed
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Sub-District	Total Land Owner based on Land Persil	Total Land Owners as of April 2014	PAH were interviewed	PAH were not interviewed
Pahae Jae	202	116	100	16
Pahae Julu	609	321	241	80
Total	811	437	341	96

Source: ERM Primary Data, June 2013

Table 4-13 shows the total project affected households surveyed as 341, these are not all presented in SSCAR Report; 191 of 341 PAHs surveyed will be analysed for

⁶ As of April 2014 186 of 437 landowners have not been paid.

the Report, and 150 of 341 PAHs surveyed will be analysed for the Resettlement Plan which includes the land owners for area Road 5, WJP, Tower and T/L ROW. These areas are still not constructed by SOL. As discussed previously, the SSCAR document covers all land owners except those associated with the towers, T/L RoW, access Road 5 and WJP 1N land owners. The remaining land owners will be covered in the RP document.

4.6.1.1 Establishing the Cut-off Date for Entitlements

The land owners were informed by SOL of the legal cut-off date during step 3 when the land owners confirmed the land size and number of plants. Based on information from LAQ Team, **Table 4-14** presents the cut –off dates for each of the Project components.

For the landowners compensated on 28 February 2012 and 3 October 2012, the landowners we notified to move from their land which was acquired by SOL on 23 May 2013. In the announcement letter (Annex C), the land owners were asked to take the following actions by the latest 1 June 2013:

- No cultivation or other activities in the rice paddy fields or in the yards that had already been compensated and acquired by SOL; and
- To harvest or take any wood or crops from the land acquired by the Project in the proposed time.

No	Area Name	Date Compensation Paid	Cut-off Date		
1	Main Access Road (Road 1 & 1A)	16-19 September 2013	1-7 May 2013		
2	Well Pad NIL 2N and Access Road	16-19 September 2013	1-7 May 2013		
3	Disposal 1 & 2 and Access Road	16-19 September 2013	1-7 May 2013		
4	Borrow Area	16-19 September 2013	1-7 May 2013		
5	WJR 1N and Access Road	16-19 September 2013	1-7 May 2013		
6	Brine Injection Line (SIL 2 to SIL 2)	28 February 2012	28 February 2012		
7	SIL 2 to Batang Toru River	3 October 2012	15 August 2012		
8	Disposal for Power Plant	30 July 2013	29 April – 6 May 2013		
9	Borrow Area	30 July 2013	29 April – 6 May 2013		
10	Well Pad SIL 1	30 July 2013	29 April - 6 May 2013		
11	Power Plant	30 July 2013	29 April - 6 May 2013		

 Table 4-14
 Cut-off date for each Project Component Area

Source: SOL Data, 2013

4.7 Socio-Economic Survey of All Landowners Covered by SOL

4.7.1 Demographic Profile

Based on information provided by SOL, there are a total of 437 land owners affected by the Project. Updated data with compensation payments up to April 2014 showsed that 426 land parcels have been paid to 251 land owners.

4.7.1.1 Age Distribution

Five age categories have been used (under 14 years, 15-24 years, 25-54 years, 55-64 years, and over 65 years), set by the Central Statistics Bureau (BPS) standards. Working age is defined as 15-64 years, while ages below 14 and over 65 years are classified as dependents.

The PAHs are 15 to 24 years, only 1 person in Sigurung-gurung village, 1 person in Silangkitang and 1 person Sibaganding village that are as lowest percentage 0.52% (**Table 4-15**). There is a high percentage of age distribution amongst the PAHs in Simataniari with 33.51% (64 people) between 25-54 years. There is also a high percentage of young people in Simataniari Village compared with the other Project villages. Besides that, there are no PAHs below 14 years, and only a small number above 65 years (31 people). This demonstrates the majority of PAHs are at a working age (25-54 years), and should be considered by SOL for livelihood assistance to improve their livelihood opportunities, skills and capabilities post the land acquisition process.

		Age (Years)									п	РАН	
Affected Villages	≤14		15 - 24		25 - 54		55 - 64		≥ 65		1 AII		
	n	%	n	%	n	%	n	%	n	%	n	%	
Pahae Jae													
Silangkitang	0	0.00	24	12.57	1	0.52	10	5.24	10	5.24	45	23.56	
Sigurung-gurung	0	0.00	18	9.42	1	0.52	11	5.76	5	2.62	35	18.32	
Total	0	0.00	18	9.42	1	0.52	11	5.76	5	2.62	80	18.32	
				l	Pahae	Julu							
Sibaganding	0	0.00	0	0.00	1	0.52	0	0.00	0	0.00	1	0.52	
Lumban Jaean	0	0.00	1	0.52	2	1.05	1	0.52	0	0.00	4	2.09	
Simataniari	0	0.00	3	1.57	64	33.51	23	12.04	16	8.38	106	55.50	
Total	0	0.00	4	2.09	67	35.08	24	12.57	16	8.38	111	58.12	

Table 4-15	Age Distribution of Project Affected People (PAPs)
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Source: ERM Primary Data, April 2014

4.7.1.2 Gender Distribution

Table 4-16 shows the number of PAHs; the majority are male and come from Simataniari village (45.03% or 86 HHs). There are 10.47% or 20 PAHs that are headed by females also in Simataniari village. There is 1 land owner who resides in Lumban Jaean village.

Table 4-16	Gender of Project Affected Household Heads and People
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		Househo	ld Head	s (HH)	
Affected Villages	Ν	Aale]	Female	Total HH
	n	% of Total	n	% of Total	
Pahae Jae					

		Househo	ld Heads	5 (HH)	
Affected Villages	N	Iale	F	emale	Total HH
	n	% of Total	n	% of Total	
Silangkitang	35	18.32	10	5.24	45
Sigurung-gurung	30	15.71	5	2,62	35
Total	65	34.03	15	7.85	80
Pahae Julu					
Sibaganding	1	0.52	0	0.00	1
Lumban Jaean	3	1.57	1	0.52	4
Simataniari	86	45.03	20	10.47	106
Total	90	47.12	21	10.99	111

Source: ERM Primary Data, April 2014

4.7.1.3 Education

In Sigurung-gurung the PAPs are educated to a junior high school level (10.58%) (**Table 4-17**). In Simataniari the highest education level was senior high school (25%) whereas 2% were educated to a university level; no PAHs in Sibaganding are educated to this level. Project Affected People consists of PAHs including family members. The majority PAHs have one spouse and 2 children.

	_					E	ducatio	n Leve	1				
Affected Villages	РАН	No comp Eleme Sch	leted entary		nentary hool	H	nior ligh hool		or High chool	Uni	iversity	at	d not tend hool
	(n)	n	%	n	%	n	%	n	%	n	%	n	%
Pahae Jae													
Silangkitang	45	2	0.01	5	0.03	21	0.11	16	0.08	1	0.01	0	0.00
Sigurung- gurung	35	1	0.01	11	0.06	12	0.06	10	0.05	1	0.01	0	0.00
Total	80	3	0.02	16	0.08	33	0.17	26	0.14	2	0.01	0	0.00
Pahae Julu													
Sibaganding	1	0	0.00	0	0.00	1	0.01	0	0.00	0	0.00	0	0.00
Lumban Jaean	4	0	0.00	0	0.00	1	0.01	0	0.00	0	0.00	0	0.00
Simataniari	106	1	0.01	24	0.13	27	0.14	47	0.25	3	0.02	4	0.02
Total	111	1	0.01	24	0.13	29	0.15	50	0.26	3	0.02	4	0.02

 Table 4-17
 Education Level of Project Affected Households (PAHs)

Source: ERM Primary Data, April 2014

4.7.1.4 Religion

Of the PAHs the majority are Christian (Protestant) (**Table 4-18**) with only a very small per cent of Muslims in Simataniari village (1.57%) and very small per cent of Christian Catholic in Simataniari (1.57%).

	Project Affected			R	eligion Level		
Affected Villages	Households	M	uslim	Christia	n Protestant	Chris	stian Catholic
	(n)	n	%	n	%	N	%
Pahae Jae							
Silangkitang	45	0	0.00	45	23.56	0	0.00
Sigurung-gurung	35	0	0.00	35	18.32	0	0.00
Total	80	0	0.00	80	41.88	0	0.00
Pahae Julu							
Sibaganding	1	0	0.00	1	0.52	0	0.00
Lumban Jaean	4	0	0.00	4	2.09	0	0.00
Simataniari	106	3	1.57	100	52.36	3	1.57
Total	111	3	1.57	105	54.97	3	1.57

Table 4-18 Religion of Project Affected Household Heads

Source: ERM Primary Data, April 2014

4.7.1.5 Household Characteristics

Amongst the PAPs in Silangkitang, Sigurung-gurung and Simataniari villages the most common number of people per household is 2 (**Table 4-19**). Sibaganding dan Lumban Jaean PAPs have the least number of family members per house.

	Project						Family	Membe	rs in One	Househ	old						
Affected Villages	Affected People		1		2		3		4		5		6		7		8
	(n)	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Pahae Jae																	
Silangkitang	45	9	0.05	13	0.07	6	0.03	5	0.03	4	0.02	4	0.02	3	0.02	1	0.01
Sigurung-gurung	35	6	0.03	9	0.05	9	0.05	7	0.04	3	0.02	0	0.00	0	0.00	1	0.01
Total	80	15	0.08	22	0.12	15	0.08	12	0.06	7	0.04	4	0.02	3	0.02	2	0.01
Pahae Julu																	
Sibaganding	1	0	0.00	0	0.00	0	0.00	1	0.01	0	0.00	0	0.00	0	0.00	0	0.00
Lumban Jaean	4	0	0.00	1	0.01	0	0.00	2	0.01	0	0.00	1	0.01	0	0.00	0	0.00
Simataniari	106	36	0.19	29	0.15	18	0.09	8	0.04	8	0.04	5	0.03	0	0.00	2	0.01
Total	111	36	0.19	30	0.16	18	0.09	11	0.06	8	0.04	6	0.03	0	0.00	2	0.01

Table 4-19Number of Family Members per Household

Source: ERM Primary Data, April 2014

4.7.1.6 Duration of Residence in the Project Affected Villages

Most of residents have been living in their village since birth (75 people); with many residing in their villages for more than 5-10 years (5 people) (**Table 4-20**). No one has lived in their villages for less than 1 years meaning the level of migration (in and out) is very low in the Project Affected Villages.

	Project				Dı	iratior	of Reside	ence			
Affected Villages	Affected People	Sin	ce Birth	<	1 Year	>1	-5 Year	5-10) Year	>1	0 Year
	(n)	n	%	n	%	n	%	n	%	n	%
Pahae Julu											
Silangkitang	45	26	0.14	0	0.00	1	0.01	1		0.00	17
Sigurung-gurung	35	24	0.13	0	0.00	1	0.01	0		0.00	10
Total	80	50	0.26	0	0.00	2	0.01	1		0.00	27
Pahae Julu											
Sibaganding	1	1	0.01	0	0.00	0	0.00	0		0.00	0
Lumban Jaean	4	2	0.01	0	0.00	0	0.00	2		0.00	0
Simataniari	106	72	0.38	0	0.00	5	0.03	4		0.00	25
Total	111	75	0.39	0	0.00	5	0.03	5		0.00	25

Table 4-20 Duration of Residence in Project Affected Village

Source: ERM Primary Data, April 2014

4.7.2 Environmental Health Profile

4.7.2.1 Source of Clean Water

The majority households use natural water sources as a clean water source (47.64%), especially in Simataniari village where all the households use natural water sources. There is small per cent of people use river as water sources (3.14%) and very small per cent of people buy water (0%). In addition to natural water sources many households utilise self-owned wells (2.62%) especially in Sibaganding; this may indicate households in this village are more affluent than other villagers using natural water sources (**Table 4-21**).

Source of Clean Water (%) **Project Affected** Affected Purchase Households Pump well PDAM River Spring Water Drilling well Villages Water (n) % Pahae Jae Silangkitang 45 23.56 3 1.57 0 0.00 15 7.85 26 13.61 0 0.00 1 0.52 18.32 2 0 0.00 11 5.76 10.99 1 0.52 0 0.00 Sigurung-35 1.05 21 gurung 0.00 10.99 0.00 Total 80 41.88 2 1.05 0 11 5.76 21 1 0.52 0 Pahae Julu Sibaganding 1 0.52 0 0.00 0 0.00 0 0.00 1 0.52 0 0.00 0 0.00 Lumban 4 2.09 0 0.00 0 0.00 1 0.52 3 1.57 0 0.00 0 0.00 Iaean 106 55.50 5 2.62 0 0.00 5 2.62 91 47.64 5 2.62 0 0.00 Simataniari 0.00 5 Total 111 58.12 5 2.62 0 6 3.14 95 49.74 2.62 0 0.00

 Table 4-21
 Clean Water Sources of Project Affected Households

4.7.2.2 Sanitation Facilities

The majority of the PAH households generally use pit latrines or public toilets although some are still utilising the river to dispose of human waste. PAHs use goose neck pit latrines in the 5 Project villages (71.36%) and PAHs use river in Silangkitan, Sigurung-gurung, Sibaganding and Simataniari village (10.94%).

	Project A			Persor	al Dis	sposal (%)				
Affected Villages	House	holds	Goose N	leck Pit Latrine	Publ	ic Toilet	R	iver	Ot	her
	(n)	%	n	%	n	%	n	%	n	%
Pahae Jae		·		·						
Silangkitang	45	23.44	40	20.83	4	2.08	1	0.52	0	0
Sigurung-gurung	35	18.23	29	15.1	5	2.6	1	0.52	0	0
Total	80	41.67	68	35.94	9	4.69	2	1.04	0	0
Pahae Julu										
Sibaganding	1	0.52	1	0.52	0	0	0	0	0	0
Lumban Jaean	4	2.08	2	1.04	0	0	2	1.04	0	0
Simataniari	106	55.73	64	33.85	25	13.02	17	8.85	0	0
Total	111	58.33	66	35.42	25	13.02	19	9.9	0	0

Table 4-22Sanitation Facility for Personal Disposal of Project Affected
Households

Source: ERM Primary Data, April 2014

4.7.2.3 Sanitation Facility for Garbage Disposal

The majority of PAHs burn their garbage; in particular in Simataniari village (47.40%) (**Table 4-23**). Garbage collection only occurs in Silangkitang, and Simataniari village with a small percentage of households participating (4.69%). The villagers of Silangkitang, Sigurung-gurung and Simataniari still use the river to dispose some of their garbage. During consultations with the PAHs indicated they have limited awareness of environmental and sanitation hygiene.

Table 4-23Sanitation Facility for Garbage Disposal of Project Affected
Households

	Project	Affected		Gart	oage I	Disposal	(%)			
Affected Villages	Hou	seholds	Collec	tive Disposal	B	urnt	R	iver	C	other
	(n)		n	%	n	%	n	%	n	%
Pahae Jae										
Silangkitang	45	23.44	2	1.04	38	19.79	4	2.08	1	0.52
Sigurung-gurung	35	18.23	1	0.52	27	14.06	7	3.65	0	0
Total	80	41.67	1	1.56	27	33.85	7	5.73	0	0.52
Pahae Julu										
Sibaganding	1	0.52	0	0	1	0.52	0	0	0	0
Lumban Jaean	4	2.08	0	0	4	2.08	0	0	0	0

	Project	Affected		Garb	oage I	Disposal	(%)			
Affected Villages	Hou	seholds	Collec	tive Disposal	B	urnt	R	iver	C	ther
	(n)		n	%	n	%	n	%	n	%
Simataniari	106	55.73	6	3.13	90	47.4	10	5.21	0	0
Total	111	58.33	6	3.13	95	50	10	5.21	0	0

Source: ERM Primary Data, April 2014

4.7.2.4 Accessibility of Affected Households

Table 4-24 indicates that none of the PAHs have lost access to water sources, agricultural land, fishing areas or community services etc. The affected land area is approximately 1km from the villagers housing and majority of project affected households are living near by the public road therefore it makes it easier to reach the public facilities.

Figure 4-12 Public Market in Onan Hasang Village



The majority of PAHs have more than a 5km (59.9%) distance between them and the nearest market; a very small per cent of people have less than 1km (3.65%) in particular in Simataniari village (**Table 4-24**). This is because SOL built a new access road.

Table 4-24 Accessibility of Affected Household
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	Projec	t Affected			Di	stance t	to the I	Market		
Affected Villages	Hou	seholds			1-3	km	3-	5 km	>!	5 km
	(n)	%	(n)	%	(n)	%	(n)	%	(n)	%
Pahae Jae										
Silangkitang	45	23.44	0	0	0	0	0	0	45	23.44
Sigurung-gurung	35	18.23	0	0	0	0	1	0.52	34	17.71
Total	80	41.67	0	0	0	0	1	0.52	34	41.15
Pahae Julu										

Sibaganding	1	0.52	0	0	0	0	0	0	1	0.52
Lumban Jaean	4	2.08	0	0	0	0	1	0.52	3	1.56
Simataniari	106	55.73	7	3.65	13	6.77	54	28.65	32	16.67
Total	111	58.33	7	3.65	13	6.77	55	29.17	35	18.75

Source: ERM Primary Data, April 2014

4.7.2.5 Vulnerability of the Area

Most of PAHs have been exposed to avalanches (104 people) and most in Pahae Jae Sub District were vulnerable to flooding (73 people) whereas in Pahae Julu the villages were most vulnerable to tsunamis (31 people) (**Table 4-25**).

Table 4-25	Vulnerability of the Area
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						Hou	sehol	d Survey	yed E	xperienc	ed wi	ith Vul	nerabi	ility of A	rea			
Affected Village	Households Surveyed (n)	Households Surveyed (%)	То	rnado	F	lood	Ava	llanche	Lar	ıdslide	I	ire	Dr	ought		esease tbreak	С	Other
	(1-)		n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Pahae Jae																		
Silangkitang	73	27.76	41	15.59	2	0.76	25	9.51	1	0.38	0	0.00	3	1.14	0	0.00	1	0.38
Sigurung- gurung	57	21.67	32	12.17	4	1.52	15	5.70	0	0.00	1	0.38	4	1.52	0	0.00	1	0.38
Total	130	49.43	73	27.76	6	2.28	40	15.21	1	0.38	1	0.38	7	2.66	0	0.00	2	0.76
Pahae Julu					1						1							
Sibaganding	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Lumban Jaean	5	1.90	1	0.38	0	0.00	2	0.76	0	0.00	0	0.00	1	0.38	0	0.00	1	0.38
Simataniari	128	48.67	0	0.00	0	0.00	62	23.57	3	1.14	22	8.37	30	11.41	4	1.52	7	2.66
Total	133	50.57	1	0.38	0	0.00	64	24.33	3	1.14	22	8.37	31	11.79	4	1.52	8	3.04

Source: ERM Primary Data, April 2014

4.7.3 *Economic Profile*

4.7.3.1 Livelihoods of the Project Affected Households

The majority of the PAHs are farmers (173 people) (**Table 4-26**), followed by army/police and government officials. There are a few PAHs acting as entrepreneurs.

As the majority are farmers they have a high reliance on their land for income and subsistence. Should their land be lost or reduced, their income may also be affected.

	Project Affected Households	Project Affected Households				Liveliho	ood o	f Project	t Affec	ted House	eholds	;		
Affected Villages	(n)	%	Fa	rmer		ernment fficial		rivate ployee	Entr	epreneur	Arm	vy/Police	o	thers
			n	%	n	%	n	%	n	%	n	%	n	%
Pahae Jae														
Silangkitang	45	23.56	38	19.90	1	0.52	2	1.05	1	0.52	0	0.00	2	1.05
Sigurung- gurung	35	18.32	34	17.80	0	0.00	1	0.52	0	0.00	0	0.00	0	0.00
Total	80	41.88	34	37.70	0	0.52	1	1.57	0	0.52	0	0.00	0	1.05
Pahae Julu														
Sibaganding	1	0.52	1	0.52	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Lumban Jaean	4	2.09	4	2.09	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Simataniari	106	55.50	95	49.74	0	0.00	2	1.05	1	0.52	4	2.09	4	2.09
Total	111	58.12	99	52.36	0	0.00	2	1.05	1	0.52	4	2.09	4	2.09

Table 4-26 Livelihoods of Project Affected Households

Source: ERM Primary Data, April 2014

4.7.3.2 Livelihood Restoration prioritized by Project Affected Households

Based on interviews with land owners, most of PAHs have chosen micro credit to support their livelihood restoration (54 people), followed by entrepreneurship skills to help their livelihood (**Table 4-27**). The findings indicate there are three types of support for livelihood restoration programs: micro credit, entrepreneurship and agricultural training.

	Project				Livelih	ood R	estoration	Prio	ritization	1	_	_	
Affected Villages	Affected Households		licro redit		repre- rship	0	ricultu- Training	1	cational aining		MFI	0	ther
	(n)	n	%	n	%	N	%	n	%	n	%	n	%
Pahae Jae													
Sigurung- gurung	35	17	8.90	5	2.62	6	3.14	3	1.57	1	0.52	3	1.57
Silangkitang	45	27	14.14	8	4.19	5	2.62	3	1.57	1	0.52	1	0.52
Total	80	44	23.04	13	6.81	11	5.76	6	3.14	2	1.05	4	2.09
Pahae Julu													
Sibaganding	1	1	0.52	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Lumban Jaean	4	2	1.05	0	0.00	0	0.00	2	1.05	0	0.00	0	0.00
Simataniari	106	34	17.80	29	15.18	19	9.95	16	8.38	7	3.66	1	0.52
Total	111	37	19.37	29	15.18	19	9.95	18	9.42	7	3.66	1	0.52

 Table 4-27
 Livelihood Restoration prioritized by Project Affected Households

Source: ERM Primary Data, June 2013

4.7.3.3 Income of Project Affected Households

The average income of the 342 surveyed PAHs is between IDR 300,000 and IDR 2,306,947.37 (**Table 4-28**). The highest income is amongst those employed by the army/police in Simataniari Village (IDR 3,350,000).

		Occupati	011					
		Monthly		Monthly A	Average Incom	ne by Occupatio	on (IDR)	
Affected Villages	PAHs (n)	Average Income (IDR)	Farmer	Government Official	Private Employee	Entrepreneur	Army/ Police	Others
Pahae Jae								
Silangkitang	45	1,646,576.47	2,293,152.94	-	1,000,000.00	-	-	-
Sigurung- gurung	35	1,469,435.90	1,447,179.49	250,000.00	2,500,000.00	1,400,000.00	-	1,750,000.00
Pahae Julu								
Lumban Jaean	4	837,500.00	837,500.00	-	-	-	-	-
Sibaganding	1	300,000.00	300,000.00	-	-	-	-	-
Simataniari	106	2,306,947.37	1,584,736.84	-	3,350,000.00	2,000,000.00	3,000,000.00	1,600,000.00

Table 4-28Monthly Average Income of Project Affected Households by
Occupation

Source: ERM Primary Data, April 2014

The BPS's (statistic centre agency) poverty line is identified from a household's monthly expenses per person. The assumption being, that anyone who earns less than this per month will not be able to purchase basic goods and therefore is classified as poor. In 2012 the Sumatera Utara Province poverty line was IDR 262,102. For areas categorized as a city in Sumatera Utara the poverty line was IDR 286,649 and for areas categorized as villages the poverty line was IDR 238,368.

Based on an average household of 4 people the household poverty line in the project area is estimated at 956,000IDR/month.

BPS data identified only 10.67% of the total province population were poor (i.e. monthly expenses below IDR 262,102 per person). **Table 4-28** presents poverty levels per project affected village (based on the 150 households interviewed); 11 (4%) were considered under the poverty line in Pahae Jae and 26 (17%) in Pahae Julu. The highest percent of households surveyed under the poverty line was in Simataniari (9%). The table clearly shows that the majority of those surveyed live just above the poverty line (earning between 956,000IDR and 2,000,000IDR per month).

It shows that majority of land owners' income level of land owners after land acquisition has increased. The total number of land owners has increased from 55 to 86 people who their income level below the poverty line.

						1	Number of	Households	5					
Village	Poverty	Village Line (IDR per capita)	956,000-	2,000,000	2,000,001	1-4,000,000	4,000,001	L-6,000,000	6,000,001	-8,000,000	>8,00	00,000	Tc	ıtal
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Pahae Jae Sub Distr	ict				-		-		-					
Sigurung-gurung	8	4.21	18	9.47	7	3.68	1	0.53	0	0.00	1	0.53	35	18.42
Silangkitang	11	5.79	28	14.74	6	3.16	0	0.00	0	0.00	0	0.00	45	23.68
Subtotal	19	10.00	46	24.21	13	6.84	1	0.53	0	0.00	1	0.53	80	42.11
Pahae Julu Sub Dist	trict													
Lumban Jaean	2	1.05	2	1.05	0	0.00	0	0.00	0	0.00	0	0.00	4	2.11
Sibaganding	1	0.53	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	0.53
Simataniari	33	17.37	50	26.32	13	6.84	7	3.68	1	0.53	1	0.53	105	55.26
Subtotal	36	18.95	52	27.37	13	6.84	7	3.68	1	0.53	1	0.53	110	57.89
Grand Total	55	28.95	98	51.58	26	13.68	8	4.21	1	0.53	2	1.05	190	100.00

Table 4-29 Household Income and Poverty Levels before SOL Acquired Land

						1	Number of	Households	3					
Village	Poverty	Village Line (IDR per capita)	956,000-	2,000,000	2,000,001	1-4,000,000	4,000,002	1-6,000,000	6,000,001	-8,000,000	>8,00	00,000	Tc	otal
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Pahae Jae Sub Distr	ict													
Sigurung-gurung	13	6.84	17	8.95	5	2.63	0	0.00	0	0.00	0	0.00	35	18.42
Silangkitang	17	8.95	24	12.63	3	1.58	0	0.00	0	0.00	1	0.53	45	23.68
Subtotal	30	15.79	41	21.58	8	4.21	0	0.00	0	0.00	1	0.53	80	42.11
Pahae Julu Sub Dis	trict													
Lumban Jaean	3	1.58	1	0.53	0	0.00	0	0.00	0	0.00	0	0.00	4	2.11
Sibaganding	1	0.53	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	0.53
Simataniari	52	27.37	37	19.47	11	5.79	4	2.11	1	0.53	0	0.00	105	55.26
Subtotal	56	29.47	38	20.00	11	5.79	4	2.11	1	0.53	0	0.00	110	57.89
Grand Total	86	45.26	79	41.58	19	10.00	4	2.11	1	0.53	1	0.53	190	100.00

Table 4-30 Household Income and Poverty Levels after SOL Acquired Land

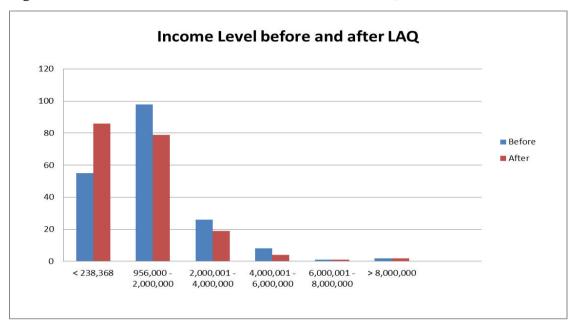


Figure 4-13 Chart of Income Level before and after LAQ

4.7.3.4 Housing Conditions of Project Affected Households

Only three villages have PAHs residing in brick-wall houses; Sigurung-gurung (5.8%) and Simataniari (15.3%). The remaining PAHs reside in a combination of hardwood walled and brick-walled houses (67.7%). Based on information from the village head, houses made from hardwood are considered traditional Batak houses. In addition, as the area is prone to earthquakes, wood is considered a more reliable material for houses.

	A	0 #0 C 0				Hou	using P	hysical	Type of	Wall		
Affected Villages	Inco	erage me of AHs	Bric	k wall	W	ood	Ban	ıboo	brick	oine with wall and vood	Ot	her
	n	%	n	%	n	%	n	%	n	%	n	%
Pahae Jae												
Silangkitang	45	23,81	12	6,35	4	2,12	0	0,00	29	15,34	0	0,00
Sigurung-gurung	35	18,52	11	5,82	0	0,00	1	0,53	23	12,17	0	0,00
Total	80	42,33	23	12,17	4	2,12	1	0,53	52	27,51	0	0,00
Pahae Julu												
Sibaganding	1	0,53	0	0,00	0	0,00	0	0,00	1	0,53	0	0,00
Lumban Jaean	4	2,12	0	0,00	1	0,53	0	0,00	3	1,59	0	0,00
Simataniari	106	55,50	29	15,18	1	0,52	0	0,00	74	38,74	2	1,05
Total	111	58,14	29	15,18	2	1,05	0	0	78	40,86	2	1,05

Table 4-31Housing Condition of Project Affected Households

4.7.4 Ethnic Profile

4.7.4.1 Ethnic Distribution

The social survey identified two ethnic groups in the Project villages; Batak and Javanese. Sigurung-gurung and Simataniari villages have PAH villagers of a Javanese ethnicity (**Table 4-32**).

	,	cted Households PAHs)	Ethnic	Distribution	of Pro	ject Affect	ed Hou	iseholds
Affected Villages	()	0/0	В	atak	M	linang	M	lelayu
	(n)	70	n	%	n	%	n	%
Pahae Jae								
Silangkitang	45	0.24	45	0.24	0	0.00	0	0.00
Sigurung-gurung	35	0.18	35	0.18	0	0.00	0	0.00
Total	80	0.42	80	0.42	0	0.00	0	0.00
Pahae Julu								
Sibaganding	1	0.74	1	0.01	0	0.00	0	0.00
Lumban Jaean	6	2.96	4	0.02	2	0.01	0	0.00
Simataniari	104	49.93	104	0.54	0	0.00	0	0.00
Total	l 111 53.63		109	53.19	2	0.44	0	0.00

Table 4-32	Ethnic Distribution of Project Affected Households

Source: ERM Primary Data, April 2014

4.7.4.2 Clan Structure and Customary System of Each Affected Village

4.7.4.2.1 Pahae Julu Sub District

Clan or *marga* in the villages located in the Pahae Julu District identify as the Batak Toba tribe, which considers that all Toba clans have family trees related to family ties. The term is known as "*tarombo*", which is based on a group of large clans that became *Raja Huta* (the first come to village) in each village. Historically the three villages of Sibaganding, Lumban Jaean, Simataniari allegedly used to be states led by one state head who led three villages. Because of this, it has become common for citizens from these three villages to be considered as one unity. The dominant clan in Pahae Julu Sub District is stated in **Table 4-33**.

Table 4-33Dominant Clan in Pahae Julu Sub District

No.	Name of Village	Clan or Marga (Pamungka Huta/Sisuan Bulu)
1	Simataniari	Sitompul, Pasaribu, Lumbantobing
2	Sibaganding	Sitompul
3	Lumban Jaean	Sitompul

4.7.4.2.2 Sibaganding Village

The majority of the Batak Toba tribe reside in Sibaganding Village, which is made up of 3 hamlets (Hamlet I, II, III each led by a hamlet head). There are 5 core clans; Sitompul (Raja Huta), Tobing, Pasaribu, Hutabarat, Sihombing with a number of smaller clans (Simamora and Gultom). Several other clans in the village (Jawa and Nias) are as a result of people migrating from other regions based on marital ties.

4.7.4.2.3 Lumban Jaean Village

As the village is close to Sibaganding the tribal identity of this village is similar; the majority being from the Batak Toba tribe. Although there are several tribes that reside in this area, their existence and origin does not appear to be comparable with the Toba tribe. Lumban Jaean has 3 core clans; Sitompul (Raja Huta), Pasaribu, Hutabarat, and 5 immigrant clans (Siahaan, Situmeang, Sihombing, Siregar and Lumban Tobing).

4.7.4.2.4 Simataniari Village

The majority of the Batak Toba tribe reside in Simataniari composed of the Sitompul (Raja Huta), Pakpahan, Tambunan, Silitonga, Sarumpaet, Lumban Tobing, Bakkara and Simatupang clans. Social tensions between the clans is generally resolved through relationships within the brotherhood. This sense of brotherhood is strengthened through marital ties that is still considered sacred and associated with traditional nuances. Therefore the "tarombo" clan can be a catalyst in alleviating conflicts.

4.7.4.2.5 Pahae Jae Sub District

The unification of the Batak Toba tribe in the Pahae Jae Sub-district is already apparent from the name of the area "*Pangaloan*", which means a socio-cultural attachment of the 4 villages (Pardomuan Nainggolan, Pardamean Nainggolan, Sigurung-gurung and Silangkitang). This attachment is more apparent in the genealogical inheritance system based on clans or villages that identify with the Batak Toba tribe. The tribe considers all Toba clans to be bound in this bond of brotherhood and are familiar with "tarombo". The dominant clan in Pahae Jae Sub District stated in **Table 4-34**.

Table 4-34Dominant Clan in Pahae Jae Sub District

Ν	No.	Name of Village	Clan or Marga (Pamungka Huta/Sisuan Bulu)
	1	Silangkitang	Sihombing, Sibarani, Simorangkir and Hutabarat
	2	Sigurung-gurung	Sitompul, Panjaitan, Parapat , Silitonga

4.7.4.2.6 Sigurung-gurung

The majority of the citizens from the Batak Toba tribe live in 6 hamlets with social groupings based on clans that are the *Raja Huta* (village opener). There are 7 clans recorded as residents of this village (Sitompul/Raja Huta), Panjaitan, Panggabean, Parapat, Sihombing, Tambunan and Simanungkalit). *Raja Obaja* (or commonly called by the term *Raja Huta* in Sigurung-gurung) plays a large role in determining social dynamics in this village. Thus, social relations of the clans depend on the opinions formulated by the Sitompul clan - descendants of the village.

4.7.4.2.7 Silangkitang

The socio-cultural ties of the citizens can be seen from the equal identity of the Batak Toba Tribe, of which the relatives are not only from blood and marital ties, but also based on clan genealogies. There are 3 large clans in the village; Sihombing Nababan (*Raja Huta*), Simorangkir, and Hutabarat. In addition there are smaller migrant clans including Silaban, Lumban Toruan and Hutasoit. Some of these clans have close social relations with the clan "*tarombo*" kinship system that is customarily themed. Similarities are obvious when the two villages hold traditional parties involving citizens from both villages as advisors (*matua-tua*) in the traditional party. **Table 4-35** presents the dominant clan (*marga*) in villages surrounding the Project area.

Table 4-35	Dominant Clan/Family (Marga)

Affected Villages	Dominant clan/marga			
Pahae Jae				
Silangkitang	Sihombing, Sibarani, Simorangkir and Hutabarat			
Sigurung-gurung	Sitompul			
Pahae Julu				
Sibaganding	Sitompul			
Lumban Jaean	Sitompul			
Simataniari	Sitompul			

Source: ERM Primary Data, April 2014

4.7.5 *Cultural Practices*

The customs practiced in the villages surrounding the Project area are similar with other customs practiced in both sub-districts. Customary activities include practices in three life transition periods; marriage, death and ancestral bone excavation. Ceremonies are often held associated with weddings, funeral, land use permit and problem solving, etc. Most PAHs use cultural practises for wedding (176 people) and funerals (172 people).

	Project	Cultura	Cultural Practises by Project Affected Households						
Affected Villages	Affected Households (n)	Wedding	Wedding Funeral		Problem Solving				
Pahae Jae									
Silangkitang	45	32	8	1	4				
Sigurung-gurung	35	22	12	0	1				
Total	80	54	20	1	5				
Pahae Julu									
Sibaganding	1	0	0	0	1				
Lumban Jaean	6	2	2	2	0				
Simataniari	104	68	31	2	3				
Total	111	70	33	4	4				

Table 4-36 Cultural Practises of Project Affected Households

Source: ERM Primary Data, April 2014

4.7.5.1 Cultural Heritage in the Affected Villages

Based on the social survey results, there is one cultural heritage affected by the Project in Simataniari village surrounding the Project. It is related to one grandfather and mother's tomb of a land owner.

Table 4-57 Cul	itural Heritage on La	nd acquired by SOL	I				
	Project Affected Households	Project Affected Households	Cult		ge by Proje useholds	ect Affected	
Affected Villages		%	Yes No				
	(n)	70	n	%	n	%	
Pahae Jae							
Silangkitang	45	23.56	0	0.00	45	23.56	
Sigurung-gurung	35	18.32	0	0.00	35	18.32	
Total	80	41.88	0	0.00	80	41.88	
Pahae Julu							
Sibaganding	1	0.52	0	0.00	1	0.52	
Lumban Jaean	4	2.09	0	0.00	4	2.09	
Simataniari	107	55.50	1	0.52	105	54.97	
Total	111	58.12	1	0.52	110	57.59	

Table 4-37Cultural Heritage on Land acquired by SOL

Source: ERM Primary Data, April 2014

4.7.5.2 Community Leader and Expectations

The majority of the Pahae Julu Sub District view religious figures as community leaders; 30% of PAHs in Simataniari (32.2%) in **Table 4-38**.

The survey findings also suggest the PAHs believe their villages will develop positively in the next 5 years (83.7%) and hence have expectations that SOL will enable them to benefit from Project opportunities such as employment (43.8%).

4.7.5.2.1 Pahae Julu Sub District

Table 4-38Community Leaders and Expectations by Project Affected Households in
Pahae Julu Sub District

	Pahae Julu								
Aspects	Villages								
		Sibaganding	Lun	ıban Jaean	Sim	ataniari			
	n	%	n	%	n	%			
Community leaders:									
Religious figure	1	0,29	4	1,18	109	32,15			
Traditional figure	1	0,29	4	1,18	108	31,86			
Village heads	1	0,29	4	1,18	107	31,56			
Change of the village in 5 years									
Positive	1	1,02	4	4,08	77	78,57			
Negative	0	0,00	0	0,00	16	16,33			
Expectation/hope toward Sarulla Geothe	rmal	Power Plant regarding	g :						
Employment	1	0,73	3	2,19	56	40,88			
To run and operate the Power	0	0,00	1	0,73	3	2,19			
Economy	1	0,73	2	1,46	70	51,09			

Source: ERM Primary Data, April 2014

In the Pahae Jae Sub District the majority of PAHs in Sigurung-gurung (19.7%) and Silangkitang (14.9%) consider the religious figure as their community leader. As in Pahae Jae Sub-District the PAHs believe their villages will develop positively in the next 5 years (60%) and hence have expectations that SOL will enable them to benefit from Project opportunities such as employment (60%).

Table 4-39Community Leaders and Expectations by Project Affected Households in
Pahae Jae Sub District

	[Pahae Jae					
Aspects		V	illages				
	Sila	angkitang	Sigu	rung-gurung			
	n	%	n	%			
Community leaders:							
Religious figure	45	19,74	34	14,91			
Traditional figure	44	19,30	33	14,47			
Village heads	42	18,42	30	13,16			
Change of the village in 5 years	·			·			
Positive	10	25,00	14	35,00			
Negative	9	22,50	7	17,50			
Expectation/hope toward Sarulla Geothermal Po	wer Plant rega	rding :					
Employment	31	39,74	21	26,92			
To run and operate the Power	0	0,00	0	0,00			
Economy	14	17,95	12	15,38			

Source: ERM Primary Data, April 2014

4.7.6 Vulnerability Profile

4.7.6.1 Identification of Vulnerable Groups

The social survey identified a number of vulnerability categories as per the ADB SPS 2009 and IFC Performance Standards: (i) female households; (ii) land owners who have an income below the regional minimum wage (<IDR 1,375,000.00) and (iii) elderly people (>55 years old). The survey identified that the majority of land owners are of Batak ethnicity that are considered vulnerable by the ADB (due to their current poor living conditions). However given the land acquisition process was directly negotiated with individual households, based on a negotiated settlement process and that no communal lands were acquired, the land acquisition process undertaken to date is not considered to cause this group to become more vulnerable.

There are 51 people indicated as vulnerable in Pahae Jae Sub District, and 61 people categorised as vulnerable in Pahae Julu Sub District.

	Project Affected	Nur	nber	Percer	ntage (%)
Affected Villages	Households (n)	Age >55	Female Household	Age >55	Female Household
Pahae Jae					
Sigurung-gurung	21	16	5	14.29	4.46
Silangkitang	30	20	10	17.86	8.93
Total	51	36	15	32.14	13.39
Pahae Julu					
Lumban Jaean	2	1	1	0.89	0.89
Silangkitang	0	0	0	0.00	0.00
Simataniari	59	39	20	34.82	17.86
Total	61	40	21	35.71	18.75

Table 4-40Vulnerable Groups as Affected Household

Source: ERM Primary Data, April 2014

4.7.7 Remaining Landholding in the Project area and Surroundings

4.7.7.1 Individual/Household Land

Based on the survey of affected people covering 191 landowners, 162 PAH (68 PAHs in Pahae Jae and 94 PAH in Pahae Julu) are significantly affected or losing 10% or more of their productive or income-generating assets have been acquired. From among those significantly affected, there are a total of 113 PAHs (46 PAHs in Pahae Jae and 67 PAH in Pahae Julu) who lost more than 50% of their total landholding. Of these PAHs, 11 owners had remaining land classified as unviable (i.e. equal to or less than 400 sq.m.) of which 6 are in Pahae Julu and 5 in Pahae Jae. Of those landowners with only remaining unviable land were males (**Table 4-41** and **Table 4-42**). There are two people has 100% loss but it

has indicated their livelihood is as police officer that they still have monthly salary as source of income. No households will require physical displacement of housing or commercial assets.

				Pa	ahae Jae					Paha	e Julu			
	Impact	F	emale]	Male	Sub	Total	Fer	nale	Μ	ale	Subt	otal	Total
		n	%	n	%	n	%	n	%	N	%	n	%	
*	50-100% Loss	10	5.24	36	18.85	46	24.08	11	5.76	56	29.32	67	35.08	113
	100% Loss	0	0.00	0	0.00	0	0.00	0	0.00	2	1.05	2	1.05	2
	Unviable	0	0.00	5	2.62	5	2.62	0	0.00	6	3.14	6	3.14	11
	Viable	10	5.24	31	16.23	41	21.47	11	5.76	48	25.13	59	30.89	100
*	10-49% Loss	5	2.62	17	8.90	22	11.52	6	3.14	21	10.99	27	14.14	49
	Unviable	3	1.57	11	5.76	14	7.33	2	1.05	10	5.24	12	6.28	26
	Viable	2	1.05	6	3.14	8	4.19	4	2.09	11	5.76	15	7.85	23
*	Less than 10% Loss	1	0.52	11	5.76	12	6.28	3	1.57	14	7.33	17	8.90	29
	Unviable	1	0.52	5	2.62	6	3.14	1	0.52	10	5.24	11	5.76	17
	Viable	0	0.00	6	3.14	6	3.14	2	1.05	4	2.09	6	3.14	12
	Grand Total	16	8.38	64	33.51	80	41.88	20	10.471	91	47.644	111	58.115	191

Table 4-41Categories of Project Affected People in Pahae Jae Sub District and PahaeJulu Sub District

Source: ERM Primary Data, April 2014

Table 4-42Remaining Landholding of Project Affected People in Pahae Jae Sub
District (*)

No	Name	Total Landholding		cquired coject	Remaining Landholding		
	Male	Female	(m²)	(m ²)	%	(m ²)	%
1			21,000	1,138	5.42	19,862	94.58
2			1,364	364	26.69	1,000	73.31
3			621	121	19.48	500	80.52
4			3,276	2,276	69.47	1,000	30.53
5			900	299	33.22	601	66.78
6			500	358	71.60	142	28.40
7			929	279	30.03	650	69.97
8			2,189	1,789	81.73	400	18.27
9			2,519	1,519	60.30	1,000	39.70
10			1,146	196	17.10	950	82.90
11			643	143	22.24	500	77.76
12			1,058	658	62.19	400	37.81
13			3,817	2,317	60.70	1,500	39.30
14			5,779	1,391	24.07	4,388	75.93

No	Name	2	Total Landholding		.cquired roject		aining holding
	Male	Female	(m ²)	(m ²)	%	(m²)	%
15			2,009	1,409	70.13	600	29.87
16			10,554	554	5.25	10,000	94.75
17			8,997	5,697	63.32	3,300	36.68
18			203	103	50.74	100	49.26
19			1,017	417	41.00	600	59.00
20			16,087	7,154	44.47	8,933	55.53
21			2,214	1,214	54.83	1,000	45.17
22			1,803	232	12.87	1,571	87.13
23			668	258	38.62	410	61.38
24			2,556	2,456	96.09	100	3.91
25			5,090	90	1.77	5,000	98.23
26			600	495	82.50	105	17.50
27			515	365	70.87	150	29.13
28			947	685	72.33	262	27.67
29			4,873	2,873	58.96	2,000	41.04
30			2,530	1,530	60.47	1,000	39.53
31			310	270	87.10	40	12.90
32			6,400	648	10.13	5,752	89.88
33			4,431	2,525	56.98	1,906	43.02
34			1,966	1,116	56.77	850	43.23
35			9,300	7,760	83.44	1,540	16.56
36			5,286	2,786	52.71	2,500	47.29
37			3,191	2,691	84.33	500	15.67
38			2,907	2,384	82.01	523	17.99
39			993	81	8.16	912	91.84
40			2,050	1,550	75.61	500	24.39
41			598	198	33.11	400	66.89
42			4,635	4,243	91.54	392	8.46
43			2,609	609	23.34	2,000	76.66
44			11,104	6,324	56.95	4,780	43.05
45			3,441	2,441	70.94	1,000	29.06
46			2,077	1,677	80.74	400	19.26
47			7,500	546	7.28	6,954	92.72
48			3,066	566	18.46	2,500	81.54
49			2,122	1,722	81.15	400	18.85
50			684	382	55.85	302	44.15
51			669	169	25.26	500	74.74
52			2,326	1,826	78.50	500	21.50
53			890	390	43.82	500	56.18
54			2,534	2,334	92.11	200	7.89
55			2,156	1,156	53.62	1,000	46.38

SARULLA OPERATIONS LIMITED (SOL)

No	Name	Total Landholding		cquired roject	Remaining Landholding		
	Male	Female	(m²)	(m ²)	%	(m ²)	%
56			38,157	3,160	8.28	34,998	91.72
57			4,273	273	6.39	4,000	93.61
58			454	28	6.17	426	93.83
59			1,004	404	40.24	600	59.76
60			36,353	34,553	95.05	1,800	4.95
61			3,951	2,951	74.69	1,000	25.31
62			779	479	61.49	300	38.51
63			1,000	296	29.60	704	70.40
64			37,685	21,678	57.52	16,007	42.48
65			11,001	1,001	9.10	10,000	90.90
66			1,991	991	49.77	1,000	50.23
67			6,236	512	8.21	5,724	91.79
68			3,573	1,920	53.74	1,653	46.26
69			11,299	10,004	88.54	1,295	11.46
70			7,525	4,286	56.96	3,239	43.04
71			600	202	33.67	398	66.33
72			500	31	6.20	469	93.80
73			1,057	57	5.39	1,000	94.61
74			11,674	3,674	31.47	8,000	68.53
75			744	343	46.10	401	53.90
76			8,416	7,916	94.06	500	5.94
77			2,360	1,960	83.05	400	16.95
78			942	542	57.54	400	42.46
79			1,558	1,058	67.91	500	32.09
80			3,033	2,583	85.16	450	14.84

Source: ERM Primary Data, April 2014

* This information has been removed as it falls within exceptions to disclosure specified in paragraph 97, (cite which item for exception) of ADB's Public Communications Policy (2011)

Table 4-43Remaining Landholding of Project Affected People in Pahae Julu Sub
District (*)

No	Nai	ne	Total Landholding		cquired coject		naining holding
	Male	Female	(m ²)	(m ²)	%	(m ²)	%
1			900	900	100.00	0	0.00
2			20,767	20,267	97.59	500	2.41
3			2,893	1,530	52.89	1,363	47.11
4			2,629	129	4.91	2,500	95.09
5			1,955	1,455	74.42	500	25.57
6			8,262	7,762	93.95	500	6.05
7			10,417	417	4.00	10,000	96.00
8			2,049	549	26.79	1,500	73.21
9			3,312	1,182	35.69	2,130	64.31
10			18,679	12,182	65.22	6,497	34.78
11			6,408	2,642	41.23	3,766	58.77
12			5,306	3,104	58.50	2,202	41.50
13			1,043	543	52.06	500	47.94
14			11,466	1,466	12.79	10,000	87.21
15			6,799	3,799	55.88	3,000	44.12
16			4,851	2,543	52.42	2,308	47.58
17			571	71	12.43	500	87.57
18			30	15	50.00	15	50.00
19			9,000	8,498	94.42	502	5.58
20			25,804	12,960	50.22	12,844	49.78
21			20,219	12,936	63.98	7,283	36.02
22			4,618	2,337	50.61	2,281	49.39
23			9,716	8,302	85.45	1,414	14.55
24			30,250	24,763	81.86	5,487	18.14
25			3,370	2,870	85.16	500	14.84
26			8,725	8,125	93.12	600	6.88
27			597	97	16.25	500	83.75
28			2,091	1,091	52.18	1,000	47.82
29			572	272	47.55	300	52.45
30			5,872	3,872	65.94	2,000	34.06
31			4,077	890	21.83	3,187	78.17
32			10,722	5,522	51.50	5,200	48.50
33			338	194	57.40	144	42.60
34			3,058	2,558	83.65	500	16.35
35			11,000	10,408	94.62	592	5.38
36			65,000	13,047	20.07	51,953	79.93
37			1,917	1,417	73.92	500	26.08
38			400	398	99.50	2	0.50
39			814	214	26.29	600	73.71
40			4,817	4,564	94.75	253	5.25
41			35,402	20,706	58.49	14,696	41.51

No	Na	me	Total Landholding		cquired roject	Remaining Landholding		
	Male	Female	(m ²)	(m ²)	%	(m ²)	%	
42			6,000	5,899	98.32	101	1.68	
43			4,293	93	2.17	4,200	97.83	
44			146,231	76,231	52.13	70,000	47.87	
45			220	119	54.09	101	45.91	
46			7,675	675	8.79	7,000	91.21	
47			4,300	4,268	99.26	32	0.74	
48			20,482	482	2.35	20,000	97.65	
49			10,140	70	0.69	10,070	99.31	
50			1,030	30	2.91	1,000	97.09	
51			1,357	557	41.05	800	58.95	
52			164,555	1,644	1.00	162,911	99.00	
53			6,673	6,173	92.51	500	7.49	
54			869	219	25.20	650	74.80	
55			7,196	3,835	53.29	3,361	46.71	
56			9,023	135	1.50	8,888	98.50	
57			92,584	10,249	11.07	82,335	88.93	
58			3,109	109	3.51	3,000	96.49	
59			4,715	1,715	36.37	3,000	63.63	
60			5,113	4,513	88.27	600	11.73	
61			428,531	8,531	1.99	420,000	98.01	
62			5,521	5,021	90.94	500	9.06	
63			20,368	10,365	50.89	10,003	49.11	
64			7,020	4,969	70.78	2,051	29.22	
65			23,618	3,618	15.32	20,000	84.68	
66			1,659	259	15.61	1,400	84.39	
67			540	40	7.41	500	92.59	
68			1,628	628	38.57	1,000	61.43	
69			14,062	9,531	67.78	4,531	32.22	
70			15,200	7,635	50.23	7,565	49.77	
71			1,120	120	10.71	1,000	89.29	
72			1,500	500	33.33	1,000	66.67	
73			23,396	11,730	50.14	11,666	49.86	
74			1,695	1,675	98.82	20	1.18	
75			16,034	13,101	81.71	2,933	18.29	
76			785	432	55.03	353	44.97	
77			939	339	36.10	600	63.90	
78			16,562	15,782	95.29	780	4.71	
79			1,167	1,129	96.74	38	3.26	
80			1,000	1,000	100.00	-	-	
81			40,002	20,002	50.00	20,000	50.00	
82			14,356	14,267	99.38	89	0.62	

No	Name		Total Landholding		cquired roject	Remaining Landholding	
	Male	Female	(m ²)	(m ²)	%	(m ²)	%
83			3,100	1,177	37.97	1,923	62.03
84			11,635	6,771	58.20	4,864	41.80
85			12,145	11,645	95.88	500	4.12
86			808	308	38.12	500	61.88
87			722	222	30.75	500	69.25
88			5,501	5,001	90.91	500	9.09
89			5,864	1,364	23.26	4,500	76.74
90			10,112	112	1.11	10,000	98.89
91			28,293	20,510	72.49	7,783	27.51
92			6,492	5,380	82.87	1,112	17.13
93			430	230	53.49	200	46.51
94			15,014	14,514	96.67	500	3.33
95			631	31	4.91	600	95.09
96			25,805	805	3.12	25,000	96.88
97			4,502	3,702	82.23	800	17.77
98			5,176	4,376	84.54	800	15.46
99			1,372	572	41.69	800	58.31
100			1,518	762	50.20	756	49.80
101			5,349	5,344	99.91	5	0.09
102			800	75	9.38	725	90.63
103			753	379	50.33	374	49.67
104			5,264	4,764	90.50	500	9.50
105			601	101	16.81	500	83.19
106			1,103	703	63.74	400	36.26
107			563	63	11.19	500	88.81
108			13,037	6,537	50.14	6,500	49.86
109			24,482	12,349	50.44	12,133	49.56
110			8,069	7,269	90.09	800	9.91
111			1,066	66	6.19	1,000	93.81

Source: ERM Primary Data, April 2014

<u>* This information has been removed as it falls within exceptions to disclosure specified in paragraph 97, (cite</u> which item for exception) of ADB's Public Communications Policy (2011)

Based on in-depth interviews with the village heads and clan/sub clan leaders, it was identified there are no communal lands owned by any of the villages, clans or sub clans. The land ownership is therefore purely based on individual families, the majority of whom have the right of land ownership from heritage.

4.8 INVOLUNTARY RESETTLEMENT AND INDIGENOUS PEOPLES IMPACTS

4.8.1 Extent of Economic and Physical Displacement

4.8.1.1 Structure Ownership

Information provided by SOL's LAQ Team indicates there are no permanent structures affected by the Project. Based on land owners's interviews, there are two temporary structures affected by the Project: Mrs Roma Sihombing's pig stall and small hut from wood located on Mr Masri Pasaribu's rice-paddy field.

	Land	Owner		N	Jumbe	r of Struct	ture Ownership a	ffected			
Affected Village	Hou	sehold		by Project Affected Land							
Allecteu village		%	Per	manent	Ter	nporary	None perma	nent or temporary			
	n		n	%	n	%	n	%			
Pahae Jae											
Silangkitang	35	18.32	0	0.00	0	0.00	35	18.32			
Sigurug-gurung	45	23.56	0	0.00	1	0.52	44	23.04			
Total	80	41.88	0	0.00	1	0.52	79	41.36			
Pahae Julu											
Sibaganding	4	2.09	0	0.00	0	0.00	4	2.09			
Lumban Jaean	1	0.52	0	0.00	0	0.00	1	0.52			
Simataniari	106	55.50	0	0.00	1	0.52	105	54.97			
Total	111	58.12	0	0.00	1	0.52	110	57.59			

 Table 4-44
 Structure Ownership affected by Project Affected Lands

Source: ERM Primary Data, April 2014

4.8.1.2 Land Asset Ownership

PAHs have lost between 8m² and 50,000m² (**Table 4-45**) of land which includes rice paddy fields and rubber and cacao plantations, etc.

Table 4-45Land Asset Ownership affected by Project Affected Lands

		Number and Size of Project Affected Land										
Affected Village		Agricultural										
Affecteu village	Land Owner Household (n)			000 m ²	1,000	-10,000 m ²	>10,000 m ²					
	n	%	n	%	n	%	n	%				
Pahae Jae	Pahae Jae											
Silangkitang	45	23.56	18	9.42	24	12.57	3	1.57				
Sigurug-gurung	35	18.32	21	10.99	14	7.33	0	0.00				
Total	80	41.88	39	20.42	38	19.90	3	1.57				
Pahae Julu												
Sibaganding	1	0.52	0	0.00	0	0.00	1	0.52				

Lumban Jaean	4	2.09	1	0.52	2	1.05	1	0.52
Simataniari	106	55.50	43	22.51	45	23.56	18	9.42
Total	111	58.12	44	23.04	47	24.61	20	10.47

Source: ERM Primary Data, April 2014

PAHs with remaining land are summarised in **Table 4-46**. The Project does not affect residential, business/commercial or pasture land.

 Table 4-46
 Land Asset Ownership affected by Project Not Affected Lands

		Number and	Size of	f Project N	Not Affe	cted Land		
Affected Village			Ag	ricultura	1			
Allecteu village	Land Owner Household (n)			000 m ²	1,000	-10,000 m ²	>10,	000 m ²
	n	%	n	%	n	%	n	%
Pahae Jae								
Silangkitang	35	18.32	22	11.52	12	6.28	1	0.52
Sigurug-gurung	45	23.56	21	10.99	20	10.47	4	2.09
Total	80	41.88	43	22.51	32	16.75	5	2.62
Pahae Julu								
Sibaganding	1	0.52	0	0.00	0	0.00	1	0.52
Lumban Jaean	4	2.09	1	0.52	3	1.57	0	0.00
Simataniari	106	55.50	52	27.23	37	19.37	17	8.90
Total	111	58.12	53	27.75	40	20.94	18	9.42

Source: ERM Primary Data, April 2014

4.8.2 Project Impacts on Forest

Law No. 19 of 2004 provides permits to lease and use State's Forests areas that are regulated by the Regulation of the Minister of Forestry No.P.14/Menhut-II/2013 regarding Guidelines for Lease and Use of Forest Areas. This regulation contains obligations that the company as the applicant to borrow and use State forest must adhere to, namely:

- The company must make payment of compensation to owners for trees and other vegetation to be harvested/ cleared;
- Reclamation, planting and fertilizing activities must be conducted in the borrow-use areas that have been exploited, every year. The company must maintain forest security, avoid and mitigate fire risks, forest degradation, erosion and landslides in and around the forest areas that are leased;
- The company is prohibited to conduct activities in areas designated as protected areas, such as watersheds, beaches, areas around lakes, reservoirs and around spring water sources.

Applications for the borrow and use of forest areas are to be equipped with:

- A work plan of the forest areas attached with a location map in scale 1:50,000 or the largest scale for the areas, with information about the total forest areas to be applied for, and with the latest satellite imagery in detailed resolution of fifteen (15) meters or more in digital and hard copy. This is to be signed by the applicant and accompanied by a reference of the satellite image source;
- Recommendations by the Regent for licensing relating to the lease and use of the forest area, as issued by the Governor;
- Recommendations by the Governor for licensing relating to the lease and use of the forest area, as issued by the Regent;
- EIA (AMDAL) that has been approved by a competent authority, except in cases when the proposed activities are not required to prepare an EIA, as in accordance with applicable regulations;
- In the case where the areas applied for are in *Perusahaan Hutan Negara Indonesia "Perum Perhutani"* (Indonesian State Forestry Company) work areas, a technical consideration from the Director of *Perum Perhutani* is required;
- Permission or agreement from the related non-forestry sector(s), except in cases where activities are not required to have such a permit/agreement;
- A Statement of Commitment to fulfil all obligations and bear all expenses in connection with such application;
- In the case where mining activities are issued by the appropriate Governor or Regent authority, a consideration from the General Director of Minerals, Coal and Geothermal and the Ministry of Energy and Mineral Resources is required.

A copy of the application for the lease and use of forest areas proposed by the applicant must be submitted to:

- General Secretary of the Ministry of Forestry;
- Head of the Forestry Planning Agency;
- General Director for Forestry Production;
- General Director for Forest Protection and Nature Conservation;
- General Director for Land Rehabilitation and Social Forestry; and
- Head of the Forest Area Consolidation.

Companies that have obtained principle approval for the 'borrow and use' of forest areas from the Ministry of Forestry are obliged to:

- Bear all expenses for works contained within the lease and use of forest areas boundaries;
- Bear all expenses for conducting inventories;
- Carry out reclamation and reforestation activities in the retired forest areas without waiting for the completion of the lease and use period;

- Organize and conduct forest protection activities;
- Enable and allow both central and regional forestry staff and authorities to conduct monitoring and evaluation activities in the field;
- Bear all expenses resulting from the lease and use of the forest areas; and
- If obligations above have been fulfilled and implemented after the permit for the lease and use of the forest areas was published, the applicant has to prepare and submit a statement to the Notary.

Based on information from SOL's LAQ Team, the Principle Approval for use of forest area for the development of the geothermal power plant No. S.508/Menhut-VII/2013 was issued on 30 August 2013 (as the Project will have an impact on production and convertible forest production in the NIL area ~ 295 Ha). However, the land owners have already been compensated by SOL. They released the right of land ownership to SOL without an attorney signature -the letter signed by the land owner, village head and sub district head.

4.8.3 Use of Compensation

The land survey identified 127 land owners who were unclear how they would spend their compensation. Only 21 land owners said the compensation would be used for primary needs i.e. meals and health costs; 20 land owners indicated they would save and 5 land owners purchased new land (**Table 4-47**).

				τ	Use of	Compensa	tion				Total
Use of Compensation		urung- rung	Silangkitang		Sib	aganding	Lu	mban Jaean	Sim	ataniari	Affected House hold
Do not know	16	8.38	25	13.09	0	0.00	4	2.09	82	42.93	127
Obtain a new house	1	0.52	0	0.00	0	0.00	0	0.00	3	1.57	4
Purchase land for a new house	0	0.00	0	0.00	0	0.00	0	0.00	1	0.52	1
Purchase land for new agricultural field	0	0.00	3	1.57	0	0.00	0	0.00	2	1.05	5
Relocation Cost	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Primary Need	9	4.71	4	2.09	1	0.52	0	0.00	7	3.66	21
Secondary Need	0	0.00	1	0.52	0	0.00	0	0.00	1	0.52	2
Saving	8	4.19	8	4.19	0	0.00	0	0.00	4	2.09	20
Capital for Business Purposes	1	0.52	1	0.52	0	0.00	0	0.00	1	0.52	3
Transport Cost	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Others	0	0.00	3	1.57	0	0.00	0	0.00	5	2.62	8
Total	35	18.32	45	23.56	1	0.52	4	2.09	106	55.50	191

Table 4-47Use of Compensation by PAHs

Source: ERM Primary Data, April 2014

4.9 ANALYSIS ON PHYSICAL AND ECONOMIC DISPLACEMENT SIGNIFICANCE

4.9.1 Loss of Land Assets

Table 4-47 summarises the number of PAHs who have lost < 10%, 11-20%, 21-30%, 31-50% or >50% of their total landholdings/land usage due to the Project land acquisition process. The majority of land is used for agricultural income-generating process hence it is important to understand the extent of land loss.

Of the 191 households surveyed for the SSCAR:

- 113 households have lost more than 50% of their land;
- 50 households have lost 10-49% of their land; and
- 28 land owners have lost less than 10% of their land.

Therefore the majority of PAHs lost a significant portion (>10%) of the land that is used for income generating purposes, however they still have another source of income.

4.9.2 Loss of Structural Assets

It is identified that only two temporary structural assets were compensated for. There are no permanent structures affected by the Project.

4.9.3 Loss of Income

Based on land owner's interviews, the majority of land owners have not lost income due to the LAQ undertaken by SOL. They still have another source of income, eg their children who live outside of village have sent funds to their parents or they still can work as sharecroppers on other lands not acquired by SOL.

4.9.4 Income below the Poverty Regional Minimum Wage

The regional minimum wage in North Tapanuli Regency is IDR 1,325,000.00; the survey indicated there are 13 land owners with an income below IDR 500,000.00 (**Table 4-48**).

Table 4-48Income below the Regional Minimum Wage

						In	icome B	rack	et (IDR)				
Affected Villages	Project Affected Households (No.)	<500,000		500,000 - 2,000,000		2,000,000 - 4,000,000		4,000,000 - 6,000,000		6,000,000 - 10,000,000		>10,000,000	
	(1101)	n	%	n	%	n	%	n	%	n	%	n	%
				P	ahae Jae								
Silangkitang	45	3	1.57	34	17.80	7	3.66	1	0.52	0	0.00	0	0.00
Sigurung-gurung	35	2	1.05	30	15.71	3	1.57	0	0.00	0	0.00	0	0.00
Total	80	5	2.62	64	33.51	10	5.24	1	0.52	0	0.00	0	0.00
	Pahae Julu												

Lumban Jaean	4	0	0	4	2.09	0	0.00	0	0.00	0	0.00	0	0.00
Sibaganding	1	0	0.00	1	0.52	0	0.00	0	0.00	0	0.00	0	0.00
Simataniari	106	8	4.19	85	44.50	7	3.66	2	1.05	0	0.00	4	2.09
Total	111	8	4.19	90	47.12	7	3.66	2	1.05	0	0.00	4	2.09

Source: ERM Primary Data, April 2014

However as stated previously the household poverty line (assuming an average household of 55 people) in the project area is around 300,000IDR/month. **Table 4-48** presents poverty levels per project affected village; a total of 98 out of 191 (51%) were considered under the poverty line. These households will therefore require particular attention to ensure they are not made more vulnerable due to the loss of land or assets.

4.9.5 Loss of Business (Sustainability of Business)

There were no identified PAH businesses impacted by the Project.

4.9.6 Source of Income: None (Livelihood)

There were no PAHs identified without a source of livelihood.

4.9.7 Vulnerable Affected Household

There were 76 land owners over the age of 55 years old and 36 land owners who were female headed households.

4.10 FINDINGS FROM SURVEY QUESTIONNAIRE

The LAQ Audit Census was undertaken to understand the socio-economic profile of the Project affected land owners. A total of 191 people participated in the audit. The majority of land owners have been compensated by SOL, only land owners for T/L ROW are still on going process.

The majority of those surveyed indicated they understood the Project however concerns regarding land issues were raised in all villages (**Table 4-49**). Furthermore the majority indicated they understood how the land price was calculated by SOL and that they were satisfied. Volume III: Indigenous Peoples Plan (IPP) details the findings of this survey in more detail.

The majority of the PAHs indicated a high reliance on farming as a form of income and subsistence. Therefore it will be important for SOL to assess whether any PAHs have become more vulnerable as a result of the land acquisition process. At the time of the survey only 316 PAHs had been compensated, and no change in income had occurred at that time.

Table 4-49Participating in Land Acquisition Process

Affected Villages	Project	Socialization	Negotiation	Compensation

	Affected Households (n)	n	0/0	n	0/0	n	%
			Pahae Jae				
Silangkitang	45	26	13.60	32	16.75	34	17.80
Sigurung-gurung	35	32	16.75	37	19.37	42	21.99
SubTotal	80	58	30.35	69	36.13	76	39.79
			Pahae Julu	L	· · · · ·		
Lumban Jaean	4	1	0.52	1	0.52	1	0.52
Sibaganding	1	3	1.57	4	2.09	4	2.09
Simataniari	106	91	47.67	57	29.84	99	51.83
Total	111	95	49.73	62	32.46	104	54.45
Grand Total	191	153	80.08	131	68.59	180	94.24

5 STATUS OF UNOCAL COMPLIANCE

5.1 **OVERVIEW**

This section reviews the land acquisition process undertaken by Pertamina/ UNOCAL; providing the status of compliance against the national requirements at the time of acquisition.

The audit includes a review of the methodology adopted in order to acquire the land as well as the approach used for setting compensation rates for land and plants, consultation process, and grievance mechanism.

5.2 **PERMIT LOCATION**

Regulation of the Minister for Agrarian Affairs No. 2 Year 1993 stipulates procedures to obtain location permits and land rights specifically for a private project. The location permit is granted in accordance to Regional Planning for the project to be able to acquire land. It was identified that the regional planning of Tapanuli Utara has determined Pahae Jae and Pahae Julu as a geothermal area. This is as defined in the Regional Regulation of Tapanuli Utara No. 19 Year 1994 and 21 Year 2001.

To obtain the location permit, the company is required to propose a permit application to the Head of Land Office at the regency level. The audit identified that Pertamina/ UNOCAL has followed this process by proposing an application letter for the location permit to the Head of Tapanuli Utara Land Office.

The location permit for SIL and NIL area has been granted to Pertamina Sumatera Utara through the following decree letters issued by the Tapanuli Utara Regent:

- 1. Decree Letter of Tapanuli Utara Regent No. 413A Year 1995 concerning Project location for NILS-A, NILS-B, and NILN-A; and
- 2. Decree Letter of Tapanuli Utara Regent No. 334 Year 1997 concerning Project location for SIL-1 and SIL-2C.

These permits were used by the Project as a basis for permission to conduct the transfer of land rights.

5.3 METHODOLOGY FOR ACQUIRING LAND AND APPROACH FOR ARRIVING AT COMPENSATION RATES

The SOL Geothermal Project, which was previously managed by Pertamina, was considered a development project for public interest. The provision on land procurement for this interest is stipulated through the President Decree No. 55 Year 1993 which includes the following process:

1. Establishment of Land Procurement Committee (LPC/PPT) at the regency level, led by the regency with Head of Land Office as Deputy Head, and involves related government institutions e.g. Regional Agricultural Agency, Head of Sub-District, and Head of Village.

The LPC/PPT is responsible for the following tasks:

- research and inventory of all affected assets (land, plants, structure, and other asset attached to the land);
- research and inventory on land ownership status;
- estimation/ calculation of compensation;
- disclosure of information to land owners;
- consultation on asset value for compensation;
- acknowledge the payment of compensation; and
- developing the minutes of the compensation payments and the transfer of right process.
- 2. Framework of compensation includes the following provision:
 - compensation is provided for affected assets, i.e. land, structure, plants, and any other objects attached to land;
 - compensation can be provided in the form of cash money, replacement land, housing resettlement, or combination of money and replacement asset;
 - when any customary asset is affected, compensation can be provided in the form of replacement asset through the development of public facilities.
 - the final decision to determine the form and value of compensation should be obtained through consultation process, which then is legalized through a Decree Letter issued by the LPC/PPT.
- 3. Compensation value is estimated as follows:
 - basis for land value is uses the real value, by considering selling value of the taxable object (i.e. government tax value);
 - basis for plants value uses the selling value estimated by the government agency responsible for this issue, i.e. Forestry Agency or Agricultural Agency;
 - estimation basis for structure uses the selling value estimated by the government agency responsible for this issue.

These process of land procurement has been followed by Pertamina/ UNOCAL (

Table 5-1).

No	Document	Letter Number	Date	
		A. SIL		
1	Letter from Pertamina to Head of Land Office	Proposing assistance for land procurement for SIL area and	373/C1100/01- SO	6 August 1994

Table 5-1Pertamina/ UNOCAL Land Compensation Framework

No	Document	Subject	Letter Number	Date
		road (access) development		
2	Letter from Land Office to LPC/PPT	Land and plants measurement and inventory on 19 December 1994	500- 2955/13/1994	14 December 1994
3	Minutes of Meeting	Estimation of compensation value and LPC operational cost (for affected asset in Silangkitang and Sigurung- gurung)	-	25 August 1994
4	Minutes of Meeting	Estimation of compensation value for land/ plants in Pardomuan Nainggolan and Silangkitang	-	6 March 1995
		B. NIL		
1	Invitation from Land Office to LPC/PPT and land owner	Inventory of land and plants on 6 November 1995, in which the Head of Villages responsible to invite all land owners to witness the measurement, show land boundaries, and calculate plants	005.580/2905/10 /95	31 October 1995
2	Letter from LPC/PPT to Head of Sub-district, Head of Villages, Staff of Agriculture Agency Tapanuli Utara, and Staff of Land Office Tapanuli Utara	Re-inventory of land and plants on 13 May 1996, in which the Head of Villages responsible to invite all land owners to witness the measurement, show land boundaries, and calculate plants	593/4897/96	9 May 1996
3	Letter from LPC/PPT to Head of Sub-district, Head of Villages, Staff of Agriculture Agency Tapanuli Utara, and Staff of Land Office Tapanuli Utara	Re-inventory of land and plants on 20 June 1996, in which the Head of Villages responsible to invite all land owners to witness the measurement, show land boundaries, and calculate plants	591/6548/96	17 June 1996
4	Letter Decree of Head of Agriculture Agency	Plants compensation value	251.23/902/HOR TI/XII/95	27 December 1995
5	Letter Decree of Head of Agriculture Agency	Plants compensation value	521.23/87/HORT I/1/96	22 January 1996

It is identified that the LPC/PPT was established to respond the letter of application from Pertamina to the Land Office, with the following structure:

- 1. Regent of Tapanuli Utara as the Head of LPC/PPT
- 2. Head of Land Office as Deputy Head
- 3. Member
 - Head of Agricultural Agency
 - Head of Public Works Agency
 - Head of Tax Office
 - Head of Sub-district Pahae Jae and Pahae Julu
 - Head of (affected) Villages
- 4. Secretary
 - Head of Order of Regent Office
 - Head of Land Rights of Land Office

Land measurement and inventory were conducted by LPC/PPT, in which the Head of Villages were given responsibility to invite all land owners to witness the measurement, show land boundaries, and calculate plants attached to the land.

The process to estimate the compensation value was conducted by the LPC/PPT, as shown in the Minutes of Meeting. It identified the following compensation value were offered:

- 1. the affected plantation land will be compensated at IDR $5,500/m^2$;
- 2. paddy field will be compensated at IDR $8,500/m^2$;
- 3. for the plantation value, it was stipulated through a decree letter issued by the Head of Agricultural Agency; a different value was applied for various plants and also between the producing plants and immature plants.

This estimation was used as basis for the land price consultation with the affected land owners. Documents related to the consultation are discussed in the following section.

5.4 CONSULTATION, GOOD FAITH NEGOTIATION AND PARTICIPATION ACTIVITIES

A number of provisions related to consultation, good faith negotiation, and participation activities are also regulated by the President Decree No. 55 Year 1993. These include:

- 1. the final decision to determine the form and value of compensation should be obtained through consultation process, which then is legalized through a Decree Letter issued by the LPC/PPT; and
- 2. if agreement through consultation cannot be reached, LPC/PPT will issue a Decree Letter which will consider the opinions, demands, and suggestions recorded during the consultation.

Table 5-2 summarises the following consultation activities were recorded during the Pertamina/UNOCAL land acquisition process.

No	Document	Subject	Letter Number	Date
	Document	A. SIL		Date
	T is the D of			10.1
1	Invitation from Regent to LPC/PPT	Land price consultation with affected land owner on 25 January 1995	593/20/TIBAN/95	18 January 1995
2	Invitation from Head of land office to LPC/PPT, Pertamina/Unocal, and land owners	2 nd round consultation (9 February 1995)	500.580-315/1/1995	31 January 1995
3	Invitation from Head of land office to LPC/PPT, Pertamina/Unocal, and land owners (in Silangkitang and Pardomuan Nainggolan)	3 rd round consultation (23 February 1995)	515.581-451/2/95	17 February 1995
	·	B. NIL	·	
1	Invitation from LPC/PPT	Invitation for socialization to owner of the land in the location that will be affected by the Project on 28 September 1995	-	September 1995
2	Invitation from LPC/PPT	Inventory of land and plants on 6 November 1995	005.580/2905/10/95	31 October 1995
3	Letter of Announcement	Announcing the land/ plants located within the proposed Pertamina project area, and the list of owner (objection to be submitted within 1 month)	01/PPT/2/1996	28 February 1996
4	Invitation from LPC/PPT	Land price consultation on 26 March 1996	005-580/374/3/96	20 March 1996

Table 5-2 Pertamina/ UNOCAL Land Consultation

Source: SOL, 2013 September 1995

The audit identified that a socialization meeting was conducted by the LPC/PPT to inform the land owners of the project plan for land acquisition. This was followed by a series of consultations for land measurement and inventory. The result of the measurements was also publicly disclosed, as shown in the Letter of Announcement. This process allowed any objections on the measurement and inventory to be raised within a month after the disclosure.

Good faith negotiation principles were used when determining the compensation value; when the first round of consultations did not reach an agreement, additional rounds of

consultations were conducted.

In addition, the President Decree No. 55 Year 1993 also regulated a mechanism to address any grievances lodged by the land owner with regards to the compensation, as follows:

- 1. land owners can file an objection, addressed to the Governor, explaining about background and reason for the objection;
- 2. the Governor responsible to address the objection by considering all parties;
- 3. the Governor will issue a decree letter to answer the objection;
- 4. if the land owner does not accept the governor's resolution the development location will not be relocated, the Governor will propose a relocation on the land right for the interest of public development to the Minister of Agrarian Affairs acting as Head of National Land Agency.

The audit identified that a number of grievances were recorded concerning the land compensation process (**Table 5-3**).

No	Document	Subject	Letter Number	Date		
	A. SIL					
1	Grievance letter to PT Rekayasa	Grievance letter from owner of plants which were affected by the Project road development in Sigurung- gurung	-	1 November 1994		
2	Minutes of Meeting	Payment for plants compensation affected by the Project road development (in Sigurung-gurung and Silangkitang)	-	16 January 1995		
3	Grievance letter to PT Rekayasa	Grievance letter from owner of plants which were affected by the Project road development in Silangkitang	-	2 February 1995		
4	Grievance letter to UNOCAL	Grievance letter from 6 owner of plants which were affected by the Project road development in Silangkitang	-	10 April 1995		
5	Minutes of Field Inspection		-	13 April 1995		
6	Minutes of Meeting	Payment for plants compensation affected by the Project road development	-	19 May 1995		
7	Statement letter from the affected owner of plants	Statement receiving the compensation	-	19 May 1995		

Table 5-3Pertamina/ UNOCAL Grievance Record

No	Document	Subject	Letter Number	Date		
	B. NIL					
1	Letter from Land Office to LPC	Re-check land owned by Pahala Pakpahan in Simataniari	600- 3560/10/1996	1 October 1996		
2	Letter from LPC to Pertamina	Compensation payment for Pahala Pakpahan	580- 4090/12/1996	24 December 1996		

The available documents did not identify whether there were any outstanding grievances not addressed by Pertamina/UNOCAL. However data shows that a number of grievances were addressed together with the LPC/PPT. Those who did not accept the value of compensation remained unpaid until the project transferred to SOL.

5.5 COMPENSATION PAYMENTS

As regulated by the President Decree No. 55 Year 1993, compensation should be paid directly to the land owners or their legitimate heirs. The implementation of this provision is as shown in **Table 5-4**.

Project Area	Document	Subject	No	Date
SIL	Invitation from head of land office to LPC/ PPT, Pertamina/ UNOCAL, land owner in Silangkitang and Pardomuan Nainggolan	Payment of compensation for land in Silangkitang (7 April 1995)	005.590- 780/4/1995	3 April 1995
NIL	Invitation from Land Procurement Committee	Payment of compensation for affected land in Onan Hasang, Sibaganding, Lumban Jaean, Simataniari (4-6 September 1996)	005.580- 2282/8/96	30 August 1996
	Document of	each compensation payment		
1	Land Certification	Certificate of reference from a acknowledge by Head of Sub area and its boundaries	0	
2	Letter of Statement	Statement of ownership from	land owner	
3	Letter of Land Recognition	Statement of recognition from owner of neighbourhood land		
4	Asset inventory	List of affected asset (land, plants, and other assets attached to the land), used as basis for compensation calculation		
5	Land Situation Map			

Table 5-4Pertamina/ UNOCAL Compensation Payment

Project Area	Document	Subject	No	Date
6	Nominative Data of Compensation Payment (NPGRT)			
7	Waiver Letter	Statement of land owner to release the land right prior to payment of compensation, acknowledge by the LPC/ PPT		0 1

5.6 WORKING PERMIT

Once the compensation has been paid and the land procurement completed, the project proposed an application letter to the Regent to be able to start working on the acquired land. The Regent of Tapanuli Utara granted Pertamina a working permit which allowed Pertamina to start working on the SIL and NIL area. This is as shown in the following documents:

- 1. Working Permit Letter No. 593/894/SEKR/94, issued by Tapanuli Utara Regional Secretary dated 15 September 1995; and
- 2. Working Permit Letter No. 613/959/Tiban/96, issued by Tapanuli Utara Regent dated 19 September 1996.

The awarded working permit indicates that the procurement process has been considered completed by the government. However, the above permit letters issued by considering the following notes:

- 1. Pertamina should disclose the project plan information to the community;
- 2. Effort should be given to mitigate disturbance or any impacts to public interest and community activities during the project development; and
- 3. Continuous consultation with the LPC/PPT for the land parcels which haven't been compensated.

5.7 **OUTSTANDING ISSUES**

A number of outstanding issues remained after the Project was transferred to SOL, are as follow:

1. There were 26 land parcels in Silangkitang, located in the Project SIL-X area, utilised for Power Plant, Disposal, and Borrow Pit, that have not been compensated by Pertamina/ UNOCAL. This was due to a disagreement on the compensation value. These land parcels have been compensated by SOL (**Table 5-5**).

Table 5-5	Land Parcels haven't been Acquired by Pertamina/UNOCAL (*)
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No	Name	Type of Land

1Plantation2Plantation3Paddy field4Paddy field5Paddy field6Plantation7Paddy field8Paddy field9Paddy field9Paddy field10Paddy field11Plantation12Paddy field13Paddy field14Paddy field15Paddy field16Paddy field17Paddy field18Plantation19Plantation20Plantation21Plantation22Plantation23Plantation24Plantation25Plantation		
3Paddy field4Paddy field5Paddy field6Plantation7Paddy field8Paddy field9Paddy field10Paddy field11Plantation12Paddy field13Paddy field14Paddy field15Paddy field16Paddy field17Paddy field18Plantation19Plantation20Plantation21Plantation22Plantation23Plantation24Plantation25Plantation	1	Plantation
4Paddy field5Paddy field6Plantation7Paddy field8Paddy field9Paddy field10Paddy field11Plantation12Paddy field13Paddy field14Paddy field15Paddy field16Paddy field17Paddy field18Plantation19Plantation20Plantation21Plantation22Plantation23Plantation24Plantation25Plantation	2	Plantation
5Paddy field6Plantation7Paddy field8Paddy field9Paddy field10Paddy field11Plantation12Paddy field13Paddy field14Paddy field15Paddy field16Paddy field17Paddy field18Plantation19Plantation20Plantation21Plantation22Plantation23Plantation24Plantation25Plantation	3	Paddy field
6Plantation7Paddy field8Paddy field9Paddy field10Paddy field11Paddy field11Plantation12Paddy field13Paddy field14Paddy field15Paddy field16Paddy field17Paddy field18Plantation19Plantation20Plantation21Plantation22Plantation23Plantation24Plantation25Plantation	4	Paddy field
7Paddy field8Paddy field9Paddy field10Paddy field11Paddy field12Paddy field13Paddy field14Paddy field15Paddy field16Paddy field17Paddy field18Plantation19Plantation20Plantation21Plantation22Plantation23Plantation24Plantation25Plantation	5	Paddy field
8Paddy field9Paddy field10Paddy field11Paddy field11Plantation12Paddy field13Paddy field14Paddy field15Paddy field16Paddy field17Paddy field18Plantation19Plantation20Plantation21Plantation22Plantation23Plantation24Plantation25Plantation	6	Plantation
9Paddy field10Paddy field11Plantation12Paddy field13Paddy field14Paddy field15Paddy field16Paddy field17Paddy field18Plantation19Plantation20Plantation21Plantation22Plantation23Plantation24Plantation25Plantation	7	Paddy field
10Paddy field11Plantation12Paddy field13Paddy field14Paddy field15Paddy field16Paddy field17Paddy field18Plantation19Plantation20Plantation21Plantation22Plantation23Plantation24Plantation25Plantation	8	Paddy field
11Plantation12Paddy field13Paddy field14Paddy field15Paddy field16Paddy field17Paddy field18Plantation19Plantation20Plantation21Plantation22Plantation23Plantation24Plantation25Plantation	9	Paddy field
12Paddy field13Paddy field14Paddy field15Paddy field16Paddy field17Paddy field18Plantation19Plantation20Plantation21Plantation22Plantation23Plantation24Plantation25Plantation	10	Paddy field
13Paddy field14Paddy field15Paddy field16Paddy field17Paddy field18Plantation19Plantation20Plantation21Plantation22Plantation23Plantation24Plantation25Plantation	11	Plantation
14Paddy field15Paddy field16Paddy field17Paddy field18Paddy field19Plantation20Plantation21Plantation22Plantation23Plantation24Plantation25Plantation	12	Paddy field
15Paddy field16Paddy field17Paddy field18Plantation19Plantation20Plantation21Plantation22Plantation23Plantation24Plantation25Plantation	13	Paddy field
16Paddy field17Paddy field18Plantation19Plantation20Plantation21Plantation22Plantation23Plantation24Plantation25Plantation	14	Paddy field
17Paddy field18Plantation19Plantation20Plantation21Plantation22Plantation23Plantation24Plantation25Plantation	15	Paddy field
18Plantation19Plantation20Plantation21Plantation22Plantation23Plantation24Plantation25Plantation	16	Paddy field
19Plantation20Plantation21Plantation22Plantation23Plantation24Plantation25Plantation	17	Paddy field
20Plantation21Plantation22Plantation23Plantation24Plantation25Plantation	18	Plantation
21Plantation22Plantation23Plantation24Plantation25Plantation	19	Plantation
22Plantation23Plantation24Plantation25Plantation	20	Plantation
23Plantation24Plantation25Plantation	21	Plantation
24Plantation25Plantation	22	Plantation
25 Plantation	23	Plantation
	24	Plantation
26 Plantation	25	Plantation
	26	Plantation

<u>* This information has been removed as it falls within exceptions to disclosure specified in paragraph 97, (cite</u> which item for exception) of ADB's Public Communications Policy (2011)

- 2. It was identified that previous land owners still cultivate the Pertamina/ UNOCAL acquired lands. SOL plans to inform these people about the Project schedule for construction, to allow these people to harvest their crops before the land cleared.
- 3. The Lenders ESDD found a house built on land which was acquired by Pertamina/UNOCAL; it also operates a kiosk/ shop. This house is currently being compensated by SOL based on GOI structure rates.



Figure 5-1 Housing on Pertamina/UNOCAL Acquired Land

Due to the findings discussed in above the audit concludes that the Pertamina/UNOCAL land acquisition process has complied Indonesian regulation on the land procurement for the development of public interest.

6 STATUS OF SOL COMPLIANCE

6.1 **OVERVIEW**

This Correction Action Plan is time bound to actions to address the gaps identified the Land Acquisition Process undertaken by SOL; this assists SOL in complying with the ADB Safeguard Policy Statement 2009 (SR 2) and IFC Performance Standards of 2012 (specifically IFC PS 5).

Table 6-1 provides a Corrective Action Plan to assist SOL in defining necessary remedial actions, budget for such actions and the time frame for resolution of non-compliance to ADB's Safeguard Policy Statements (2009).

6.1.1 Impact Assessment

This SSCAR has not captured all the Project's land acquisition activities; a Resettlement Plan report (Volume 5) discusses the land to be acquired for the transmission line ROW, Laydown, Road 5, WJP 1N, etc.

No	Area name	Date/Month Action	Total Land Owners	Current Status
1	Tower Footprint and Transmission Line ROW	Feb-14	145	The initial survey for the tower footprint has been compensated The remaining potential land owners for the T/L ROW has been identified and surveyed, will be paid soonest.
2	Laydown		6	The land owners have been compensated.
3	NIL 1N and Road 4A Expansion	Oct-12	6	The land owners have been compensated.
4	WJR 2N and Access Road	Dec-13	11	The land owners have been compensated.
5	WJR 1N and Road 6, 6B	Oct-12	8	The land owners have been compensated, 2 land owner has not been paid
6	Borrow Area (Pit)	Sep-13	20	The land owners have been compensated. 1 land owner has not been paid due to family dispute
7	Brine Injection Line	Dec-13	1	The land owner has been

Table 6-1On-going Land Acquisition Activities

No	Area name	Date/Month Action	Total Land Owners	Current Status
				compensated
8	Disposal 1 and 2, Road 3A	Sep-13	20	The land owner has been compensated
9	Road 1 and 1A	Sep-13	66	The land owners have been compensated. 6 land owner has not been paid due to family dispute
10	NIL 2N and Road 3B	Sep-13	3	The land owner has been compensated
11	Power Plant and Road 2, 3	Sep-13	21	The land owner has been compensated
12	Road 5 and WJP	Oct-12	11	The land owner has been compensated
13	BM 8 – BP 1 (additional)	Sep-13	1	The land owner has been compensated

Source: SOL Data, 2014

6.1.2 Public Consultation and Information Disclosure

Public consultation and information disclosure has been conducted well during the land acquisition process for the Project. The consultation activities were conducted in a culturally appropriate manner (using both Bahasa Indonesia and Batak language) with Batak facilitators and inclusive of females. PAHs have been informed of the Project, the acquisition process and SOL's compensation policy prior to the signature of land acquisition agreements. PAHs have also been given alternative resettlement options including cash compensation for land and plants.

Site investigation indicates that PAHs are interested in following information related with the Project:

- 1. Compensation price for land and plants;
- 2. Employment; and
- 3. Project schedule and commencement of activities; specifically around employment and community development programs.

6.1.3 Livelihood Restoration

The survey data indicates that the PAHs mostly rely on their land for income and household subsistence. Although there is no clear decline in PAH's income due to the Project's on-going compensation payment, the cash compensation may not be sustained for a long time. The livelihood restoration for some PAHs is challenging especially for those who have lost more than 50% of their farmland.

SOL is planning to establish a program that will be implemented to support livelihood restoration for land owners. The program focuses on agriculture and livelihoods as part of

the ISP. Further details of the ISP are presented in Volume 4: Indigenous Peoples Plan (IPP).

A PAH Education and Health Program is to be implemented soon that targets the 9 Project affected villages (Pardomuan Nainggolan, Pardamean Nainggolan, Silangkitang and Sigurung-gurng and Simataniari, Sibaganding, Lumban Jaean, Onan Hasang and Janji Natogu).

The ISP will include a job placement Program, i.e. skills training, such as IT, cooking, automotive, etc. It is recommended SOL undertake a PAH needs assessment in each village that can support the livelihood restoration planning and implementation. This will enable SOL to comprehensively assess if the program has sufficiently restored the PAH's livelihood to an equal or higher standard than before the land acquisition process commenced.

6.1.4 *Grievance Resolution*

There is a Grievance Mechanism in place dealing with resettlement related grievances. Most of the consulted PAHs understand this Grievance Mechanism and are aware of how to access it and lodge a grievance. The mechanism is currently being implemented well in the Project area. Grievances are being addressed in an efficient way and PAHs appear satisfied with the resolutions offered. No serious grievances had been collected at the time of field survey.

6.1.5 Vulnerable Groups

Vulnerable groups have been identified during the process of the impact assessment. The Project has provided access to the participation of vulnerable groups. Special assistance should be made to improve the livelihood of affected vulnerable groups, i.e. the significantly affected female headed households should be given assistance to develop businesses, or made a priority by the Project for employment based on their skill sets.

6.1.6 Date for Discontinuing Use of the Land

SOL has provided more time for land owners to continue cultivation on their land after they have been compensated. SOL has given around 1.5 years for the land owners to continue to use the land. It is recommended that SOL notify the PAHs now and remind them again 60 days prior to commencement of the construction work to ensure they have at least 1 month to harvest their land. Currently it is two weeks prior to construction work commencing which is not considered sufficient time to harvest or take the crops from the land.

6.1.7 Monitoring and Evaluation

Monitoring and evaluation is indicated as necessary together with the process of project implementation. SOL should prepare a comprehensive monitoring and evaluation plan, especially for those project components, which have not been captured by the Resettlement Plan, i.e. access roads, transmission lines, etc.

Table 6-2 provides the compliance status of the social performance of the Project considering the ADB SPS and JBIC requirements along with the IFC's PS5.

Table 6-2Social Safeguards Audit Findings

No	ADB/IFC/JBIC Requirements	Issue and Description of Observation	Recommendations		
2	 Involuntary Resettlement Safeguards The applicability of the ADB SPS SR 2 should be seen in the following context: The Project requires a total of 120 Ha of land which will be allocated for project components such as power generation facilities and access roads. The acquired land is largely paddy rice fields and a small proportion of plantation land most of which are privately owned by individual families. The Project has acquired land through a negotiated settlement process where the land owner has the right to refusal. There are likely to be adverse social impacts on some households, in particular those that have sold 100% of land (or those left with only unviable land) which will need to be mitigated. 				
2.1	Screen the project early on to identify past, present, and future involuntary resettlement impacts and risks. Determine the scope of resettlement planning through a survey and/or census of displaced persons, including a gender analysis, specifically related to resettlement impacts and risks.	In accordance to the requirements of ADB's SPS SR 2 on Involuntary Resettlement, the project has been categorized as Category A the project will acquire land currently used for livelihood and other purposes by the local people. An ESMP and IPP (inclusive of ISP) has been undertaken to assess the potential social impacts (inclusive of gender) and establish appropriate mitigation and management measures to minimise or enhance them. The current IPP does not include socio-economic data on all future lands to be acquires (only the tower base area). SOL plan to undertake a 100% census of future land owned by the end of November 2013 which will feed into the RP that has been developed.	After the census has been undertaken the IPP/ISP and ESMP should be reviewed to ensure all impacts on these potentially impacted communities are identified and mitigated against.		
2.2	Carry out meaningful consultations with affected persons, host communities, and concerned nongovernment organizations. Inform all displaced persons of their entitlements and resettlement options.	Has conducted consultation with land owners since 2008; and consultations have been on going to the present (September 2013). Consultation activities are undertaken in a culturally and gender sensitive manner, have included socialisation on the land acquisition process and project components, land measurements and survey of assets, and good faith negotiations. SOL has also established a well socialised grievance mechanism. Other stakeholders consulted have included NGOs/CSOs, sub district heads and BPN.	SOL will prepare situation maps for each affected village to enable the communities to further visualise the Project footprint and components.		

No	ADB/IFC/JBIC Requirements	Issue and Description of Observation	Recommendations
2.3	Establish a grievance redress mechanism to receive and facilitate resolution of the affected persons' concerns.	SOL has developed a Grievance Redressal Mechanism which is currently being implemented by SOL's external relations team in NIL and SIL. The mechanism implemented is addressing grievances lodged in a timely manner and prioritising them in 4 categories. However as many grievances are lodged verbally or to the village leaders a comprehensive database of all grievances lodged, fact finding details and how they were resolved and closed out is not available.	SOL should strengthen the implementation of the grievance process by formalising the recording process so that grievances are lodged through the external relations team who then log all grievances and update how they are being addressed in a SOL Project database. Periodically this process should be internally and externally audited.
2.4	Improve, or at least restore, the livelihoods of all economically displaced persons	Despite land owners selling through a negotiated settlement some will lose all of their land (7 HHs) and 92 will only be left with unviable land (i.e. equal to or less than 400m2) therefore a disruption to livelihoods is likely to occur, if only temporary, whilst new land is purchased and crops are grown. SOL plans to implement a short program focussed on livelihoods as part of its ISP however the plan required further development to ensure its targets the most vulnerable an meets the communities real needs.	Based on the IPP undertaken and this SCCAR SOL should ensure the ISP and ESMP activities prioritise those identified as significantly impacted through the loss of 100% of land (or only left with unviable land). This should be based on the communities' needs; a livelihood restoration plan should be incorporated into the ISP to ensure that lost income is restored.
2.5	Prepare a resettlement plan elaborating on displaced persons' entitlements, the income and livelihood restoration strategy, institutional arrangements, monitoring and reporting framework, budget, and time- bound implementation schedule.	SOL has not undertaken a RP for lands acquired to date. The ISP in the IPP sets out SOL's plans to undertake livelihood restoration including institutional arrangements, monitoring and reporting and tentative budget and duration. An RP has been developed in line with ADB's SPS SR2 on Involuntary Resettlement for future lands to be acquired by the Project e.g. for the transmission line. A census is still to be undertaken for this RP; SOL plan to undertaken this by the end of November 2013.	SOL to conduct periodic internal and external audits of their land acquisition process, in particular focussing on those identified as vulnerable (i.e. those who lost 100% of land) to ensure no landowner are made more vulnerable by the Project. As above, SOL to incorporate a targeted livelihood restoration program into their ISP. SOL to undertake a 100% census of landowners for the remaining Project lands to be acquired along with establishing the cut-off date (completion of census). The legal date for land owners to stop using their land should be at least 1 month after compensation is paid.

No	ADB/IFC/JBIC Requirements	Issue and Description of Observation	Recommendations
			After which the IPP/ISP and ESMP should be reviewed to ensure all impacts on these potentially impacted communities are identified and mitigated against.
2.6	Disclose a draft resettlement plan, including documentation of the consultation process in a timely manner, before project appraisal, in an accessible place and a form and language(s) understandable to affected persons and other stakeholders.	No RP was prepared for lands already acquired by the Projects. However SOL have prepared an RP in line with ADB's SPS SR2 on Involuntary Resettlement for future lands to be acquired by the Project e.g. for the transmission line that will be disclosed as per the disclosure requirements of the ADB.	
2.7	Pay compensation and provide other resettlement entitlements before physical or economic displacement. Implement the resettlement plan under close supervision throughout project implementation.	SOL has conducted their land acquisition through a negotiated seller process overseen and legalised by the village leader. The right to refusal and the process in general has been socialised widely in a culturally and gender sensitive manner. Land prices were based on a 2010 sub-district reference and recent sales in the village. Land productivity was not considered (at the request of the villagers). Crop/plants prices were based on 2010/2011 Agricultural Agency of North Tapanuli Regency for productive plants, unproductive plants and seeds. Compensation was provided to both land owners and those who legally rented the land. No squatters were identified. All taxes and administrative costs were paid by SOL.	SOL to ensure that a third party is present during the negotiations process for future lands to be acquired by the Project. SOL also to market value for land and crops for new lands to be acquired as well as determining structure rates for those potentially involved in the future land acquisition process. SOL to offer support to those identified as vulnerable in terms of financial management, finding new land and negotiating. SOL to ascertain actual current market value of the paddy lands in the project area to ensure 65,000/m2 IDR is sufficient to purchase like for like land. Similarly for crops/plants. SOL to ensure the price paid is sufficient to purchase like for like seeds. SOL to implement a livelihood restoration to support those identified as vulnerable.

No	ADB/IFC/JBIC Requirements	Issue and Description of Observation	Recommendations
2.8	Monitor and assess resettlement outcomes, their impacts on the standards of living of displaced persons, and whether the objectives of the resettlement plan have been achieved by taking into account the baseline conditions and the results of resettlement monitoring. Disclose monitoring reports.	Neither UNOCAL nor SOL has not undertaken internal or external monitoring or evaluation of the land acquisition process to date. This SCCAR is the first report to identify outstanding issues to be resolved. Given the uncertainty regarding landowners involved in the UNOCAL process (due to a lack of socio-economic baseline data) and the likelihood that some households may become more vulnerable monitoring and evaluation is required periodically.	As a part of the RP for lands still to be acquired SOL will undertake internal monitoring, determining monitoring indicators to measure and track quality of life as well as specify resettlement outcomes. Furthermore SOL will conduct external (third party) monitoring to ensure compliance with the RP. As part of these audits SOL should include UNOCAL and previous SOL landowners (e.g. for SIL) to ensure no landowner are made more vulnerable by the Project.

7 CORRECTIVE MEASURES

There are no issues related to the UNOCAL Land Acquisition that require corrective actions. All the land owners whose land was acquired by UNOCAL have been able to continue cultivating their land until construction commences. However before the Project commences any activity SOL sends them an announcement letter 2 weeks prior to the contractor execution in order to communicate no more use of the land. SOL and the village heads that have been consulted have indicated these land owners have complied with the announcement letter instructions.

As a result of this review a number of corrective actions are recommended to be implemented by SOL (**Table 7-1**). These actions aim to ensure all PAHs livelihoods are restored to an equal or higher level than before the land acquisition process commenced as well as support SOL in adhering to the ADBs SPS and JBIC requirements as well as the IFC's Performance Standard (PS 5).

Issues/Topics	Corrective Actions	Deliverable	Timelines	Responsible to undertaking this action		Remarks
SR 2: Involuntary F	Resettlement Safeguards					
Insufficient impact assessment	The database of resettlement impacts requires updating. Impacts from other project components i.e. transmission line ROW, Laydown, Road 5, WJP 1N, etc. should be captured in the Resettlement Plan.	Land Census ReportResettlement Plan	January 2015	ERM and SOL	Т	he impact from the /L has been pdated.
Currently, the compensation for structures is based on negotiation.	SOL should prepare a list of compensation rates for any potentially affected structures. If there are many land owners with structures e.g. along the transmission line RoW it will be easier if SOL have an initial price for compensation SOL needs to make sure the compensation rate meets market value of the structures	 List of compensation rates for structures List of compensation records for structures 	December 2014	SOL	tł st a:	n the T/L ROW, here are some tructured identified ffected by the roject.
SOL has a short term plan for project affected people to restore their livelihood	It is recommended to SOL undertake a Livelihood Restoration Plan as part of the IPP that should be prepared based on a Needs Assessment in each project affected village. The PAH needs assessment will be undertaken in Q3 of 2014; a	 Budget for Livelihood Restoration Planning (see Part 3: IPP for details on SOL's ISP) 	November 2014	SOL	tł n It L R	OL has developed ne ISP based on a eeds assessment. will include a ivelihood estoration rogram.

Table 7-1 Corrective Action Plan for Sarulla Operation Limited (*)

Issues/Topics	Corrective Actions	Deliverable	Timelines	Responsible to undertaking this action	Remarks
	detailed livelihood program will be developed and submitted to ADB.				
Date for land owners to stop using their land	The legal date for land owners to stop using their land should at least 1 month after the compensation is paid. This will with sufficient time for land owners to harvest their crops.	 Letter of Announcement 	February 2015	SOL	This has been done for SIL and NIL. It will be implemented for the T/L land owners
The grievance mechanism is already in place	SOL has prepared good documentation for all grievances raised by PAHs, in particular if raised by vulnerable groups such as female headed households.	Grievance Records	2013	SOL	Sample of grievance records has been provided (attached in SSCAR Annex E)
Monitoring and Evaluation	SOL should prepare internal monitoring (submission of quarterly reports)	 Internal Monitoring Report 	2014 onwards	ERM	SOL has appointed ERM to conduct Internal Monitoring
	External monitoring (submission of semi-annual reports)	 External Monitoring Report 	2014 onwards	Lender's External Consultant	The lender's external consultant will conduct the external monitoring
	Post-resettlement evaluation (e.g. 18 months, 36 months post the land acquisition process.	 Evaluation Report 	2015, 2016, 2017	SOL	SOL will identify an expert to undertake the post resettlement audits

* This information has been removed as it falls within exceptions to disclosure specified in paragraph 97, (cite which item for exception) of ADB's Public Communications Policy (2011)

Annex A

List of Forestry Landowners

Table A1List of SOL Landowners in Forestry Area

No	Name
1	Husor Tua Sitompul
2	Ramses Pasaribu
3	Tumpal Sitompul
4	Jaendar Lumbantobing
5	Richard Sitompul
6	Masri Pasaribu
7	Heberlin Matondang
8	Gimbot Sitompul
9	Dahlan Sitompul
10	Gilmor Sitompul
11	Sortia Sitompul
12	Masda Sitompul
13	Rusma Tambunan
14	Jamananti Hutabarat
15	Tunggul Sitompul
16	Rasional Sitompul
17	Ramot Sitompul
18	Naromangulon Situmeang
19	Saut Sitompul
20	Bistok Bakkara
21	Mararif Lumbantobing
22	Jupri Berdifa Sitompul
23	Donel Sitompul
24	Dildumar Pospos
25	Romanna Panjaitan
26	Maju Sitompul
27	Mawar Hutabarat
28	Elvis Sitompul
29	Mhd. Hidayat Sitompul
30	Appe Tua Sitompul

Annex B

2009 Agricultural Agency Rates & Sub district Land Price



PEMERINTAH KABUPATEN TAPANULI UTARA KECAMATAN PAHAE JAE SARULLA – KP 22465

Sarulla, Tgl 25 Mei 2009

Nomor	592 / 24/2 V /2009	Kepada Yth.
Sifat	: Penting	Bapak Direktur MedcoEnergi
Lamp	·	D/P. Donny Frengki
Perihal	: Referensi Harga Tanah Di Kecamatan Pahae Jae	Di- <u>Sarulla</u>

Menindak lanjuti surat Saudara Nomor : MGS-002/LA-ER/2009, tanggal 13 Mei 2009 perihal seperti pada pokok surat.-

Atas hal tersebut dengan pengalaman kami di lapangan selama mengadakan transaksi jual beli oleh masyarakat, harga tanah di Kecamatan Pahae Jae selama 2 (dua) Tahun terakhir harga rata-rata adalah Rp. 50.000,0 per Meter.-

Demikian disampaikan kepada Bapak untuk maklum dan seperlunya,-

HAE JAE ŮBOLON, SE 838

Tembusan:

1. Yth. Bpk. Bupati Tapanuli Utara Sebagai Laporan.-

2. Pertinggal.-----

PEMERINTAH KABUPATEN TAPANULI UTARA DINAS PERTANIAN DAN PERKEBUNAN

JL. S. M. Simanjuntak No. 1 Tarutung 22411 Tapanuli Utara Telp (0633) 20220 Fax (0633) 20495

Web site : http://www.taputkab.go.id; E-mail: pertanian@taputkab.go.id

Tarutung, /O Agustus 2009

Nomor: 1872 /DPP/I/2009 Sifat : Penting Lamp : 1 (satu) berkas Perihal : Harga Dasar Tanaman. Kepada Yth. Direktur PT Medco Geothermal Sarulla Cq. LA & ER Medco Geothermal Sarulla

> di -Tempat.-

Memenuhi Surat Bapak LA & ER PT Medco Geothermal Sarulla Nomor : MGS – 001 / LA-ER / VII/2009 tanggal 0 Juli 2009 perihal Harga Dasar Tanaman, untuk itu terlampir kami sampaikan daftar harga tanaman yang telah disurvey oleh Staf Dinas Pertanian dan Perkebunan Kab. Tap. Utara.

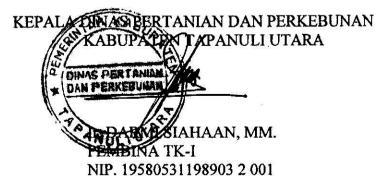
Demikian disampaikan untuk dapat dipergunakan atas perhatian diucapkan terimakasih.



Untuk ganti rugi tanaman.

	Jenis Tanaman	Kurang Enam Bulan / Bibit	Belum Menghasilkan	Sudah Menghasilkan	Ket
No.		Harga (Rp)	Harga (Rp)	Harga (Rp)	
1.	Karet	10.000	37.200	545.000	
2.	Kelapa	25.000	32.000	350.000	
3.	Durian	12.000	95.000	350.000	
4.	Rambutan	7.500	20.000	75.000	
5.	Mangga	12.500	25,000	65.000	
6.	Nangka	12.500	25.000	65.000	
7.	Jeruk	12.500	25.000	65.000	
8.	Padi		1.500 (rumpun)	2.500 (rumpun)]
9.	Pisang	11.500 (rumpun)	15.000 (rumpun)	25.000 (rumpun)	
10.	Pinang	7.000	20.000	75.000	1
11.	Kopi Robusta	7.000	13.000	100.000	
12.	Coklat	8.000	25.000	220.000	
13.	Cengkeh	17.500	25.000	250.000	
14.	Jengkol	5.000	20.000	50,000	
15.	Aren	25.000	35.000	125.000	
16.	Asam	5.000	8.000	25.000	
17.	Langsat	. 12.500	35.000	125.000	
18.	Rambe	12.500	35.000	125.000	
19.	Manggis	12.000	35.000	125.000	1
20.	Petai	7.500	20.000	75.000	
21.	Kayu Sembarangan	25.000	50.000	250.000	
22.	Ubi Kayu	3.500	8.000	25.000	
23.	Salak	6.500 (rumpun)	25.000 (rumpun)	150.000 (rumpun)	
24.	Jambu Air	6.000	15.000	75.000	1
25.	Nenas	7.500 (rumpun)	15.000 (rumpun)	35.000(rumpun)	1
26.	Kemenyaan	12.000	15.000	450.000	1
27.	Rumbia / Nipah	25.000	35.000	100.000	1
28.	Bambu	7.500 (rumpun)	15.000 (rumpun)	75.000 (rumpun)	
29.	Bambu Lemang	7.500 (rumpun)	15.000 (rumpun)	75.000 (rumpun)	
30.	Sinim / Mallo	8.500 (rumpun)	25.000 (rumpun)	125.000 (rumpun)	
31.	Alpukat	10.000	40,000	250.000	
32.	Kulit Manis	7.500	12.000	200.000	1
33.	Kemiri	25.000	50.000	250.000	
35.	Kopi Arabika	10.000	75.000	350.000	1
36.	Sirsak	8.000	25.000	50.000	
37.	Kincung	1.500	20.000	50.000	1
38.	Duku	12.000	35.000	150.000	1
<u>39.</u>	Pepaya	10.000	25.000	30.000	
<u>40.</u>	Kueni	12.500	55.000	100.000	
41.	Tiung	12.500	25.000	125.000	-
41.	Rimbang	5.000	7.500	10.000	_

Tarutung, 10 Agustus 2009



	a (Rn)	750.000	350.000	75 000	000.0/	65.000	65.000	2.500 (rumpun)	(undun) 000	000.001	220.000	250.000	50.000	000.021	125.000	125.000	125.000	75.000	25.000	150.000 (rumpun)	75.000	450,000	100.000	75.000 (rumpun)	(undunu) 000	(undunu) 000	200.000	250.000	350.000	50.000	150.000	30.000	100,000	125.000	10.000		RKEBUNA		
C. MAL W.	Sugan Mo																																				Oktober 2010 NIAN DAN PE APANULI UTA RIS,	33 1 006	
Relum Menchasillan	Harga (Rp)	37.200	32.000	000.022	25.000	25.000	25.000	1.500 (rumpun)	(unduini) 000.01	13.000	25.000	25.000	20.000	8 000	35.000	35.000	35.000	20.000	8.000	25.000 (rumpun)	15 000 (mmmin)	15.000	35.000	15.000 (rumpun)	15.000 (rumpun)	(undum) 000.02	12.000	50.000	75.000	25.000	35 000	25.000	55.000	25.000	1.500		s PERTAJ	NIP. 19621217 199203 1 006	
Untuk ganti rugi tanaman. Jenis Tanaman Kurang Enam Bulan / Bibit Rohm Monohamitan -	Harga (Rp)	10.000	000.62	000.00	12.500	12.500	12.500	11 500 /	(unduni) ovc.11	7.000	8.000	17.500	5.000	5.000	12.500	12.500	12.000	000.20	3.500	6.500 (rumpun)	7.500 (mmmin)	12.000	25.000	7.500 (rumpun)	7.500 (rumpun)	(undun1) 000.0	7.500	25.000	10.000	8.000	12.000	10.000	12.500	12.500	000.0	Catt : 1 Meter ² Tanaman Padi sebanyak 80 rumpun	Tarutun KEPALA DINA. KEPALA DINA. KEPALA DINA. KEPALANI		
Untuk ganti ru _i Jenis Tanaman		Karet	Durian	Rambutan	Mangga	Nangka	Jeruk B4:	Pisane	Pinang	Kopi Robusta	Coklat	Cengkeh	Aren	Asam	Langsat	Rambe	Manggis	Kayu Sembarangan	Jbi Kayu	Salak	Jamou Air Nenas	Kemenyaan	tumbia / Nipah	Bambu	Bambu Lemang	Albukat	Kulit Manis	Cemiri	Kopi Arabika	Sirsak	Duku	epaya	Kueni	Tiung	Imoang	Meter ² Tanaman P			

Annex C

Announcement of Cut-off Date Letter

*S	arulla	
alla Dbi	erations Ltd	Sarulla, 23 Mei 2013
No.	095/SOL/VI/2013	Kepada
Lamp,		Bapak/Ibu : Sabar Simorang bi
Perihal	PEMBERITAHUAN	Di - Tempat

Dengan hormat,

Sehubungan akan dimulainya aktifitas fisik Uji Sumur Proyek Pembangkit Listrik Panas Bumi oleh Sarulla Operation Limited (SOL) di kecamatan Pahae Jae, khususnya untuk pekerjaan tanah , pemasangan Pipa, dan pemasangan fasilitas uji sumur di tapak sumur SIL 1, SIL 2, dan SIL 3 dan jalur antara tapak- tapak sumur tersebut, yang akan dimulai awal bulan Juni 2013, maka dengan ini kami meminta kerjasamanya kepada para pemilik lahan yang sudah dibeli/disewa tanahnya agar :

- Tidak lagi melakukan penanaman apapun atau aktifitas lainnya pada lokasi sawah, kebun dan kolam dll;
- Secepatnya mengambil kayu/ hal- hal lain yang masih berada di lokasi sawah, kebun, kolam, dan masih dianggap bernilai,

selambat-lambatnya sampai dengan hari Sabtu tanggal 01 Juni 2013

Demikian surat pemberitahuan ini disampaikan agar kita semua bisa selalu melaksanakan komitmen yang telah kita sepakati bersama guna mendukung suksesnya pelaksanaan Proyek Pembangkit Listrik Panas Bumi Sarulla, atas perhatian dan kerjasamanya kami ucapkan banyak terimakasih.

Hormat kami,

Sarulla Operations Limited alles

Mhd. Rum LA & External Relation Officer

Annex D

List of Landowners

No	Name		Name Area	RP/SSCAR	Domicile	Land area acquired	Total Compensation	Total Compensation for Crops/	Total Compensation	Date Paid
	Male	Female				(m²)	for Land	Trees acquired	(IDR)	
		1		SIL AR	1					
1			Brine Injection Line (SIL 1 – SIL 2)	SSCAR	Sigurung- gurung	1138	73.970.000	151.622.100	225.592.100	28-Feb-12
2			Road 9 Expansion	SSCAR	Sigurung- gurung	364	23.660.000	-	23.660.000	16-Oct-13
3			Laydown 2-SILD	SSCAR	Silangkitang	121	7.865.000	-	7.865.000	16-Oct-13
4			Tower 30	RP	Silangkitang	1157	75.205.000	-	75.205.000	21-Feb-14
5			Brine Injection Line (SIL 1 – SIL 2)	SSCAR	Sigurung- gurung	2276	156.455.000	257.149.300	413.604.300	28-Feb-12
6			Brine Injection Line (SIL 1 – SIL 2)	SSCAR	Silangkitang	299	19.435.000	35.428.000	54.863.000	28-Feb-12
7			SIL 2 to Batang Toru River	SSCAR	Sigurung- gurung	358	23.270.000	802.451.400	825.721.400	03-Okt-12
8			Road 9	SSCAR	Silangkitang	279	18.135.000	-	18.135.000	16-Oct-13
9			SIL 2 Expansion	SSCAR	Sigurung- gurung	1789	116.285.000	-	116.285.000	16-Oct-13
10			SIL 2 Expansion	SSCAR	Silangkitang	1519	98.735.000	-	98.735.000	16-Oct-13
11			Brine Injection Line (SIL 1 – SIL 2)	SSCAR	Sigurung- gurung	196	12.740.000	31.917.400	44.657.400	28-Feb-12
12			Road 9 Expansion	SSCAR	Sigurung- gurung	143	9.295.000	-	9.295.000	16-Oct-13
13			BrineInjection Line (SIL 1 – SIL 2)	SSCAR	Sigurung- gurung	658	42.770.000	67.315.500	110.085.500	28-Feb-12
14			Borrow Area	SSCAR	Silangkitang	4384	254.960.000	304.856.600	559.816.600	30-Jul-13
15			Laydown 1	SSCAR	Silangkitang	782	50.830.000	-	50.830.000	16-Oct-13
16			Laydown 1	SSCAR	Silangkitang	1946	-	-	-	
17			Power Plant	SSCAR	Sigurung- gurung	2073	134.745.000	9.061.600	143.806.600	30-Jul-13
18			SIL 1	SSCAR	Silangkitang	2317	150.605.000	140.273.500	290.878.500	30-Jul-13
19			Brine Injection Line (SIL 1 – SIL 2)	SSCAR	Sigurung- gurung	1391	89.245.000	179.528.500	268.773.500	28-Feb-12
20			Laydown 1	SSCAR	Silangkitang	1409	91.585.000	-	91.585.000	16-Oct-13
21			Power Plant	SSCAR	Silangkitang	554	36.010.000	27.805.200	63.815.200	30-Jul-13
22			Road 9 Expansion	SSCAR	Silangkitang	5697	370.305.000	-	370.305.000	16-Oct-13

List of Land Owners - SIL Total (*)

No	Name	e	Name Area	RP/SSCAR	Domicile	Land area acquired	Total Compensation	Total Compensation for Crops/	Total Compensation	Date Paid
	Male	Female				(m²)	for Land	Trees acquired	(IDR)	
23			SIL 1	SSCAR	Silangkitang	1938	125.970.000	116.280.000	242.250.000	16-Oct-13
24			Brine Injection Line (SIL 1 – SIL 2)	SSCAR	Sigurung- gurung	103	6.695.000	12.120.000	18.815.000	28-Feb-12
25			Brine Injection Line (SIL 1 – SIL 2)	SSCAR	Silangkitang	417	27.105.000	24.647.500	51.752.500	28-Feb-12
26			Brine Injection Line (additional)	SSCAR	Silangkitang	81	5.265.000	4.860.000	10.125.000	2014
27			Power Plant	SSCAR	Silangkitang	7154	227.747.300	80.312.300	308.059.600	30-Jul-13
28			SIL 2	SSCAR	Silangkitang	2531	164.515.000	-	164.515.000	16-Oct-13
29			Road 9	SSCAR	Silangkitang	1214	78.910.000	-	78.910.000	15-Nov-13
30			Laydown 1	SSCAR	Silangkitang	869	56.485.000	-	56.485.000	16-Oct-13
31			Road 9 Expansion	SSCAR	Sigurung- gurung	232	15.080.000	-	15.080.000	16-Oct-13
32			Brine Injection Line (SIL 1 – SIL 2)	SSCAR	Silangkitang	258	16.770.000	6.188.800	22.958.800	28-Feb-12
33			Road 9 Expansion	SSCAR	Sigurung- gurung	2456	117.195.000	-	117.195.000	16-Oct-13
34			Brine Injection Line (SIL 1 – SIL 2)	SSCAR	Sigurung- gurung	90	5.850.000	4.518.400	10.368.400	28-Feb-12
35			T/L ROW	RP	Sigurung- gurung	-	-	-	-	-
36			Brine Injection Line (SIL 1 – SIL 2)	SSCAR	Sigurung- gurung	495	32.175.000	12.250.000	44.425.000	28-Feb-12
37			Brine Injection Line (SIL 1 – SIL 2)	SSCAR	Sigurung- gurung	365	23.725.000	23.205.600	46.930.600	28-Feb-12
38			T/L ROW	RP	Silangkitang		-	-	-	
39			Brine Injection Line (SIL 1 – SIL 2)	SSCAR	Sigurung- gurung	685	4.940.000	9.600.000	14.540.000	28-Feb-12
40			Borrow Area	SSCAR	Silangkitang	2873	186.745.000	158.266.600	345.011.600	30-Jul-13
41			SIL 2 to Batang Toru River	SSCAR	Sigurung- gurung	1530	99.450.000	18.000.000	117.450.000	03-Okt-12
42			T/L ROW	RP	Pahae Jae	-	-	-	-	-
43			Tower 2	RP	Silangkitang	900	58.500.000	-	58.500.000	21-Feb-14
44			Brine Injection Line (SIL 1 – SIL 2)	SSCAR	Sigurung- gurung	270	17.550.000	25.715.200	43.265.200	28-Feb-12
45			Road 9 Expansion	SSCAR	Sigurung-	648	42.120.000	-	42.120.000	16-Oct-13

No	Nam	e	Name Area	RP/SSCAR	Domicile	Land area acquired	Total Compensation	Total Compensation for Crops/	Total Compensation	Date Paid
	Male	Female				(m ²)	for Land	Trees acquired	(IDR)	
					gurung					
46			T/L ROW	RP	Silangkitang	-	-	-	-	-
47			Tower 30	RP	Silangkitang	1333	86.645.000	-	86.645.000	21-Feb-14
48			Power Plant	SSCAR	Silangkitang	2525	164.125.000	36.011.300	200.136.300	30-Jul-13
49			Brine Injection Line (SIL 1 – SIL 2)	SSCAR	Silangkitang	1116	72.540.000	74.833.900	147.373.900	28-Feb-12
50			T/L ROW	RP	Sigurung- gurung	-	-	-	-	-
51			T/L ROW	RP	Silangkitang	-	-	-	-	-
52			Tower 4	RP	Silangkitang	1017	66.105.000	-	66.105.000	21-Feb-14
53			Borrow Area	SSCAR	Silangkitang	7760	504.400.000	294.046.600	798.446.600	30-Jul-13
54			Tower 28	RP	Sigurung- gurung	1156	75.140.000	-	75.140.000	21-Feb-14
55			SIL 1	SSCAR	Silangkitang	2786	181.090.000	-	181.090.000	30-Jul-13
56			Road 9 Expansion	SSCAR	Sigurung- gurung	2468	160.420.000	-	160.420.000	16-Oct-13
57			SIL 2 Expansion	SSCAR	Sigurung- gurung	2691	174.915.000	-	174.915.000	16-Oct-13
58			Brine Injection Line (SIL 1 – SIL 2)	SSCAR	Sigurung- gurung	2384	154.960.000	613.360.000	768.320.000	28-Feb-12
59			Brine Injection Line (SIL 1 – SIL 2)	SSCAR	Sigurung- gurung	81	5.265.000	2.984.400	8.249.400	28-Feb-12
60			Laydown 2-SILD	SSCAR	Silangkitang	1550	100.750.000	-	100.750.000	16-Oct-13
61			Brine Injection Line (SIL 1 – SIL 2)	SSCAR	Sigurung- gurung	198	12.870.000	23.105.000	35.975.000	28-Feb-12
62			Dispossal For Drilling - Sil D	SSCAR	Silangkitang	4243	275.795.000	-	275.795.000	16-Oct-13
63			T/L ROW	RP	Sigurung- gurung	-	-	-	-	-
64			Brine Injection Line (SIL 1 – SIL 2)	SSCAR	Sigurung- gurung	609	39.585.000	21.574.400	61.159.400	28-Feb-12
65			T/L ROW	RP	Silangkitang	-	-	-	-	-
66			Brine Injection Line (SIL 1 – SIL 2)	SSCAR	Silangkitang	6324	411.060.000	342.770.400	753.830.400	28-Feb-12
67			SIL 2 to Batang Toru River	SSCAR	Sigurung- gurung	2441	158.665.000	284.295.900	442.960.900	03-Okt-12

No	Nam	e	Name Area	RP/SSCAR	Domicile	Land area acquired	Total Compensation	Total Compensation for Crops/	Total Compensation	Date Paid
	Male	Female				(m²)	for Land	Trees acquired	(IDR)	
68			Laydown 1	SSCAR	Silangkitang	1677	109.005.000	-	109.005.000	16-Oct-13
69			Power Plant	SSCAR	Silangkitang	546	35.490.000	10.869.100	46.359.100	30-Jul-13
70			Laydown 2-SILD	SSCAR	Silangkitang	566	36.790.000	-	36.790.000	16-Oct-13
71			Laydown 1	SSCAR	Silangkitang	1722	111.930.000	-	111.930.000	16-Oct-13
72			Borrow Area	SSCAR	Silangkitang	382	24.830.000	1.097.048.100	1.121.878.100	30-Jul-13
73			T/L ROW	RP	Silangkitang		-	-	-	
74			Power Plant	SSCAR	Silangkitang	169	10.985.000	9.703.500	20.688.500	30-Jul-13
75			Laydown1	SSCAR	Silangkitang	1826	-	-	-	
76			T/L ROW	RP	Silangkitang		-	-	-	
77			Laydown 1	SSCAR	Silangkitang	390	25.350.000	-	25.350.000	16-Oct-13
78			Laydown 2-SILD	SSCAR	Silangkitang	2334	151.710.000	-	151.710.000	16-Oct-13
79			T/L ROW	RP	Sigurung- gurung	-	-	-	-	-
80			Brine Injection Line (SIL 1 – SIL 2)	SSCAR	Sigurung- gurung	1156	-	-	-	03-Apr-12
81			Power Plant	SSCAR	Silangkitang	3159,5	3.160	3.160	6.319	30-Jul-13
82			T/L ROW	RP	Silangkitang	-	-	-	-	-
83			Power Plant	SSCAR	Silangkitang	273	17.745.000	23.837.000	41.582.000	30-Jul-13
84			Brine Injection Line (SIL 1 – SIL 2)	SSCAR	Silangkitang	535	34.775.000	-	34.775.000	28-Feb-12
85			Brine Injection Line (additional)	SSCAR	Silangkitang	28	1.820.000	3.112.000	4.932.000	12-Feb-14
86			Road 9 Expansion	SSCAR	Silangkitang	404	26.260.000	-	26.260.000	16-Oct-13
87			Disposal Area	SSCAR	Silangkitang	34553	3.509.220.000	1.776.656.300	5.285.876.300	30-Jul-13
88			Power Plant	SSCAR	Silangkitang	2951	191.165.000	92.207.900	283.372.900	30-Jul-13
89			Brine Injection Line (SIL 1 – SIL 2)	SSCAR	Sigurung- gurung	479	31.135.000	60.657.400	91.792.400	28-Feb-12
90			T/L ROW	RP	Sigurung- gurung	-	-	-	-	-
91			Laydown 1	SSCAR	Silangkitang	1004	65.260.000	-	65.260.000	16-Oct-13
92			Brine Injection Line (SIL 1 – SIL 2)	SSCAR	Sigurung- gurung	296	19.240.000	44.426.000	63.666.000	28-Feb-12
93			Power Plant	SSCAR	Silangkitang	21678	1.060.350.365	512.718.765	1.573.069.130	30-Jul-13
94			SIL 1	SSCAR	Silangkitang	1938	125.970.000	-	125.970.000	30-Jul-13
95			Brine Injection Line (SIL 1 – SIL 2)	SSCAR	Silangkitang	1001	65.065.000	147.592.700	212.657.700	28-Feb-12

No	Nam	e	Name Area	RP/SSCAR	Domicile	Land area acquired	Total Compensation	Total Compensation for Crops/	Total Compensation	Date Paid
	Male	Female				(m ²)	for Land	Trees acquired	(IDR)	
96			SIL 1	SSCAR	Silangkitang	991	64.415.000	92.240.000	156.655.000	30-Jul-13
97			T/L ROW	RP	Silangkitang	-	-	-	-	-
98			SIL 2 Expansion	SSCAR	Sigurung- gurung	512	33.280.000	-	33.280.000	16-Oct-13
99			Brine Injection Line (SIL 1 – SIL 2)	SSCAR	Sigurung- gurung	1920	124.800.000	214.630.900	339.430.900	28-Feb-12
100			Power Plant	SSCAR	Silangkitang	10004	650.260.000	398.129.100	1.048.389.100	30-Jul-13
101			Tower 27	RP	Sigurung- gurung	1268	82.420.000	-	82.420.000	21-Feb-14
102			Power Plant	SSCAR	Silangkitang	4286	197.535.000	173.219.800	370.754.800	30-Jul-13
103			Brine Injection Line (SIL 1 – SIL 2)	SSCAR	Sigurung- gurung	202	13.130.000	23.055.000	36.185.000	28-Feb-12
104			Road 9 Expansion	SSCAR	Silangkitang	31	2.015.000	-	2.015.000	16-Oct-13
105			Laydown 2-SILD	SSCAR	Silangkitang	57	3.705.000	-	3.705.000	16-Oct-13
106			Laydown 2-SILD	SSCAR	Silangkitang	3674	238.810.000	-	238.810.000	16-Oct-13
107			Brine Injection Line (SIL 1 – SIL 2)	SSCAR	Sigurung- gurung	343	16.640.000	31.200.000	47.840.000	28-Feb-12
108			Brine Injection Line (SIL 1 – SIL 2)	SSCAR	Sigurung- gurung	474	30.810.000	55.747.400	86.557.400	28-Feb-12
109			SIL 2 to Batang Toru River	SSCAR	Sigurung- gurung	7916	514.540.000	160.630.200	675.170.200	03-Okt-12
110			Brine Injection Line (SIL 1 – SIL 2)	SSCAR	Sigurung- gurung	1960	127.400.000	106.522.500	233.922.500	28-Feb-12
111			Brine Injection Line (SIL 1 – SIL 2)	SSCAR	Silangkitang	542	35.230.000	21.201.000	56.431.000	06-Jul-05
112			T/L ROW	RP	Silangkitang	-	-	-	-	-
113			Brine Injection Line (SIL 1 – SIL 2)	SSCAR	Sigurung- gurung	1058	68.770.000	140.142.000	208.912.000	28-Feb-12
114			Brine Injection Line (additional)	SSCAR	Silangkitang	121	7.865.000	7.260.000	15.125.000	12-Feb-14
115			Road 9 Expansion	SSCAR	Silangkitang	2583	167.895.000	-	167.895.000	16-Oct-13
116			Tower 4	RP	Silangkitang	138	8.970.000	-	8.970.000	21-02-14

List of Land Owners - NIL Total(*)

No	Name		Name Area	RP/SSCAR	Domicile	Land area acquired	Total Compensation	Total Compensation for Crops/	Total Compensation	Date Paid
	Male	Female				(m²)	for Land	Trees acquired	(IDR)	
					NIL AREA					
1			T/L ROW	RP	Lumban Jaean	-	-	-	-	-
2			Tower 7B	RP	Lumban Jaean	306	19.890.000	18.360.000	38.250.000	20-Feb-14
3			T/L ROW	RP	Simanampang	-	-	-	-	-
4			T/L ROW	RP	Simanampang	-	-	-	-	-
5			BORROW PIT	SSCAR	Onan Hasang	900	58.500.000	66.503.000	125.003.000	16-Oct-13
6			POWER PLAN & ROAD 2, 3	SSCAR	Simataniari / Lumban Jaean	20267	1.317.355.000	310.890.200	1.628.245.200	16-Oct-13
7			DISPOSAL 1 & 2, ROAD 3A	SSCAR	Simataniari / Lumban Jaean	21433	1.393.145.000	828.380.500	2.221.525.500	16-Oct-13
8			T/L ROW	RP	Hutabarat	-	-	-	-	-
9			ROAD 1 & 1A	SSCAR	Lumban Jaean dan Simataniari	1530	99.450.000	61.558.800	161.008.800	16-Oct-13
10			Tower 18	RP	Simanampang	1037	67.405.000	40.469.500	107.874.500	20-Feb-14
11			ROAD 5 & WJP (WJP)	RP	Lumban Jaean dan Sibaganding	2350	152.750.000	43.700.000	196.450.000	03-Okt-12
12			Tower 13	RP	Simanampang	8	520.000	1.114.500	1.634.500	20-Feb-14
13			ROAD 1 & 1A (Right Side of Road)	SSCAR	Lumban Jaean dan Simataniari	129	8.385.000	7.740.000	16.125.000	16-Oct-13
14			ROAD 1 & 1A (Right Side of Road)	SSCAR	Lumban Jaean dan Simataniari	270	17.550.000	5.070.000	22.620.000	16-Oct-13
15			T/L ROW	RP	Lumban Jaean	-	-	-	-	-
16			ROAD 1 & 1 A	SSCAR	Lumban Jaean dan Simataniari	299	19,435,000	12,051,700	31,486,700	16-Sept-13
17			WJR 2 & ROAD (WJR 2)	SSCAR	Lumbanjean, Sibaganding dan	1455	94.575.000	104.220.800	198.795.800	03-Okt-12

No	Nam	e	Name Area	RP/SSCAR	Domicile	Land area acquired	Total Compensation	Total Compensation for Crops/	Total Compensation	Date Paid
	Male	Female				(m²)	for Land	Trees acquired	(IDR)	
					Simataniari			-		
18			Acces Road 1&1A	SSCAR	Onan Hasang	499	32.435.000	9.826.100	42.261.100	16-Sept-13
19			T/L ROW	RP	Onan Hasang				-	
20			BORROW PIT	SSCAR	Simataniari	7762	7.762	7.762	15.524	16-Sept-13
21			T/L ROW	RP	Sitoluama	-	-	-	-	-
22			ROAD 1 & 1A (Left Side of Road)	SSCAR	Lumban Jaean dan Simataniari	417	27.105.000	16.213.800	43.318.800	16-Sept-13
23			BORROW PIT	SSCAR	Simataniari	2452	159.380.000	1.725.000	161.105.000	16-Sept-13
24			ROAD 5 & WJP (Road 5)	RP	Lumban Jaean dan Sibaganding	2431	158.015.000	168.745.000	326.760.000	03-Okt-12
25			ROAD 1 & 1A	SSCAR	Simataniari / Lumban Jaean	549	35.685.000	50.795.000	86.480.000	16-Sept-13
26			ROAD 1 & 1A	SSCAR	Onan Hasang	1182	52.780.000	31.980.700	84.760.700	16-Sept-13
27			LAYDOWN	SSCAR	Lumban Jaean	7423	482.495.000	285.358.700	767.853.700	03-Okt-12
28			ROAD 4 & NIL 1N (NIL 1N)	SSCAR	Lumban Jaean, Sibaganding dan Simataniari	11823	768.495.000	59.156.000	827.651.000	03-Okt-12
29			NIL 2N & ROAD B	SSCAR	Lumbanjean	1116	72.540.000	9.625.000	82.165.000	16-Sept-13
30			T/L ROW	RP	Hutabarat	12182	785.265.000	329.467.200	1.114.732.200	16-Sept-13
31			ROAD 1 & 1A (Left Side of Road)	SSCAR	Simataniari	2642	165.165.000	18.200.000	183.365.000	16-Sept-13
32			Tower 9	RP	Hutabarat	1024	66.560.000	37.116.000	103.676.000	20-Feb-14
33			Tower 13	RP	Simanampang	835	54.275.000	62.157.900	116.432.900	20- Feb-14
34			POWER PLAN & ROAD 2, 3	SSCAR	Simataniari	5336	346.840.000	91.883.400	438.723.400	18-Sept-13
35			BORROW PIT	SSCAR	Simataniari	3104	201.760.000	144.833.500	346.593.500	16-Sept-13
36			Tower 25	RP	Sitoluama	898	58.370.000	50.460.000	108.830.000	21-Feb-14
37			ROAD 1 & 1A (Left Side of	SSCAR	Lumban Jaean dan	543	35.295.000	3.935.000	39.230.000	16-Sept-13

No	Namo	e	Name Area	RP/SSCAR	Domicile	Land area acquired	Total Compensation	Total Compensation for Crops/	Total Compensation	Date Paid
	Male	Female				(m²)	for Land	Trees acquired	(IDR)	
			Road)		Simataniari					
38			ROAD 5 & WJP (Road 5)	RP	Lumban Jaean dan Sibaganding	4314	280.410.000	41.350.700	321.760.700	03-Okt-12
39			ROAD 1 & 1A	SSCAR	Onan Hasang	238	15.470.000	3.264.400	18.734.400	16-Sept-13
40			T/L ROW	RP	Hutabarat				-	•
41			DISPOSAL 1 & 2, ROAD 3A (Disposal 2)	SSCAR	Simataniari / Lumbanjean	1466	95.290.000	27.136.000	122.426.000	16-Sept-13
42			ROAD 1 & 1A (Left Side of Road)	SSCAR	Lumban Jaean dan Simataniari	3799	246.935.000	142.050.800	388.985.800	16-Sept-13
43			ROAD 4 & NIL 1N (NIL 1N)	SSCAR	Lumban Jaean	19533	1.259.645.000	131.235.000	1.390.880.000	03-Okt-12
44			POWER PLAN & ROAD 2, 3	SSCAR	Simataniari	2543	165.295.000	59.809.900	225.104.900	16-Sept-13
45			ROAD 5 & WJP (Road 5)	RP	Lumban Jaean dan Sibaganding	8692	564.980.000	132.290.000	697.270.000	03-Okt-12
46			ROAD 1 & 1A	SSCAR	Onan Hasang	71	4.615.000	598.500	5.213.500	16-Sept-13
47			ROAD 5 & WJP (Road 5)	RP	Lumban Jaean dan Sibaganding	3263	212.095.000	122.151.200	334.246.200	03-Okt-12
48			T/L ROW	RP	Simanampang	-	-	-	-	-
49			T/L ROW	RP	Simanampang	-	-	-	-	-
50			T/L ROW	RP	Hutabarat	135	-	-	-	-
51			ROAD 5 & WJP (Road 5)	RP	Lumban Jaean dan Sibaganding	6760	439.400.000	268.717.000	708.117.000	03-Okt-12
52			ROAD 1 & 1A (Right Side of Road)	SSCAR	Lumban Jaean	15	975.000	4.649.000	5.624.000	03-Okt-12
53			Tower 7A	RP	Onan Hasang	160	10.400.000	6.776.600	17.176.600	20-Feb-14
54			ROAD 1 & 1A	SSCAR	Simataniari / Lumban Jaean	8498	552.370.000	229.824.300	782.194.300	16-Sept-13
55			ROAD 1 & 1A	SSCAR	Simataniari	12960	842.400.000	430.741.700	1.273.141.700	16-Sept-13

SARULLA GEOTHERMAL DEVELOPMENT SSCAR & CAP

SARULLA OPERATION LIMITED (SOL)

No	Nam	le	Name Area	RP/SSCAR	Domicile	Land area acquired	Total Compensation	Total Compensation for Crops/	Total Compensation	Date Paid
	Male	Female				(m ²)	for Land	Trees acquired	(IDR)	
			(Left Side of							
			Road)							
56			T/L ROW	RP	Hutabarat	-	-	-	-	-
57			ROAD 5 & WJP (Road 5)	RP	Lumban Jaean dan Sibaganding	9366	608.790.000	350.989.000	959.779.000	03-Okt-12
58			BORROW PIT	SSCAR	Simataniari	12936	840.840.000	535.322.000	1.376.162.000	16-Sept-13
59			Tower 22	RP	Sitoluama	898	58.370.000	11.005.000	69.375.000	21-Feb-14
60			ROAD 1 & 1A (Right Side of Road)	SSCAR	Lumban Jaean dan Simataniari	124	8.060.000	3.000.000	11.060.000	
61			BORROW PIT	SSCAR	Simataniari	3906	253.890.000	242.231.000	496.121.000	19-Sept-13
62			Acces Road 1&1A	SSCAR	Simataniari	2337	151.905.000	104.954.500	256.859.500	17-Sept-13
63			T/L ROW	RP	Hutabarat	-	-	-	-	-
64			T/L ROW	RP	Sitoluama	-	-	-	-	-
65			T/L ROW	RP	Simanampang	-	-	-	-	-
66			BORROW PIT	SSCAR	Simataniari	20337	1.321.905.000	503.289.700	1.825.194.700	16-Sept-13
67			T/L ROW	RP	Sibaganding				-	
68			POWER PLAN & ROAD 2, 3	SSCAR	Simataniari / Lumban Jaean	8302	539.630.000	324.628.600	864.258.600	16-Sept-13
69			POWER PLAN & ROAD 2, 3	SSCAR	Simataniari	24763	1.609.595.000	698.401.800	2.307.996.800	16-Sept-13
70			ROAD 1 & 1A (Right Side of Road)	SSCAR	Sarulla	106	6.890.000	6.360.000	13.250.000	16-Sept-13
71			DISPOSAL 1 & 2, ROAD 3A (Disposal 1)	SSCAR	Simataniari / Lumban Jaean	15592	1.013.480.000	1.278.656.200	2.292.136.200	16-Sept-13
72			BORROW PIT	SSCAR	Simataniari	1021	66.365.000	61.260.000	127.625.000	16-Sept-13
73			T/L ROW	RP	Hutabarat				-	16-Sept-13
74			ROAD 1 & 1A	SSCAR	Lumban Jaean	2870	186.550.000	97.685.900	284.235.900	16-Sept-13
75			ROAD 1 & 1A	SSCAR	Simataniari dan Lumban Jaean	8125	528.125.000	301.261.500	829.386.500	16-Sept-13
76			ROAD 1 & 1A (Right Side of	SSCAR	Sibaganding	97	6.305.000	2.816.500	9.121.500	16-Sept-13

No	Nan	ne	Name Area	RP/SSCAR	Domicile	Land area acquired	Total Compensation	Total Compensation for Crops/	Total Compensation	Date Paid
	Male	Female				(m²)	for Land	Trees acquired	(IDR)	
			Road)							
77			T/L ROW	RP	Sitoluama	-	-	-	-	-
78			ROAD 1 & 1A (Right Side of Road)	SSCAR	Simataniari	1091	70.915.000	11.984.500	82.899.500	16-Sept-13
79			DISPOSAL 1 & 2, ROAD 3A (Disposal 1)	SSCAR	Lumban Jaean	5499	357.435.000	141.774.800	499.209.800	16-Sept-13
80			ROAD 5 & WJP (Road 5)	RP	Lumban Jaean	3466	225.290.000	96.293.000	321.583.000	03-Okt-12
81			T/L ROW	RP	Onan Hasang	-	-	-	-	-
82			ROAD 1 & 1A	SSCAR	Lumban Jaean	29	1.885.000	1.740.000	3.625.000	16-Sept-13
83			T/L ROW	RP	Hutabarat	-	-	-	-	-
84			T/L ROW	RP	Hutabarat	-	-	-	-	-
85			ROAD 1 & 1A	SSCAR	Sibaganding	272	17.680.000	16.884.000	34.564.000	16-Sept-13
86			T/L ROW	RP	Sibaganding	-	-	-	-	-
87			T/L ROW	RP	Sitoluama	-	-	-	-	-
88			ROAD 1 & 1A (Right Side of Road)	SSCAR	Simataniari	3872	251.680.000	85.788.300	337.468.300	16-Sept-13
89			T/L ROW	RP	Simataniari	890	57.850.000	49.789.700	107.639.700	-
90			T/L ROW	RP	Hutabarat				-	-
91			T/L ROW	RP	Hutabarat	813	44.915.000	45.124.000	90.039.000	-
92			WJR 1N & ROAD 6, 6B (WJR 1)	SSCAR	Simataniari	304	19.760.000	18.939.400	38.699.400	16-Sept-13
93			POWER PLAN & ROAD 2, 3	SSCAR	Lumbanjean	5522	358.930.000	168.267.200	527.197.200	16-Sept-13
94			T/L ROW	RP	Lontung Dolok	-	-	-	-	-
95			T/L ROW	RP	Sibaganding	-	-	-	-	-
96			ROAD 5 & WJP (WJP)	RP	Sibaganding	45862	2.981.030.000	1.864.645.400	4.845.675.400	03-Okt-12
97			WJR 1N & ROAD 6, 6B (WJR 1)	SSCAR	Simataniari	5482	356.330.000	112.761.800	469.091.800	16-Sept-13
98			T/L ROW	RP	Onan Hasang				-	

No	Nam	e	Name Area	RP/SSCAR	Domicile	Land area acquired	Total Compensation	Total Compensation for Crops/	Total Compensation	Date Paid
	Male	Female				(m²)	for Land	Trees acquired	(IDR)	
99			WJR 1N & ROAD 6, 6B (Right Side of Road)	SSCAR	Simataniari	194	12.610.000	33.155.000	45.765.000	16-Sept-13
100			T/L ROW	RP	Lumban Jaean	-	-	-	-	-
101			T/L ROW	RP	Hutabarat	-	-	-	-	-
102			ROAD 1 & 1A	SSCAR	Simataniari dan Lumban Jaean	2558	166.270.000	93.092.000	259.362.000	16-Sept-13
103			BORROW PIT	SSCAR	Onan Hasang	10408	676.520.000	840.076.500	1.516.596.500	16-Sept-13
104			POWER PLAN & ROAD 2, 3	SSCAR	Lumban Jaean	13047	848.055.000	878.744.900	1.726.799.900	16-Sept-13
105			ROAD 1 & 1A (Left Side of Road)	SSCAR	Lumban Jaean dan Simataniari	1417	26.975.000	12.908.230	39.883.230	16-Sept-13
106			T/L ROW	RP	Sitoluama	-	-	-	-	16-Sept-13
107			ROAD 1 & 1A	SSCAR	Sibaganding	398	25.870.000	23.880.000	49.750.000	16-Sept-13
108			ROAD 1 & 1A	SSCAR	Onan Hasang	214	13.910.000	5.295.000	19.205.000	16-Sept-13
109			ROAD 1 & 1A	SSCAR	Sibagnding	4564	296.855.000	213.499.600	510.354.600	16-Sept-13
110			ROAD 1 & 1A	SSCAR	Simataniari dan Lumban Jaean	291	18.915.000	14.526.200	33.441.200	16-Sept-13
111			DISPOSAL 1 & 2, ROAD 3A (Disposal 2)	SSCAR	Simataniari	20706	1.345.890.000	399.608.500	1.745.498.500	16-Sept-13
112			T/L ROW	RP	Onan Hasang	-	-	-	-	-
113			Tower 7B	RP	Lumban Jaean	13781	895.765.000	687.698.500	1.583.463.500	06-Juli-13
114			T/L ROW	RP	Hutabarat	-	-	-	-	-
115			ROAD 4 & NIL 1N (Road 4)	SSCAR	Lumban Jaean	29819	1.938.235.000	209.587.500	2.147.822.500	03-Okt-12
116			POWER PLAN & ROAD 2, 3	SSCAR	Lumban Jaean	5899	383.435.000	110.787.900	494.222.900	16-Sept-13
117			T/L ROW	RP	Hutabarat	25			-	16-Sept-13
118			ROAD 1 & 1A	SSCAR	Lumban Jaean	93	6.045.000	6.505.000	12.550.000	16-Sept-13
119			POWER PLAN & ROAD 2, 3	SSCAR	Lumban Jaean	76231	4.955.015.000	1.019.321.500	5.974.336.500	16-Sept-13

No	Name		Name Area	RP/SSCAR	Domicile	Land area acquired	Total Compensation	Total Compensation for Crops/	Total Compensation	Date Paid
	Male	Female				(m ²)	for Land	Trees acquired	(IDR)	
120			T/L ROW	RP	Onan Hasang	-	-	-	-	-
121			WJR 1N & ROAD 6, 6B (Right Side of Road)	SSCAR	Simataniari	119	7.735.000	12.064.100	19.799.100	16-Sept-13
122			WJR 2 & Road (WJR 2)	SSCAR	Sibaganding	675	43.875.000	36.146.600	80.021.600	03-Okt-12
123			T/L ROW	RP	Sibaganding	-	-	-	-	-
124			T/L ROW	RP	Simanampang	-	-	-	-	-
125			ROAD 4 & NIL 1N (Road 4)	SSCAR	Lumban Jaean, Sibaganding dan Simataniari	4268	277.420.000	52.305.000	329.725.000	03-Okt-12
126			ROAD 1 & 1A	SSCAR	Lumban Jaean	482	31.330.000	53.365.000	84.695.000	16-Sept-13
127			T/L ROW	RP	Onan Hasang	-	-	-	-	-
128			POWER PLAN & ROAD 2, 3	SSCAR	Lumbanjean	7269	472.485.000	183.384.600	655.869.600	16-Sept-13
129			T/L ROW	RP	Sitoluama	-	-	-	-	-
130			ROAD 1 & 1A (Left Side of Road)	SSCAR	Simataniari	70	4.550.000	2.584.000	7.134.000	16-Sept-13
131			Tower 7	RP	Sibaganding	384	24.960.000	23.040.000	48.000.000	20-Feb-14
132			T/L ROW	RP	Sitoluama	-	-	-	-	-
133			WJR 1N & ROAD 6, 6B (Right Side of Road)	SSCAR	Simataniari	30	1.950.000	3.000.000	4.950.000	16-Sept-13
134			WJR 2 & ROAD (WJR 2)	SSCAR	Lumbanjean	1436	93.340.000	29.699.500	123.039.500	03-Okt-12
135			DISPOSAL 1 & 2, ROAD 3A (Disposal 2)	SSCAR	Simataniari	557	36.205.000	39.760.000	75.965.000	16-Sept-13
136			Brine Injection Line	SSCAR	Silangkitang	154	10.010.000	16.280.000	26.290.000	06-Des-13
137			Road & WJR 2 (WJR 2)	SSCAR	Simataniari	2898	97.360.000	151.090.700	248.450.700	03-Okt-12

No	Nam	e	Name Area	RP/SSCAR	Domicile	Land area acquired	Total Compensation	Total Compensation for Crops/	Total Compensation	Date Paid
	Male	Female				(m²)	for Land	Trees acquired	(IDR)	
138			T/L ROW	RP	Sitoluama	898	58.370.000	28.733.600	87.103.600	
139			T/L ROW	RP	Simanampang	499			-	
140			Tower 7B	RP	Lumban Jaean	351	22.815.000	21.060.000	43.875.000	20-Feb-14
141			BORROW PIT	SSCAR	Simataniari	1644	106.860.000	95.778.000	202.638.000	16-Sept-13
142			T/L ROW	RP	Sitoluama	-	-	-	-	-
143			ROAD 5 & WJP (WJP)	RP	Sibaganding	23737	1.542.905.000	1.008.012.900	2.550.917.900	03-Okt-12
144			WJR 2 & ROAD (WJR 2)	SSCAR	Sibaganding	6173	401.245.000	197.875.800	599.120.800	03-Okt-12
145			T/L ROW	RP	Onan Hasang	-	-	-	-	-
146			T/L ROW	RP	Sitoluama	-	-	-	-	-
147			DISPOSAL 1 & 2, ROAD 3A (Disposal 1)	SSCAR	Lumban Jaean	20248	1.316.120.000	526.862.000	1.842.982.000	16-Sept-13
148			T/L ROW	RP	Sitoluama	-	-	-	-	-
149			ROAD 1 & 1A (Right Side of Road)	SSCAR	Lumban Jaean	219	14.235.000	13.322.000	27.557.000	16-Sept-13
150			ROAD 1 & 1A (Right Side of Road)	SSCAR	Simataniari	3835	249.275.000	231.331.000	480.606.000	16-Sept-13
151			T/L ROW	RP	Simanampang	-	-	-	-	-
152			Tower 5	RP	Onan Hasang	104	6.760.000	6.240.000	13.000.000	20-Feb-14
153			T/L ROW	RP	Sibaganding		-	-	-	-
154			T/L ROW	RP	Sibaganding	454	-	-	-	-
155			ROAD 1 & 1A	SSCAR	Simataniari dan Lumban Jaean	135	8.775.000	302.038.500	310.813.500	16-Sept-13
156			WJR 2 & Road (WJR 2)	SSCAR	Sibaganding	10249	666.185.000	293.938.500	960.123.500	03-Okt-12
157			DISPOSAL 1 & 2, ROAD 3A (Disposal 2)	SSCAR	Simataniari	989	64.285.000	59.340.000	123.625.000	16-Sept-13
158			ROAD 1 & 1A (Left Side of Road)	SSCAR	Lumban Jaean	109	7.085.000	650.000	7.735.000	16-Sept-13
159			LAYDOWN	SSCAR	Lumbanjean	1715	111.475.000	41.550.000	153.025.000	03-Okt-12

No	Nan	ıe	Name Area	RP/SSCAR	Domicile	Land area acquired	Total Compensation	Total Compensation for Crops/	Total Compensation	Date Paid
	Male	Female				(m²)	for Land	Trees acquired	(IDR)	
160			T/L ROW	RP	Hutabarat	-	-	-	-	-
161			BORROW PIT	SSCAR	Simataniari	4513	293.345.000	207.467.900	500.812.900	16-Sept-13
162			T/L ROW	RP	Simanampang	-	-	-	-	-
163			NIL 2N & ROAD B	SSCAR	Lumbanjean	8531	358.475.000	257.170.200	615.645.200	16-Sept-13
164			Tower 5	RP	Onan Hasang	810	52.650.000	48.600.000	101.250.000	20-Feb-14
165			DISPOSAL 1 & 2, ROAD 3A (Disposal 2)	SSCAR	Simataniari	5021	326.365.000	282.673.900	609.038.900	16-Sept-13
166			ROAD 4 & NIL 1N (Road 4)	SSCAR	Lumbanjean	10365	673.920.000	250.914.400	924.834.400	03-Okt-12
167			T/L ROW	RP	Simanampang	893	-	-	-	-
168			T/L ROW	RP	Simanampang	1024	-	-	-	-
169			T/L ROW	RP	Onan Hasang	-	-	-	-	-
170			T/L ROW	RP	Sibaganding	-	-	-	-	-
171			DISPOSAL 1 & 2, ROAD 3A (Disposal 2)	SSCAR	Simataniari	3237	210.405.000	180.518.000	390.923.000	16-Sept-13
172			T/L ROW	RP	Onan Hasang	-	-	-	-	-
173			BORROW PIT	SSCAR	Onan Hasang	4969	322.985.000	214.667.200	537.652.200	16-Sept-13
174			LAYDOWN	SSCAR	Sibaganding	3618	235.170.000	107.570.700	342.740.700	03-Okt-12
175			ROAD 1 & 1A	SSCAR	Sibaganding	259	16.835.000	16.360.000	33.195.000	03-Okt-12
176			T/L ROW	RP	Hutabarat	-	-	-	-	-
177			ROAD 1 & 1A (Right Side of Road)	SSCAR	Lumban Jaean	40	2.600.000	2.400.000	5.000.000	16-Sept-13
178			T/L ROW	RP	Onan Hasang	-	-	-	-	-
179			T/L ROW	RP	Onan Hasang	-	-	-	-	-
180			T/L ROW	RP	Sibaganding	653	42.445.000	50.249.000	92.694.000	
181			ROAD 1 & 1A	SSCAR	Sibaganding	78	5.070.000	4.680.000	9.750.000	16-Sept-13
182			T/L ROW	RP	Lontung Dolok	-	-	-	-	-
183			Tower 4	RP		816	53.040.000	48.960.000	102.000.000	03-Okt-12
184			T/L ROW	RP	Simanampang	-	-	-	-	-
185			T/L ROW	RP	Onan Hasang	-	-	-	-	-

No	Nam	le	Name Area	RP/SSCAR	Domicile	Land area acquired	Total Compensation	Total Compensation for Crops/	Total Compensation	Date Paid
	Male	Female				(m²)	for Land	Trees acquired	(IDR)	
186			T/L ROW	RP	Simanampang	-	-	-	-	-
187			T/L ROW	RP	Sibaganding	-	-	-	-	-
188			T/L ROW	RP	Simanampang	-	-	-	-	-
189			T/L ROW	RP	Simanampang	243	-	-	-	-
190			ROAD 1 & 1A	SSCAR	Onan Hasang	628	40.820.000	18.180.000	59.000.000	16-Sept-13
191			T/L ROW	RP	Sibaganding	-	-	-	-	-
192			ROAD 1 & 1A (Right Side of Road)	SSCAR	Lumban Jaean	812	52.780.000	24.144.300	76.924.300	16-Sept-13
193			T/L ROW	RP	Hutabarat	-	-	-	-	-
194			POWER PLAN & ROAD 2, 3	SSCAR	Simataniari	9531	619.515.000	203.246.100	822.761.100	16-Sept-13
195			DISPOSAL 1 & 2, ROAD 3A (Disposal 1)	SSCAR	Sibaganding	7635	496.275.000	628.318.900	1.124.593.900	16-Sept-13
196			T/L ROW	RP	Sibaganding	-	-	-	-	-
197			Tower 4	RP	Lontung Dolok	444	28.860.000	26.640.000	55.500.000	20-Feb-14
198			T/L ROW	RP	Sitoluama	-	-	-	-	-
199			T/L ROW	RP	Hutabarat	-	-	-	-	-
200			T/L ROW	RP	Simanampang	-	-	-	-	-
201			T/L ROW	RP	Simanampang	-	-	-	-	-
202			T/L ROW	RP	Simanampang	-	-	-	-	-
203			Borrow Area	SSCAR	Simataniari	120	7.800.000	7.200.000	15.000.000	16-Sept-13
204			DISPOSAL 1 & 2, ROAD 3A (Disposal 2)	SSCAR	Simataniari	3412	221.780.000	206.165.000	427.945.000	16-Sept-13
205			T/L ROW	RP	Simanampang	-	-	-	-	-
206			ROAD 1 & 1A (Right Side of Road)	SSCAR	Simataniari	13640	886.600.000	312.060.500	1.198.660.500	16-Sept-13
207			Tower 3	RP	Sibaganding	120	7.800.000	8.363.000	16.163.000	20-Feb-14
208			BORROW PIT	SSCAR	Onan Hasang	500	32.500.000		32.500.000	16-Sept-13
209			WJR 2 & Road (WJR 2)	SSCAR	Lumbanjean	9027	586.755.000	293.927.200	880.682.200	03-Okt-12
210			T/L ROW	RP	Hutabarat	-	-	-	-	-

No	Nam	le	Name Area	RP/SSCAR	Domicile	Land area acquired	Total Compensation	Total Compensation for Crops/	Total Compensation	Date Paid
	Male	Female				(m²)	for Land	Trees acquired	(IDR)	
211			BM 8 - BP.1 (Additional)	SSCAR	Simataniari	84	5.460.000	1.135.000	6.595.000	
212			POWER PLAN & ROAD 2, 3	SSCAR	Simataniari	11730	763.750.000	328.220.000	1.091.970.000	16-Sept-13
213			ROAD 1 & 1A (Left Side of Road)	SSCAR	Sibaganding	1675	108.875.000	17.351.000	126.226.000	16-Sept-13
214			T/L ROW	RP	Sitoluama	-	-	-	-	-
215			T/L ROW	RP	Onan Hasang	-	-	-	-	-
216			T/L ROW	RP	Sitoluama	898	58.370.000	56.111.000	114.481.000	-
217			T/L ROW	RP	Simanampang	6	390.000		390.000	20-Feb-14
218			T/L ROW	RP	Simanampang	-	-	-	-	-
219			BORROW PIT	SSCAR	Simataniari	2919	189.735.000	53.232.800	242.967.800	16-Sept-13
220			T/L ROW	RP	Hutabarat	2170	141.050.000	52.122.600	193.172.600	-
221			T/L ROW	RP	Sitoluama	-	-	-	-	-
222			ROAD 1 & 1A (Left Side of Road)	SSCAR	Lumban Jaean	13101	851.565.000	404.284.200	1.255.849.200	16-Sept-13
223			ROAD 1 & 1A	SSCAR	Sibaganding	432	28.080.000	27.035.000	55.115.000	16-Sept-13
224			ROAD 1 & 1A (Right Side of Road)	SSCAR	Sibaganding	339	22.035.000	5.822.500	27.857.500	16-Sept-13
225			ROAD 1 & 1A	SSCAR	Lumban Jaean	15782	1.025.830.000	322.986.400	1.348.816.400	16-Sept-13
226			T/L ROW	RP	Simanampang	-	-	-	-	-
227			ROAD 1 & 1A (Right Side of Road)	SSCAR	Simataniari	2137	138.905.000	80.583.800	219.488.800	16-Sept-13
228			T/L ROW	RP	Sibaganding	6217	404.105.000	230.434.800	634.539.800	-
229			T/L ROW	RP	Hutabarat	-	-	-	-	-
230			ROAD 1 & 1A	SSCAR	Sibaganding	1129	73.385.000	68.117.000	141.502.000	16-Sept-13
231			BORROW PIT	SSCAR	Onan Hasang	1000	65.000.000	101.355.400	166.355.400	16-Sept-13
232			T/L ROW	RP	Simanampang	-	-	-	-	-
233			POWER PLAN & ROAD 2, 3	SSCAR	Lumban Jaean	20002	1.300.130.000	957.739.400	2.257.869.400	16-Sept-13
234			T/L ROW	RP	Simanampang	-	-	-	-	-
235			T/L ROW	RP	Simanampang	1193	-	-	-	-

No	Nam	ne	Name Area	RP/SSCAR	Domicile	Land area acquired	Total Compensation	Total Compensation for Crops/	Total Compensation	Date Paid
	Male	Female				(m²)	for Land	Trees acquired	(IDR)	
236			T/L ROW	RP	Hutabarat	-	-	-	-	-
237			T/L ROW	RP	Sibaganding	-	-	-	-	-
238			DISPOSAL 1 & 2, ROAD 3A (Disposal 2)	SSCAR	Simataniari	14267	927.355.000	324.416.500	1.251.771.500	16-Sept-13
239			ROAD 1 & 1A (Left Side of Road)	SSCAR	Simataniari	1177	76.505.000	18.700.000	95.205.000	16-Sept-13
240			DISPOSAL 1 & 2, ROAD 3A (Disposal 2)	SSCAR	Simataniari	6771	440.115.000	450.858.100	890.973.100	16-Sept-13
241			POWER PLAN & ROAD 2, 3	SSCAR	Lumbanjean	11645	756.925.000	654.341.400	1.411.266.400	16-Sept-13
242			T/L ROW	RP	Onan Hasang	-	-	-	-	-
243			ROAD 1 & 1A	SSCAR	Janji Natogu	1538	99.970.000	27.285.000	127.255.000	16-Sept-13
244			ROAD 1 & 1A	SSCAR	Lumban Jaean	308	20.020.000	16.630.000	36.650.000	16-Sept-13
245			POWER PLAN & ROAD 2, 3	SSCAR	Lumban Jaean	222	14.430.000	13.846.600	28.276.600	16-Sept-13
246			T/L ROW	RP	Simanampang	-	-	-	-	-
247			Tower 21	RP	Sitoluama	898	58.370.000	37.276.000	95.646.000	21-Feb-14
248			BORROW PIT	SSCAR	Simataniari	5001	325.065.000	82.495.000	407.560.000	16-Sept-13
249			T/L ROW	RP	Onan Hasang	242	-	-	-	-
250			T/L ROW	RP	Sibaganding	-	-	-	-	-
251			ROAD 1 & 1A	SSCAR	Onan Hasang	1364	13.520.000	13.730.000	27.250.000	16-Sept-13
252			ROAD 1 & 1A	SSCAR	Lumban Jaean	112	7.280.000	7.400.000	14.680.000	16-Sept-13
253			T/L ROW	RP	Simanampang	44	-	-	-	-
254			WJR 2 & ROAD (WJR 2)	SSCAR	Sibaganding	2250	53.950.000	11.817.500	65.767.500	03-Okt-12
255			POWER PLAN & ROAD 2, 3	SSCAR	Simataniari	20510	1.333.150.000	618.223.300	1.951.373.300	16-Sept-13
256			WJR 2 (additional)	SSCAR	Lumban Jaean	5380	349.700.000	172.931.600	522.631.600	11- Feb-14
257			BORROW PIT	SSCAR	Simataniari	397	25.805.000	23.820.000	49.625.000	16-Sept-13
258			T/L ROW	RP	Simanampang	-	-	-	-	-
259			ROAD 1 & 1A	SSCAR	Onan Hasang	230	14.950.000	13.800.000	28.750.000	16-Sept-13

No	Nan	ie	Name Area	RP/SSCAR	Domicile	Land area acquired	Total Compensation	Total Compensation for Crops/	Total Compensation	Date Paid
	Male	Female				(m ²)	for Land	Trees acquired	(IDR)	
260			T/L ROW	RP	Hutabarat	-	-	-	-	-
261			DISPOSAL 1 & 2, ROAD 3A (Disposal 1)	SSCAR	Lumban Jaean	14514	943.410.000	729.850.300	1.673.260.300	16-Sept-13
262			T/L ROW	RP	Simanampang	-	-	-	-	-
263			T/L ROW	RP	Simanampang	-	-	-	-	-
264			WJR 1N & ROAD 6, 6B (Right Side of Road)	SSCAR	Simataniari	31	2.015.000	1.860.000	3.875.000	16-Sept-13
265			ROAD 1 & 1A (Right Side of Road)	SSCAR	Lumban Jaean	805	52.325.000	21.930.500	74.255.500	16-Sept-13
266			T/L ROW	RP	Onan Hasang	-	-	-	-	-
267			T/L ROW	RP	Sitoluama	-	-	-	-	-
268			DISPOSAL 1 & 2, ROAD 3A (Disposal 2)	SSCAR	Simataniari	3702	240.630.000	169.734.600	410.364.600	16-Sept-13
269			Borrow Area	SSCAR	Simataniari	4376	284.440.000	250.091.700	534.531.700	19-Sept-13
270			T/L ROW	RP	Simanampang	-	-	-	-	-
271			ROAD 1 & 1A	SSCAR	Lumban Jaean	200	13.000.000	14.219.500	27.219.500	16-Sept-13
272			T/L ROW	RP	Hutabarat	-	-	-	-	-
273			T/L ROW	RP	Simanampang	-	-	-	-	-
274			DISPOSAL 1 & 2, ROAD 3A (Disposal 2)	SSCAR	Simataniari	572	37.180.000	34.320.000	71.500.000	16-Sept-13
275			T/L ROW	RP	Simanampang	-	-	-	-	-
276			Tower 8	RP	Sibaganding	666	666	666	1.332	20-Feb-14
277			ROAD 1 & 1A	SSCAR	Lumban Jaean	762	49.530.000	46.885.500	96.415.500	16-Sept-13
278			Road 6B (additional)	SSCAR	Simataniari	5344	155.350.000	239.530.400	394.880.400	•
279			Laydown	SSCAR	Lumban Jaean	8231	535.015.000	155.837.100	690.852.100	03-Okt-12
280			WJR 2 & ROAD (WJR 2)	SSCAR	Lumbanjean, Sibaganding dan Simataniari	1230	79.950.000	19.262.000	99.212.000	03-Okt-12
281			ROAD 1 & 1A	SSCAR	Onan Hasang	75	4.875.000	13.006.000	17.881.000	16-Sept-13

<u>No</u>	Narr	le	Name Area	RP/SSCAR	Domicile	Land area acquired	Total Compensation	Total Compensation for Crops/	Total Compensation	Date Paid
	Male	Female				(m²)	for Land	Trees acquired	(IDR)	
282			WJR 2 & Road (WJR 2)	SSCAR	Sibaganding	1337	86.905.000	51.590.700	138.495.700	03-Okt-12
283			T/L ROW	RP	Hutabarat	-	-	-	-	-
284			ROAD 1 & 1A (Right Side of Road)	SSCAR	Simataniari	379	24.635.000	30.324.000	54.959.000	16-Sept-13
285			LAYDOWN	SSCAR	Lumban Jaean	2036	132.340.000	119.112.000	251.452.000	03-Okt-12
286			T/L ROW	RP	Hutabarat	-	-	-	-	-
287			DISPOSAL 1 & 2, ROAD 3A (Disposal 2)	SSCAR	Sibaganding	9628	625.820.000	262.940.000	888.760.000	16-Sept-13
288			T/L ROW	RP	Onan Hasang	-	-	-	-	-
289			T/L ROW	RP	Sitoluama	-	-	-	-	-
290			T/L ROW	RP	Hutabarat	-	-	-	-	-
291			ROAD 4 & NIL 1N (NIL 1N)	SSCAR	Lumban Jaean, Sibaganding dan Simataniari	4764	309.660.000	68.050.000	377.710.000	03-Okt-12
292			Tower 12	RP	Simanampang	89	5.785.000	4.069.100	9.854.100	20-Feb-14
293			T/L ROW	RP	Hutabarat	-	-	-	-	-
294			T/L ROW	RP	Sitoluama	-	-	-	-	-
295			DISPOSAL 1 & 2, ROAD 3A (Disposal 2)	SSCAR	Simataniari	1114	72.410.000	66.840.000	139.250.000	16-Sept-13
296			Road 6B (additional)	SSCAR	Simataniari	101	6.565.000	4.975.500	11.540.500	03-Mar-14
297			Tower 10	RP	Hutabarat	868	56,420,00	2.400.000	2.400.000	20-Feb-14
298			T/L ROW	RP	Sibaganding	-	-	-	-	-
299			T/L ROW	RP	Sibaganding	-	-	-	-	-
300			BORROW PIT	SSCAR	Simataniari	703	45.695.000	43.776.500	89.471.500	16-Sept-13
301			ROAD 1 & 1A (Right Side of Road)	SSCAR	Lumban Jaean	110	7.150.000	6.600.000	13.750.000	16-Sept-13
302			Power Plant	SSCAR	Lumban Jaean	1166	75.790.000	139.123.700	214.913.700	17-Sept-13
303			T/L ROW	RP	Onan Hasang	-	-	-	-	-
304			T/L ROW	RP	Onan Hasang	-	-	-	-	-

No	Nam	e	Name Area	RP/SSCAR	Domicile	Land area acquired	Total Compensation	Total Compensation for Crops/	Total Compensation	Date Paid	
	Male	Female				(m²)	for Land	Trees acquired	(IDR)		
305			ROAD 1 & 1A (Right Side of Road)	SSCAR	Simataniari	63	4.095.000	3.340.000	7.435.000	16-Sept-13	
306			T/L ROW	RP	Sitoluama	1024	66.560.000	35.679.400	102.239.400		
307			Tower 11	RP	Hutabarat	740	48.100.000	20.856.000	68.956.000	20-Feb-14	
308			ROAD 5 & WJP (Road 5)	RP	Sibaganding	6432	418.080.000	204.406.200	622.486.200	03-Okt-12	
309			T/L ROW	RP	Sitoluama				-		
310			POWER PLAN & ROAD 2, 3	SSCAR	Lumban Jaean	6537	424.905.000	462.488.200	887.393.200	16-Sept-13	
311			ROAD 5 & WJP (Road 5)	RP	Lumban Jaean	4593	298.545.000	112.337.000	410.882.000	03-Okt-12	
312			DISPOSAL 1 & 2, ROAD 3A (Disposal 2)	SSCAR	Simataniari	12349	802.685.000	820.620.600	1.623.305.600	16-Sept-13	
313			T/L ROW	RP	Onan Hasang	10787	701.155.000	309.590.000	1.010.745.000	-	
314			ROAD 1 & 1A (Left Side of Road)	SSCAR	Simataniari dan Lumban Jaean	822	53.430.000	19.908.800	73.338.800	-	
315			LAYDOWN	SSCAR	Lumbanjean dan Sibaganding	8231	535.015.000	155.837.100	690.852.100	03-Okt-12	
316			NIL 2N & ROAD 3B (NIL 2N)	SSCAR	Lumban Jaean	263	17.095.000	6.856.000	23.951.000	16-Sept-13	
317			POWER PLAN & ROAD 2, 3	SSCAR	Lumban Jaean	7269	472.485.000	249.384.100	721.869.100	16-Sept-13	
318			ROAD 1 & 1A	SSCAR	Sibaganding	66	4.290.000	3.960.000	8.250.000	16-Sept-13	
319			POWER PLAN & ROAD 2, 3	SSCAR	Lumban Jaean	6658	432.770.000	93.070.600	525.840.600	16-Sept-13	
320			T/L ROW	RP	Simanampang	876	-	-	-	-	
321			T/L ROW	RP	Onan Hasang	-	-	-	-	-	

Annex E

Grievance Records

1					GRIEVANCE LOG							GRIEVANCE TRACKING						GRIEVAN	E CLOSED	DOUT			
000	ata Berntund	Method	Employee Received	Grisessus	and the second	Staff Responsible to	- Production	Index	Valdation	Investigation Results			Sull Inquestio August	Pagess	A SHOW	Constituents	Outcome and Response to Completenet (d	-		Decision communicational Complex			ant Management action
100	ala Baratana	Received	Superior States	Category	and the second	Basalue	Sarget Date	Second St	Valdetter	Reserved and America	Fallow Lip and Montings	Correction Actions	to Residue	C. Comments	Agreements	Contraction	Contrast and and an a literature of	Choice Carl	whee	Ry Whom	Course Date	statistical	to provert recorrect
1 1	A#-13	Verbal	Industain Sciency of Instantial relations	Labor	forest read to be 1 was closed to, PT Pager land, teaching advance of their Involves for the earth-spit is till not peed by PT PT	87.89					1.2.1.1						Pay Companyation	Connunction		Example Example		141	
1 54	1 Seg 211.8	vertial	ladustas (domput cartartal telefori)		Proof all Roghan Pargatan was barred by the sand from the road access contraction to batalig time at St. 2	50.		9/12/2014	8353816	SGL Enternal Relation approach Iand purcht le pascaful way Interpretation	50), Enternel Relation approach land somer a a praceful way icomplete:	SOL Laternal Relation approach land menes In a precedul way (complete)					S2L External Relation approach land never in a pract/ful wear introduced	Ратопа Солтупация		Industen Soompul		191	
4 10	1 Sey 201.5	versal	industan Sitemput Kastamal kelaturi	-	Prind al Ringhas Panjartan was barned by the sand from the road access contraction to belong time at \$1.2	10.		6/11/1014	\$25,2554	SCL External Relation approach land parter is a peakeful way (complete)	50), External Relation approach land owner in a projection way completed	5CI, Easternal Relation: approach land owner In a prescript way (complete)					301 Esternal Relation approach land owner is a passishil wire plotholither	Personal Communication		Industan Sitemput		5ei	
1. 25	1.3ea 201.8	verbel	Industan Sépreput Leonarmal relation(Point of Sugarty Shorebing was barred by the said from the amony of 2 fload contraction to bacanghory in \$1,7	101		8323014	4262214	323. Enserval Relation approach land awirer it a peaceful way complete.	SDL Enterney Relation approach land owner in a precedul way completed	SCI. Estamoi Relation approach land monet to a peacoful way (complete)					VCL External Relation approach land parties a percend way toompleted	Perunal Cummunation		10.000 500000		'e t	
18 8	Nery 2013	verbal	Industan Sitempul Industan Sitempul	Secul	Excertained and split over during the earth-policy at \$74.0-300 and full at spins trees downfull the stops	-44						Pag (Jampeustion						Personal Core-regregation		Manual Manual		-	
11 11	Hen 2013	verbal	Pedastan Storngol Sectornal Impiaci	Secal	Application for the hoarding settlement that prevenuels agreed at \$7.5 300	Partiant		-	-		1	Pug Campenation		1			Section and section of the section o	Personal Cammunagion		Industan Shampul		141	
11 13	1 No. 1013	-arbai	Industan bilannyasi Iautarkal mathani	-	The imaginor of anothy field of Lubus Latong was broken by the uncontroll two water during the brune stuncture have construction Prevention 2 to 50, 1							SCI. External Relation approach land pursers in a preached way (complete)						Personal Communications		indunan Manad		her.	
a 1	Day 2013	vertia)	lodystyn Sharoyyt Lautarnal raiania (j	Secul	The Community around 34.2 was surprised by the main coming fours well serving at 56.2 and though them was an audioastic And would be show the wolfsed activity							On 30 Dec 2011, 50X constant a mixeting with the officient of tiggroung porting and Gaughtang, and long flows about the unified activity, so the welfneed can be continued (paragrited)						Sheet of a site of a get	20 Oer 14	returan Manaul	På Dec 14	741	
11 1.	411.8	Varbal	Industan Sitampur Sectamet relation)	Secul	Affuent form Dranage was kern the pail that of familian community			1	1			Pay Composettion						Parsonal Communication		Teducian Naturapul		-	
10 -	- 11	-9-941	Industan Silampur Kadarnal Inlanun)	a.e.	"Ne constantly also for near St. 2 was affect and unable to step because of the neary during walked	501						From 13 to 21 Jan 2014, 924, 924, everyote ullager of Slanghtlang and Sesatanian to the safe zone (complete)						Personal Carlshumestern	33-23 ian 2954	Industan Secondul	13-21 Are 2014	` m	
14 13	im 34	letter	Induitan Seampur Isolamar relation)	Secul	Landstate at Road LA 57A 3-050 partaging the orlager land and petity field downkill the stope	Tyunde.79			10-000-0			Pay Compension (Complete)		1				Parsonal Cammunication		Industan Stompul		784	
18 23	im 14	-terbiel	Industes Sciences (externe) (electer)	Secul	Atternative road construction has damaged the cometery of Similary environments	+1+1						Canglete								Deduction Depropul		7 8 8	
24 15	bian 18	(arta)	Industan Sitemark (entersy' reletion)	Secul	Villager pedds held at near the boundary fire was browvited during the sente-onic at \$7.6, 1-400.	PT 24			[]			Pay Competation (Complete)						Komunikasi Parisinal		Depregal		781	
11 11	fets 14	urbal	Industan Silamoul (antarrar relation)	Sacut	Mud from open dramage has went to paddy field around \$7A 3600				l			Pay CompanyItim (Complete)						Company Company		Industan Seprepul		789	
23 30	Arath 14	retel	Induitan Sittampul Jertantel relation)	Seco	Excessional and split was during the earth-cores of 5P 1 and full or cores been described the slope	ne -						Pay Competention (Complete)						Personel Communication		Bearing of		Tes	
24 5	Ma+14	(****	industan Sitampul Mutantar relation)	Seciel	Excession and and over during the earthwarks at \$7.4 3+100 and half on villagent gapers association page	#1.##						Complete								Induction Sitomput		**	
n 11	i Alar-18		ndustan Sitoinguj pertamai rejeturoj	Sacre	l room with non-water carried sorte mud Rowing to villagers fails at Torestanam	PT PP						Campieta								Industan Selemput		791	
10 18	120.28	****	Industan Monroud Instantial relations	Secul	Encours with reve water correct some must have access read flowing to integers field at Simulations.	PT PH						Campteia							1	Stamps		***	
10 2.	ALC: N	um mar	Industry Storegul portenal teletory	Sacial	Security Fool 5 in SF2 is providened established on land secret by the vilage of Security (an	301			Q			Campiete		1		· · · · · · · · ·				Storigs!		7es -	
34 5	b#34	iensi .	Industan Sebengul Jautamal relations	Security	The community stopped acts its at the antinence of WL 3 area	Pi Grann Parcada			J			Camplete								Searcher		-	
n 11	her 1.4	***	ndustan Sitempul utotamai telatsorij	Labore	Converses, same flocking in to air for a git from risk during methological from SL to NL	·						Explain to the conveniently that activity for that time is only for 5 days, just for the constructing of shifting foundation						Penanai Cammunughan		Industan Sitemed		***	
W 11	Nº LE		Industan Seberaput Initianal Relations	Labour	UPSI pangetisan maint mili, watantar rakatasa tajasa tar manwy	nhi					_	NCL throtte the SMSI to come to SOL office, and asked for an explanation three SMSI the research of asking for						Meeting		Induman Sherrad			
39 18	Sep 14	ve ter	Norma () (144, (14)	Secul	A secal people Transform Hutabary), complexing about water put that becking the access to he and at NU, area			N20, 2814	\$25/2014	weise gass was blocking the acces to the complement land	thering with the chape	annel, and CR Teach and dyna meet with bentow we and explain that dyna will design new assess to his test and also a diamying tone of his family as yoing guard	- C.	non the complement's ser en avera point On angless of designing the new arcess	NA	hah .		Meeting and Decuteer	18 kep 1	Debing F (SQ), ER,	18 Sep 14	***	recent the discord and prove there are bird to the chaper

REMARK