Resettlement Plan

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BHU: Secondary Towns Urban Development Project —Sarpang Water Supply Development Project (Contract Package-SM/UWS/002), and

Development of Shechamthang Local Area Plan Infrastructure: Roads, Drainage and Water Supply Project (Contract Package-SM/UR/001)

Prepared by the Ministry of Works and Human Settlements. (MOWHS), Royal Government of Bhutan for the Asian Development Bank

CURRENCYEQUIVALENTS

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ABBREVIATIONS

ADB – Asian Development Bank

AH – affected household AP – affected person BPL – below poverty line

CPR – common property resource

DDR – due diligence report
FGD – focus group discussion
FHH – female-headed household

GRC – Grievance Redressal Committee

IP – indigenous people LAP – local area plan

MOWHS – Ministry of Works and Human Settlement

NGO – nongovernment organization

PAVA – Property Assessment and Valuation Agency

PIU – project implementation unit PMU – project management unit

PMSC – project management and supervision consultant

RP – resettlement plan

SPS – Safeguard Policy Statement

TOR – terms of reference WTP – water treatment plant

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EXECUTIVE SUMMARY

- 1. **Background.** Under the Secondary Towns Urban Development Project (STUDP), the Asian Development Bank (ADB) is supporting the development of critical urban infrastructure in three improrant secondary towns of Bhutan Trashigang, Sarpang and SamdrupJongkhar. The latter two towns are located along the southern border with India and have potential to be developed as growth centers focusing on trade and manufacturing. Improved infrastructure in these towns will help to increase the economic competitiveness of these cities while simultanoeusly providing an improved urban environment for the residents. The Ministry of Works and Human Settlements (MOWHS) acting through its' Water and Sanitation Division (WSD), Department of Engineering Services is the executing agency for the project. A project management unit (PMU) has been established in the WSD of the MOWHS, Thimphu supported by project implementation units (PIU) in project locations.
- 2. **Subproject description.** The loan will support infrastructure development under 7 works packages, which includes two packages in Sarpang- Water Supply Development Project and Development of Shechamthang Local Area Plan (LAP) Infrastructure: Roads, Drainage and Water Supply Project in Sarpang. The Sarpang water supply development project comprises the following components: (i) construction of reinforced cement concrete (RCC) grit chamber (including dismantling of exisiting sedimentation tank) near intake at Lharing Chhu (35 meters [m] away); (ii) providing and laying 16.053 kilometers (km) of raw water ductile iron transmission main from source to the exisiting water treatement plant (WTP); (iii) onstruction of 2 RCC break pressure tanks (BPTs) of 10 cubic meter capacity using ductile iron pipes and fittings with barbed wire fencing and gate; and (iv) construction of 8m river crossing.
- 3. **Resettlement plan.** This resettlement plan covers the resettlement impacts for the laying of trasnmssion line under the Sarpang water supply development project and the laying of transmission line under the Shechamthang LAP Infrastructure: Roads, Drainage and Water Supply Project. The document has been prepared based on detailed engineering designs for both these contract packages. The document identifies compensation and mitigation measures for identified impacts in accordance with ADB's Safeguard Policy Statement (SPS), 2009, and applicable laws of the Royal Government of Bhutan.
- Scope of Land Acquisition and Resettlement. No land acquisition or physical displacement is expected under the subprojects. Proposed new subproject components under the Sarpang water supply project require land for construction of RCC grit chamber, laying of raw water transmission main from source to treatment plant, construction of 2 RCC BPT and construction of river crossing. Except for 2.156 km of privately owned land for laying of water transmission pipe (200 millimeter [mm] diameter pipe for raw water transmission main), rest of the project development and construction activities will be carried out on government land. These private land parcels belong to 19 households (91 household members) across three locations namely Relangthang, Jogidangra and Sarpang bazar. None of the households are vulnerable or, as per definition of ADB SPS, 2009. No damage to structure or loss of land or other asset is anticipated under the sub project as per existing design and implementation arrangements. Similarly, no physical or economic displacement is envisaged. Impacts are expected during transmission pipe laying work. This may result in loss of crops for land owners if the work is carried out during cropping season. The PIU has also assured that transmission pipes' alignment will feature bends to ensure that tree (fruit and timber) felling is avoided. In case, such avoidance is not possible or observed by contractors/PIU, the affected households will be compensated as per the entitlement matrix for this project. No indigenous people's households (as per definition of SPS) will be affected by this project. Third party certification indicates that the land owners have

voluntarily agreed to the pipe laying activity in their land parcels without transfer of titles; none of the owners were coerced, and none are vulnerable. Excavations of trenches during pipe laying will be regulated and only done for a length where pipes can be laid, and trenches covered back the same day before closure of work, thereby minimizing temporary impacts to local community/ households.

- 5. Shechamthang is located across the river from current settlement in Sarpang Tar and is being developed as the new commercial node of Sarpang. The Shechamthang LAP Infrastructure: Roads, Drainage and Water Supply Project subproject comprises of two components that are: (i) construction of urban infrastructure in Shechamthang LAP where land has been pooled from private landowners for the development of facilities like roads, water supply and drains- the land pooling was not done in anticipation of ADB project and is covered under the due diligence report for Sarpang; (ii) development of water distribution main lines to convey water to Sarpang Tar and the new Sarpang satellite town (Shechamthang). Component b) includes laying of treated water distribution pipeline through two agricultural properties. These two households will bear impacts under both work packages i.e. Water Supply Development and LAP Infrastructure development as affected land parcels (2 in number) are close to the WTP and proposed alignment of both the water supply transmission main (water supply development package) and water distribution line (LAP infrastructure development package) passes through these land parcels. A separate Due Diligence Report (DDR) has been prepared for the LAP infrastructure project that may be referred for detailed information of the project.
- 6. **Categorization.**The water supply subproject is classified as category B in accordance with ADB SPS, 2009. ADB SPS, 2009 covers both temporary and permanent impacts to both titled and non-titled persons and includes both physical and economic displacement.
- 7. **Consultation and disclosure.** Goals and objectives of the project have been disclosed to stakeholders (beneficiaries, affected persons, stakeholder agencies) through meetings, workshops and focus group discussionsat various points in time. A program of continuous consultation and disclosure is proposed.
- 8. **Institutional setup**. The MOWHS acting through its WSD, Department of Engineering Services (DES) is the executing agency for the project. The Dzongkhag (district) administration is the implementing agency. The WSD, MOWHS houses the PMU. The PMU will be in charge of overall planning and implementation under the guidance of DES Project Director and the MOWHS. PIU has been set up at the project location (Sarpang) and it is responsible for managing day to day affairs related to sub-projects and oversee the implementation of this resettlement plan. The PIU comprises of one project manager, one engineer, one technician, and one environment cum gender officer. The PMU and PIUs will be assisted by Social and Gender Specialist of the project management and supervision consultants (PMSC) to monitor project compliance on social safeguards. The Project managers of the PIUs with support from other PIU staff will conduct field observations and consultations with local communities.
- 9. **Resettlement budget and financing plan.** The overall budget under this resettlement plan will be Nu1.07 million. This is based on lump sum figures and will be updated after the completion of the detailed measurement survey. This includes 10% pecent contingency.

¹ A separate due diligence report (DDR) has been prepared for the Sarpang satellite town subproject that may be referred for detailed information of the project.

I. PROJECT DESCRIPTION

A. Introduction

- 1. Under the Secondary Towns Urban Development Project (STUDP), the Asian Development Bank (ADB) will provide a \$10 million loan to the Royal Government of Bhutan for developing urban infrastructure in three secondary towns of Bhutan-Trashigang (including Rangjung, Sarpang (Shechamthang), and SamdrupJongkhar (including Dewathang). The latter two towns are located along the southern border with India and have potential to be developed as growth centers focusing on trade and manufacturing. The government will supplement the loan with \$2 million contribution. STUDP will develop seven subprojects in three thromdes. Improved infrastructure in these towns will help to increase the economic competitiveness of these cities while simultaneously providing an improved urban environment for the residents.
- 2. The impact of the project will be balanced and sustainable development of human settlements in Sarpang, Trashigang, and SamdrupJongkhar ensured.¹ The intended outcome of the project will be improved quality, efficiency, and sustainabilty of urban services in these towns. The project will support water supply improvements and network expansion in all three towns, expand sewerage network in SamdrupJongkhar (directly complementing government's ongoing investments in waste water treatment), and provide targeted investments in water supply, roads and drainage for the development of a new town in Sarpang (Ranibagan also known as Shechamthang).
- 3. The Ministry of Works and Human Settlements (MOWHS) acting through its Water and Sanitation Division (WSD), Department of Engineering Services will be the executing agency. A project management unit (PMU), established in the WSD, MOWHS, will be responsible for planning, implementation, monitoring and supervision, and coordination of all activities under the project. The project implementing units (PIUs) have been established in Trashigang, SamdrupJongkhar and Sarpang and will be responsible for the daily coordination and execution of the project.²
- 4. The loan will support infrastructure development under seven works packages: (i) Development of Shechamthang Local Area Plan (LAP) Infrastructure: Roads, Drainage and Water Supply Project; (ii) Sarpang Water Supply Development Project; (iii) Rehabilitation of SamdrupJongkhar Water Supply System Improvement Project; (iv) Samdrup Jongkhar sanitation and sewerage project; (v) Trashigang water distribution network improvement project; (vi) Dewathang Water Supply Augmentation Project; and (vii) Rangjung intake and water treatment plant (WTP) rehabilitation project.
- 5. This draft resettlement plan is prepared for the particular components under the Sarpang Water Supply Development Project and the Shechamthang Lap infrastructure Project, for which there are involuntary resettlement impacts. The RP is prepared based on the detailed designs prepared by the PMU of STUDP for both these subprojects. The subproject is classified as "Category B" for involuntary resettlement impact as per ADB Safeguard Policy Statement (SPS), 2009. The draft resettlement plan will be updated and reconfirmed based on findings of detailed measurement survey (DMS) for final involuntary resettlement impacts or if there are any changes in sub-component alignment/design elements during project implementation. The final

Royal Government of Bhutan, Gross National Happiness Commission. 2013. Eleventh Five Year Plan, 2014–2018. Thimphu.

² Sarpang project implementation unit (PIU) has been established under the Sarpang dzongkhag administration and will be the implementing agency for all subprojects in Sarpang.

resettlement plan will be reviewed by PMU, submitted to ADB for approval and disclosed on Sarpang PIUs and ADB website. No civil work will be taken up prior to completion of final RP implementation for this package. The Project implementing unit of Sarpang Dzongkhag is responsible to hand over the project land/sites to the contractor free of encumbrance.

6. Budget requirements are provided under resettlement budget section of this document (Section IX).

B. Proposed Subproject Components

- 7. Sarpang water supply development project comprises the following components: (i) construction of reinforced cement concrete (RCC) grit chamber (including dismantling of exisiting sedimentation tank) near intake at Lharing Chhu (35 meters [m] away); (ii) providing and laying 16.053 kilometers (km) of raw water ductile iron transmission main from source to the exisiting water treatement plant; and (iii) construction of two RCC break pressure tanks (BPT) of 10 cubic meter capacity using ductile iron pipes and fittings with barbed wire fencing and gate; and (iv) construction of 8 m river crossing. This resettlement plan covers about 2km of pipe under component (ii), which passes through 20 private agricultural lands belonging to 19 people. Due diligence report (DDR) for Sarpang covers all other components.
- 8. The works to be undertaken in the LAP infrastructure works package consists of the following components DDR document prepared for this work package may be referred for further details):
 - (i) Construction of 1.3 km of primary road;
 - (ii) Construction of 2.44 km of secondary road;
 - (iii) Construction of 1.3 km of road side drains along primary road;
 - (iv) Construction of 4.88 km of road side drain along secondary road;
 - (v) 3.0 km of storm water drain;
 - (vi) 0.350 km of roadside footpath; and
 - (vii) 5.676 km of water distribution network.
- 9. The resettlement plan covers laying of distribution pipe under component (vii), which passes through two private agricualtural lands. These two land owners are also affected by the laying of pipes as described in para 7. DDR for Sarpang covers all other components under the Shechamthang LAP infrastructure package.
- 10. Measures to avoid and minimize private land acquisition and involuntary resettlement impacts were made by the government by siting most facilties and pipleines in government land. However, due to difficulty of terrain and for purposes of simplifying alignments, 2.156 km of the 16.053 km water transmission line will pass through private lands belonging to 19 land owners (20 land parcels).
- 11. Traffic management during pipe laying work, ensuring access to shops and businesses by providing pedestrian access through planks and other such measuresare proposed to mitigate localized temporary impacts of the construction. Where excavation close to properties / residences cannot be avoided, simple mitigation measures such as provision of planks are proposed as per available guidelines in the evironmental mangement plan (EMP) and best practice. Timely information will be provided to the public about potential negative impacts and mitigation measures, including grievance redress procedures and time taken for the same, prior to start of project implementation.

C. Objectives of the Resettlement Plan

- 12. This resettlement plan is prepared for investments proposed for subproject components of Sarpang water supply development project and Shechamthang LAP infrastructure package. It addresses the involuntary resettlement impacts of the proposed subproject components and is consistent with ADB SPS, 2009 and other legal provisions of the Royal Government of Bhutan.
- 13. This resettlement plan is prepared in accordance with ADB SPS requirements for involuntary resettlementin Category B projects and to meet the following objectives:
 - (i) to describe the identified scope and extent of land acquisition and involuntary resettlement impacts because of identified project components, and address them through appropriate recommendations and mitigation measures in the resettlement plan;
 - (ii) to present the socio-economic profile of the population in the project area, identify social impacts, including impacts on the poor and vulnerable, and the needs and priorities of different sections of the population, including women, poor and vulnerable;
 - (iii) to describe the likely economic impacts and identified livelihood risks of the proposed project components;
 - (iv) to describe the process undertaken during project design to engage stakeholders and the planned information disclosure measures and the process for carrying out consultation with affected people and facilitating their participation during project implementation;
 - (v) to establish a framework for grievance redressal for affected persons (APs) that is appropriate to the local context, in consultation with stakeholders;
 - (vi) to describe the applicable national and local legal framework for the project, and define the involuntary resettlement policy principles applicable to the project;
 - (vii) to define entitlements of affected persons, and assistance and benefits available under the project;
 - (viii) to present a budget for resettlement and define institutional arrangements, implementation responsibilities and implementation schedule for resettlement implementation; and
 - (ix) to describe the monitoring mechanism that will be used to monitor resettlement plan implementation.

Figure 1: Google Earth Image depicting Sarpang water supply scheme components including 16.053km transmission line alignment

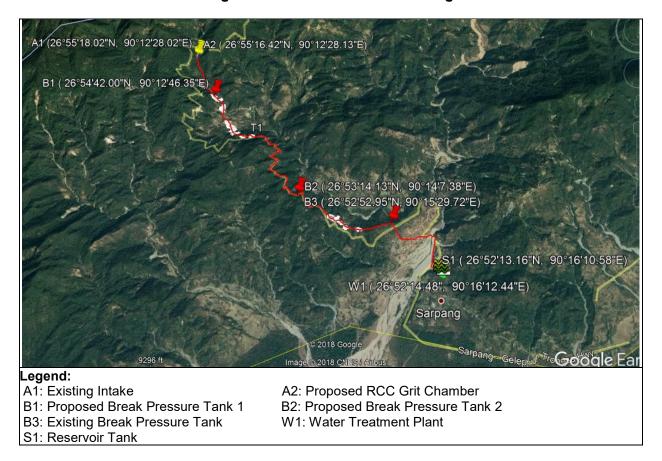


Figure 2: Google Earth Image depicting site for RCC grit chamber

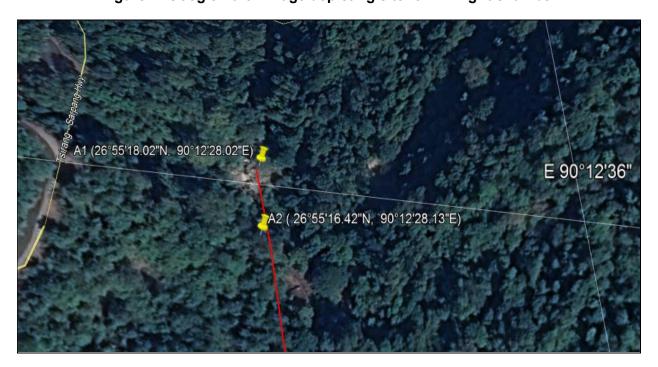


Figure 3: Google Earth Image depicting location of Break pressure Tank 1



Figure 4: Google Earth Image depicting location of Break Pressure Tank 2

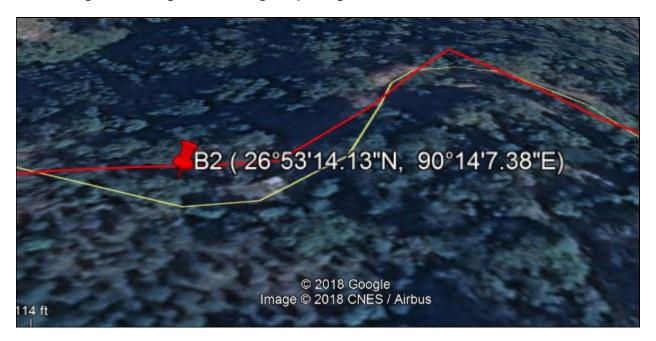


Figure 5: Google Earth Image depicting location of river crossing section of transmission line (to be laid along existing bridge)

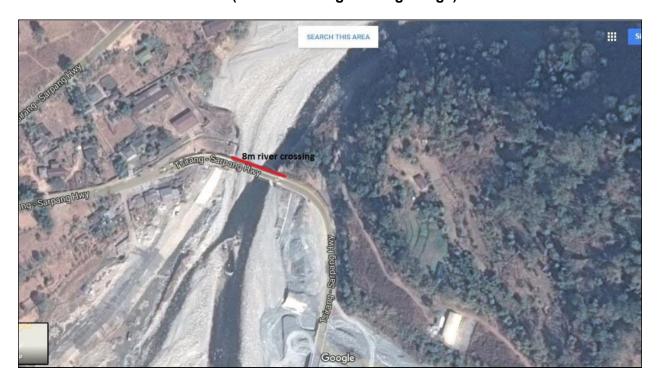
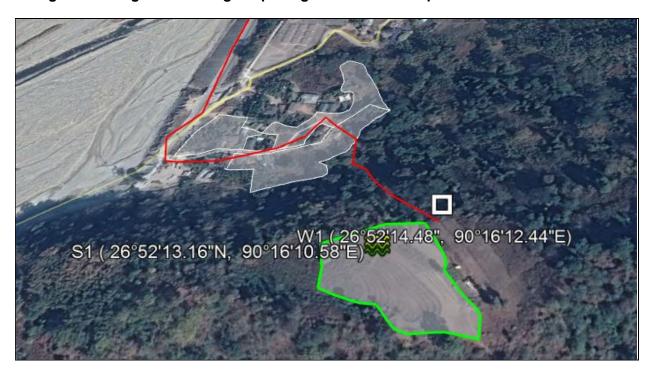


Figure 6: Google Earth Image depicting water treatment plant and reservoir location



II. SCOPE OF LAND ACQUISITION AND RESETTLEMENT

A. Land acquisition and involuntary resettlement

- 14. The scope of land acquisition and resettlement is identified based on field visits to the identified subproject sites and alignments. Proposed interventions and their potential involuntary resettlement impacts are presented sub-project component-wise, in Table 1 below. All land required for the subproject components under the Sarpang water supply development project is located on government land/ exisiting road right of ways, except for 2.156 km of water transmission line which traverses through private lands owned by 19 households (91 household members). Third party certification confirms that land owners have voluntarily agreed to laying of pipe laying through their land parcel, without transfer of titles (there will be no need for private land acquisition). These people will face temporary impacts during pipe laying, potential loss of crops/ trees along the pipe alignments and will be able to continue cropping activities over the pipe after it is laid. There will though be temporary disruption to cultivation and crop losses, if pipe laying is carried out during agriculture season and felling of few trees will possibly be required if proposed alignment bends are not provided by the contractor/PIU. Land owners have agreed to allow pipe laying for the welfare of the community on condition that no transfer of title is involved. Estimation of temporary impacts along proposed transmission pipe alignment is based on transect walks along the entire (100% of privately owned land parcels) stretch as per the detailed sub project designs.
- 15. Two of these affected households will also face impacts due to laying of distribution pipe works in the Shechamthang LAP package. 0.366 km of the treated water distribution main line will be laid through through these two plots (Appendix 2). As described above, the land owners have voluntarily agreed to laying of pipe through their prioperty without coercion (as verified by third party assessment).
- 16. The resettlement plan will further be updated after completion of DMS (based on assessment of tree and crop loss) and in case there is realignemnt from current design. Land certificate from Sarpang Dzongkhag (district) administration confirming APs permission to use their land for project sub-components is in Appendix 2.

Table 1: Potential involuntary resettlement impacts under the Sarpang water supply project

	Components	Capacity	Unit (No.)	Land ownership	Involuntary Resettlement	Indigenous People Impact
1	Construction of RCC grit chamber (including dismantling of exisiting sedimentation tank) near intake at Lharing Chu (35m away)	-	1	Sarpang Dzongkhag (district	On the bank of the river on government land, no IR impact anticipated as these are vacant and unused.	None
2	16.053km raw water transmission Ductile iron pipe from source to the existing water treatment plant.	dia	1	Sarpang dzongkhag and 19 private land owners	2.156 km of pipeline traverses through 19 private land holidings (19 APs, 91 HH members). All APs have voluntarily agreed to allow pipe laying, without transfer of titles and none are significantly	pipe laying will not make any person worse off as

						Indigenous
			Unit	Land	Involuntary Resettlement	People
	Components	Capacity	(No.)	ownership	Impact	Impact
					affected.4 The affected areas	can be
					will not have any crop loss if	continued
					laying of transmission pipe is	on top of the
					carried out during non-	buried
					agriculture season. Such	pipes.
					special consideration will need	
					to be applied for at least 2 households that will be	
					affected by pipelaying	
					activities proposed under 2	
					packages. The contract	
					documents include a clause	
					pertaining to the requirement	
					for simultaneous work by the 2	
					contractors on the lands	
					owned by these 2 households	
					and the need to avoid	
					construction during the	
					cropping season, particularly	
					for them. Single crops are	
					taken by the land owners	
					(mainly rice and maize).	
					Cropping season extends	
					between late May to	
					November end (covering the entire rice crop cycle i.e.	
					seedling preparation to	
					harvesting).	
					riai vestirig).	
					There are some trees (fruit and	
					timber) that might get affected	
					if transmission pipes are not	
					bent at these locations, as has	
					been assured by the PIU, this	
					will be confirmed during DMS	
					and RP updating.	
3	Two RCC Break	10 cubic	2	Sarpang	Located on government land	None
	pressure tanks using	meters		dzongkhag	which is free of any	
	DI pipes and fittings	each			occupation/use; no IR impact	
	withj barbed wire				anticipated.	
1	fencing and gate	Ores	4	Corpora	Will be constructed about a	None
4	River crossing	8m-	1	Sarpang dzongkhag	Will be constructed abutting	None
				uzonyknay	the exisiting bridge across Sarpang river- included in the	
					right of way.	
<u> </u>		<u> </u>			ingite of way.	

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⁴: The third party has certified that (i) The donation will not cause significant impacts on the livelihood of the donors; (ii) the donors have fully understood the value of their donated lands; (ii) the donation does not come from the land owner categorized as poor or vulnerable family; (iii) the donation will not cause any economic or physical displacement of the renters, tenant and other types of current land users; (iv) meaningful consultations are conducted with the land owner(s); and (v) the land donation(s) does not come from coercion or asymmetrical power relation between the land owner(s) and the government.

- 17. For components involving civil work, efforts have been made in detailed design to avoid or minimize resettlement impact through: (i) proposals on available government land/sites, rather than private land acquisition; (ii) design of main pipe alignments through available government land and right-of-way (RoW) of existing public roads; and (iii) proposal for adequate traffic management plan along busy road stretches; (iv) preferred scheduling of excavation work on private land holdings during non agriculture season (only 2 km out of 16 km transmission pipe line will be on private land and work can be scheduled to meet this objective); and (v) bending of pipe alignments to avoid felling of trees).
- 18. Components 1,3 and 4 in table 1 above are located on government land. 2.156 km of the 16.053 km water transmission line (item 2 in table above) will be laid along 19 agricultural properties. In addition, 0.366 km of the treated water distribution main line (under Shechamthang package) will be laid through 2 private agricultural plots
- 19. **Explanation of impacts to land owners**. The 2.156 km of the raw water transmission main proposed to pass through privately owned land (19 households) may lead to partial loss of crop ranging between an average of 1-2% of annual income per land owner if work scheduling to avoid agricultural season is not undertaken and loss of trees if realignment is not possible in certain sections. Appendix 3 provides details of calculations of estimated loss for these APs and Appendix 4 provides their socioeconomic profile.
- 20. All affected persons face impact on less than 10% of their land holdings. Once the pipes are laid, the affected persons can continue cropping activities over the alignmentas pipes will be laid least 700 millimeters (mm) below ground level.⁵ One affected person,will have 11% of his land parcel impacted by pipe laying only during construction.⁶ However, sub-surface use restrictions to the above-referred affected person because of pipe laid (e.g., building construction) will be limited to 0.7% of the affected land parcel. Affected person is willing to allow laying of transmission line through his land and is not primarily dependent on the land for his livelihood and is not vulnerable. Seven pipe sections laid through private properties will not contain joints/valves to avoid any leakages and minimizing future need of maintenance activities. The executing agency and dzongkhag administration have assured the affected persons during consultation meetings held on 30 January that (i) no heavy machinary will be used during pipe laying works or during maintenance activities (if at all maintenance would be required); and (ii) construction and miantenance works will be undertaken during non-cropping season. None of the affected persons are assessed to be vulnerable.⁷
- 21. Excavation for each stretch will be commensurate to the length of pipe that can be laid during the day and excavated trenches be covered back by closure of work by day end, to minimize the period of disruption to land owners. Pipe laying will be scheduled during non-harvest and non-ploughing season to minimize crop losses for affected land owners.
- 22. A summary of potential involuntary resettlement impacts of proposed interventions under this sub project is presented in Table 2.

⁵ Any construction activities cannot be undertaken over this area.

⁶ The temporary impact is calculated based on a 3m wide clearance required during construction. Post-construction, the impact will be limited to the pipe length and diameter of 200 millimeters.

⁷ Defined as those below the poverty line, the landless, the elderly, women and children.

Table 2: Summary of Resettlement Impacts

	Table 2: Summary of Resettlement Impacts						
S. No.	Details	Affected persons (No.)/ affected land area (sq. m)	Remarks				
1	Land acquisition	None	Pipes will be laid >700mm below the surface level. No structures stand on proposed alignment. Project work package will affect 20 private land parcels belonging to 19 persons who have voluntarily agreed to allow pipelaying through their lands; affecting less than 3% of affected landholding (refer Appendix 5 for further details). Cropping activities can be continued as normal as pipes will be buried at a depth of more than 700mm below the gound level.				
2.	Permanent physical or economic displacement	None					
3.	Structure loss	None	No structure loss, an assessment was carried out by the District Engineering Officer, PIU; also validated by third party assessment team.				
3a	Vulnerable APs among those facing relocation	N/A	None				
4.	Potential temporary income loss	No					
4a.	Vulnerable APs among those facing temporary income loss	No					
5	Affected titleholders	None					
6.	Permanent income loss	None					
7.	Loss of trees or crops	Xx for xx land owners(dzongkhag)	Temporary impact (crop loss) during pipe laying (200 mm dia pipe, minimum 700 meters underneath surface), for which the length and affected width of trench for excavation and excavated earth (3m) passing through private land is considered for assessment of crop loss in this RP. The PIU plans to lay the pipe in such a way that tree felling will be avoided to the extent possible. Implementation on private land parcels will be carried out during non-agriculture season. However, in case of any loss of crops/ trees compensation will be made as per entitlement matrix (refer Appendix 3 for illustrative calculation of estimated loss for these affected persons)				
8.	Affected IP	None	-				

- 23. Detailed impact description for each of the land parcels is provided under **Appendix 5**.
- 24. Through implementation of the EMP, contractors are required to maintain access to shops/ properties along the work alignments to avoid and limit the disturbance to the extent possible, and

implement mitigation measures specified in their contracts, which will be monitored by the project management and supervisionconsultants (PMSC) and PIU.⁸ Temporary impacts to people along the pipe routes will be avoided and/or mitigated through careful planning of the timing of implementation of works on busy road stretches and agricultural plots, good traffic management planning and implementation,⁹ and maintaining access to shops/properties during the construction period as outlined in the EMP.¹⁰

- 25. The following mitigation measures are proposed to avoid and/or mitigatetemporary impacts to businesses and residents during linear works:(i) provision of advance notice to community, (ii) scheduling implementation work on private agricultural plots in manner that avoids crop loss (iii) providing optimal bends in alignment to avoid felling of trees (iv) conducting awareness campaigns on the proposed project, its benefits, potential temporary impacts and mitigation measures, grievance redress mechanism, etc., (v) maintaining access by providing planks and leaving spaces to avoid disturbance to residents and businesses, (vi) managing traffic flows as per the traffic management plan prepared by the contractor in coordination with local authorities and communities, (vii) undertaking pipe-laying work in manageable sections in town areas and limiting the amount of time of open trenches, and (viii) placing details of telephone hotlinesand contact information of PIU offices in signagesin visible places. Majority of the measures will be enforced through the contract, which will have these as clauses. The responsibility for communications and outreach with people will be with the PIUs.
- 26. Another important consideration required for resettlement plan implementation is with respect to two affected person households that are doubly impacted, both under Water Supply transmission (this package) and the Lap Infrastructure subproject, both under STUDP. Every effort will be taken by the PIU and the contractors to ensure that disruption is minimized to these APs. Contractors for the two packages should hence start ciivl works in the referred two land parcels simultaneouslyto avoid impacting these people twice. Further, the the bidding documents for this subproject include the following provisions adressing the concerns of the 19 land owners regarding the construction works: (i) no heavy machinery will be used within their plots; and (ii) contractors should undertake multiple pipe laying works within a single property simultaneously to avoid inconveniencing the affected persons multiple times

B. Indigenous Peoples

27. Selected project location is within or close to the urban limits of Sarpang, and none fall in traditional enclaves of indigenous community groups. No household from indigenous people category (as defined by SPS) was found with in project villages and none are affected by the project.

III. SOCIOECONOMIC INFORMATION AND PROFILE

A. Profile of Affected Persons

28. **Persons facing temporary impacts.** None among the affected households have been

⁸ The project management and supervision consultant (PMSC) will be responsible for construction supervision.

⁹ Traffic management plans will be developed by the Contractor (approved by the PMSC) for any congested road segments during the implementation period.

¹⁰ To ensure disturbance is minimized to the extent possible, contractors will be required to expedite works in busy areas, provide pedestrian planks across trenches, manage traffic flows, minimize construction period, etc.

found to be below poverty line (BPL) households (refer Table 3) or vulnerable. 11 None of the affected households are female-headed. All the affected persons are titleholders of the affected land parcels.

Table 3: Summary Profile of Temporarily Affected Persons

	Table 3. Sullillary Frome	e of Temporarily Affected Persons
S. No.	Description	Profile
1	Components	Laying of clear water transmission mains (200 mm dia meter ductile iron pipe)
2	Total no. of temporarily affected persons (under both packages- 2 are twice affected)	19 HHs (landowners), 91 family members
3	Loss	Crop Loss- Although pipe laying work is proposed to be conducted in non-agricultural season, the affected landwoners may face crop losses if not done so. No. of such households are 2 (405 square meter of cropped area) Tree Loss- 2 households (Bhim Lhama Thingh, Sarpang Bazarareca nut plantation and Pema Wangchuck, Relangthang-Teak plantation) may loose few trees if transmission pipe alignment is not bent while traversing through their plots. Transmission alignment also passes through fruit orchards (mainly orange) of other land owners, though proposed alignment is along plot boundaries. Exact tree loss can not be ascertained at this stage and will be assessed during DMS. The final losses will be evaluated after the detailed measurement survey. Appendix 3 provides an illustrative calculation for these losses which will be ascertained upon DMS exercise. A lump sum provision has been made in the RP budget to meet these compensation requirements.
4	Titleholders	All 19
5	APs with vulnerabilities other than lack of legal title (BPL/ FHH/indigenous person/ daily labour/elderly headed/kutcha house)	None
6	Female headed households	0 (0% of 19 APs)
7	Total members of temporarily affected person households	91
8	Average household size	4.8
9	Social composition	
	IP (if any)	None
	Buddhists	2 (10.5%)
	Hindu	17 (88.5%)
	Other religion	0 (00%)
13	Educational attainment	
	Literate	13 (68.5%)
	Illiterate	6 (31.5%)
14	Per Capita Per Month Income of AP household (Nu.)	
	<2195.95	0 (0%)
	>2195.95	19 (100%)

¹¹ Vulnerable groups, inclide those below the poverty line, the landless, the elderly, women and children, and Indigenous Peoples, and those without legal title to land.

Note: Per Poverty Analysis Report, 2017, the poverty rate in Bhutan is Nu2,195.95 per person per month of which the food poverty line is Nu1,473.45/person/ month while the non-food allowance is Nu722.5/person/month. Source: Census and Socio-economic Survey of Affected Persons, STUDP.

29. Detailed profile of temporarily affected persons is presented in Appendix 4. The profile of temporarily affected persons is based on 100% transect walk of potentially affected households/ agricultural properties along transmission mains alignment.

IV. INFORMATION DISCLOSURE, CONSULTATION, AND PARTICIPATION

A. Public Consultation

30. The resettlement plan was prepared in consultation with stakeholders including affected people and their representatives, project beneficiaries, affected persons and their representatives, local leaders, district offcials, and PIU staff, project preparatory technaicl assistance consultants and ADB project team at various stages of the pre-project cycle conducted information and consultations with the public of Sarpangin February 2017, June 2017, November 2013 to March 2014 and in June and September 2013. A consultation meeting to discuss subprojects in Sarpang was conducted by the district administration on 17 February 2017. The proposed development interventions, perceived impacts and mitigation measures were discussed during these meetings. The public clearance for STUDP projects was provided during the 17th February 2017 meeting with the participation of 65 people (44 men, 21 women). Consultations with temporarily: impacted people were conducted by the Sarpang Dzongkhag on 26 January 2018 where all AP households were represented in the meeting. The scope of temporary impacts was discussed and agreed. This includes that there would be no transfer of titles upon allowing laying of transmission pipes through affected persons' land parcels. A third party independent evaluator also attended this consultation and confirmed that there was no coercion involved and the affected persons unanimously agreed to the project as well as the compensations. The outcome of this meeting with summary of consultations is presented in Appendix 6 of this resettlement plan. The independent third-party assessor's review is in Appendix 7. No objections received from the affected persons is provided as Appendix 2 of this document. All 19 affected perosns were consulted by the PIU and the independent third party regarding the pipe laying works. Summary of concerns raised by affected persons and mitigation measures are provided in table below:

Table 4: Summary of Concerns Raised by Affected Persons

Concern	Response from PIU (mitigation measures)
Ensure proper construction so pipes don't leak and	PIU assured that they will ensure highest
cause damage to crops	construction quality and urged affected persons to
	report any construction mismanagement issues to
	the PIU
6 households requested to be connected to water	The PIU informed households that the pipe will
supply from this scheme as exisiting water supply	convey untreated raw water and as per
scheme is erratic	government legislation they cannot provide water
	supply connections supplying untreated water.
Increasing the diameter of the exsiting water	PIU assured they will undertake field survey to
piepleine from 25 mm to 32 mm	assess feasibility and this may be incorporated into
	the scope of the exisiting project.
Request for shifting of old pipelines to avoid	PIU engineers will undertake site surveys to
boundary walls	assess what can be done
Affected persons requested that the contractor	PIU gave assurances that this will be ensured.
should not use heavy machinery during pipe laying	Relevant clauses have been incorporated into the
works to avoid damage to their properties.	constract documents to ensure this. Works

Concern	Response from PIU (mitigation measures)
	packages are being tendered simulatenously so
	that both contarctors can coordinate the activities
	and to ensure that consutruction in the 2 twice
	impacted plots can happen concurrently.

mm = millimeter, PIU = project implementation unit.

B. Information Disclosure

31. Information dissemination and disclosure has been a continuous process since thebeginning of the program. The approved resettlement plan will be placed in the office of Sarpang PIU and Sarpang dzong (district administration building). The PIU supported by PMSC will continue consultations, information dissemination, and disclosure. The finalized/approved RP will also be disclosed in ADB website, as well as on websites of MOWHS and PIUs. Project information will be continually disseminated through disclosure of resettlement planning documents, as and when updated. Information on compensation, entitlements and resettlement planning and management principles adopted for the subproject will be made available in the local language (Dzongkha) and the same will be distributed to affected persons. The consultation process will be continuous, through the project cycle.

C. Continued Consultation and Participation

32. The PIU supported by PMSC will extend and expand the consultation and disclosure process during the construction period. The PMSC will conduct training of contractors (engineers as well as safeguards personnel) and PIU staff.PIU will be assisted by PMSC to ensure that the communities in project areas are fully aware of project activities at all stages of construction. Community groups will be consulted and made aware of the civil works and project activities, anticipated impacts and mitigation measures, grievance redress processand contact details of PIU personnel prior to construction. Social and gender specialist of PMSC will support Sarpang PIU to undertake consultations, information dissemination and disclosure activities including disclosure activities related to environmental and social safeguards.

V. GRIEVANCE REDRESS MECHANISM

33. Local grievance redress mechanism is important in the implementation of the proposed subproject since any complaint and concern of the affected people must be addressed promptly at no cost to the complainant and without retribution. This mechanism shall be disclosed in public consultations during detailed design and in meetings during the construction phase. Complaints about involuntary resettlement impacts of projects will be established through the established GRM process below.

A. Grievance Redress Mechanism

34. The project grievance redress mechanism (GRM) follows a tiered system, starting at the local level. The GRM structure has been agreed with the concerned agencies and a notification of the GRM structure as shown in Figure 7 ahead and the Grievance Redress Committee (GRC) composition have been provided by MOWHS. See government notification in Appendix 8. The GRM will ensure that grievances and complaints regarding land acquisition, compensation and resettlement or other social and environmental issues will be addressed in a timely and satisfactory manner. People in the towns will be made aware of their rights and the detailed procedures for filing of grievances. PIUs will be undertaking outreach activities to make people

aware of the GRM and will be published on the thromde/ dzongkhag and MOWHS websites. GRM will also be displayed at notice boards in the PIU offices.

- 35. **First level of GRM.** Aggrieved persons may first approach the contractor's site representative/ project manager in case of complaints related to construction related nuisances. The complaint must be recorded in the site register and contractor should provide a resolution to the complaint within 2 days. In case, the complaint is not resolved at this level, the aggrieved persons can then file a complaint with the PIU office. Aggrieved persons are entitled to lodge complaints regarding any aspect of the land acquisition, entitlements, benefits or rates of payment as well as any project related social or environmental issues. Complaints can be made verbally or in written form. Complaints made to the PIU should be resolved within 3 days. All complaints must be recorded by the PIU, including actions taken to resolve the complaint. Complaints, their nature and resolution should be mentioned in the quarterly progress reports. A sample grievance registration form is appended as Appendix 9.
- 36. **2nd level of GRM:** At this level, the PIU Manager/Municipal level will coordinate with the Dzongkhag/ thromde municipal Committee which should be in place prior to project implementation. This committee will be comprised of: (i) Dzongda (district administrator) or thrompon (mayor) as Chairman; (ii) municipal engineer (PIU Project managers) as Member secretary; (iii) District engineers; (iii) district/ municipal planning officer; (iv) district/ municipal legal officer; (v) district/ municipal environmental officer; (vi) district/municipal land record officer, (vii) town representatives (elected); and (viii) gender focal person of PIUs. The aggrieved person who filed the complaint (or representative from affected household) will be called to present his/her case and deliberation on the case will be done through proper hearing or mediation. It will be the responsibility of the dzongkhag/ thromde committee to resolve the issue within 15 days from the date the complaint is received Minutes of meeting of the Dzongkhag/ thromde committee meeting will be kept and resolution provided will be recorded for purposes of project monitoring.
- 37. If the complaint is unresolved at this level, the PMU, PIU or the District Administrator will inform the aggrieved person accordingly and assist them in elevating the complaint to the PMU/Central Grievance Committee.
- 38. **3rd level of GRM**. Grievances not redressed at the Dzongkhag/ thromde municipal committee within 15 days will be brought to the Central Grievance Redress Committee at MOWHS level. The Central Grievance Redress Committee will comprise of: (i) Secretary, MOWHS (Chairman); (ii) Director, DES (Member secretary); (iii) Project manager, PMU; (iv) Project coordinator, PMU; (v) Water and Sanitation Division chief; (vi) legal officer, MOWHS; (vii) environmental officer, MOWHS; (viii) gender officer (MOWHS); and (ix) representatives from local nongovernment organizations (NGOs). It will be the responsibility of the dzongkhag/ thromde committee to resolve the issue within 10 days from the date the complaint is received. In the event, the grievance is still not resolved; the matter may be elevated by the aggrieved person to an appropriate court of law. The court will have the final authority to approve or reject the case. Aggrieved persons may seek recourse through legal system at any stage of the GRM process.

B. Record Keeping

39. Records will be kept by the PIU of all grievances received, including contact details of complainant, date the complaint was received, nature of grievance, agreed corrective actions and the date these were made effective, and final outcome.

C. Costs

- 40. All costs involved in resolving the complaints (meetings, consultations, communication, and information dissemination) will be borne by the municipalities (Sarpang PIU for this subproject) that will operate and maintain the road and drainage network.
- 41. The GRM notwithstanding, an aggrieved person shall have access to the country's legal system at any stage. This can run parallel to accessing the GRM and is not dependent on the negative outcome of the GRM.
- 42. In the event, the established GRM is not in a position to resolve the issue, the affected persons can also use the ADB Accountability Mechanism through directly contacting (in writing) the Complaint Receiving Officer at ADB headquarters. The complaint can be submitted in any of the official languages of ADB's developing member countries. The ADB Accountability Mechanism information will be included in the project information document to be distributed to the affected communities, as part of the project GRM.

Local Contractor (construction related) 2 days L е е PIU records complaint 5 days Chairman -Dzongda(district administrator)/ thrompon (mayor) L Member - secretary, municipal engineer (PIU е Other members - district engineers, planning V officer, legal officer, environmental officer, е Dzongkag/ thromde municipal land record officer, town representative gender (elected), focal committee representatives of affected households will participate in the meetings 2 20 days Chairman - Secretary, MOWHS Member secretary – Director, DES L Other members-PMU, PM; Project coordinator; WSD chief; legal officer; е Central environmental officer; gender officer V (MOWHS), representatives from local **Grievance Redress Committee** е NGOs 30 days 3 Court

Figure 7: Grievance Redress Process

D. Information dissemination methods of the GRM.

43. The PIU with support from social and gender specialist of PMSC will conduct meetings to generate awareness on GRM. The campaign will ensure that the poor, vulnerable and others are made aware of grievance redress procedures and entitlements per project Resettlement Plan including, who to contact and when, where/ how to register grievance, various stages of grievance redress process, time likely to be taken for redressal of minor and major grievances, etc. Grievances received, and responses provided will be documented and reported back to the affected persons.

44. **Periodic review and documentation of lessons learned**. The PMU safeguard officers will periodically review the functioning of the GRM and record information on the effectiveness of the mechanism, especially on the PIU's ability to prevent and address grievances.

VI. POLICY AND LEGAL FRAMEWORK

- 45. The policy framework and entitlements for the project are based on applicable laws and regulations of the national and state government, ADB'sSafeguardsPolicy Statement 2009; andthe applicable laws/ policies of the Royal Government of Bhtan.
- 46. **ADB Safeguards Policy Statement (2009)**. The core involuntary resettlement principles applicable are: (i) land acquisition, and other involuntary resettlement impacts will be avoided or minimized exploring all viable alternative subproject designs; (ii) where unavoidable, time-bound Resettlement Plans will be prepared and APs will be assisted in improving or at least regaining their pre-program standard of living; (iii) consultation with APs on compensation, disclosure of resettlement information to APs, and participation of affected persons in planning and implementing subprojects will be ensured; (iv) vulnerable groups will be provided special assistance; (v) payment of compensation to APs including non-titled persons (e.g., informal dwellers/squatters, and encroachers) for acquired assets at replacement rates; (vi) payment of compensation and resettlement assistance prior to the contractor taking physical acquisition of the land and prior to the commencement of any construction activities; (vii) provisionof income restoration and rehabilitation; and (viii) establishment of appropriate grievance redress mechanisms. ADB SPS requires payment of compensation prior to actual loss.
- 47. **Royal Government of Bhutan's Laws and Policies.** These include Land Act of Bhutan, 2007- theprimary legal instruments for Land Acquisition and Resettlement in Bhutan which regulates ownership, sales and the compensation payable by the Royal Government of Bhutan, Thromde Act of 2007, and The Land Pooling Rules in the Kingdom of Bhutan, 2009.

A. The Land Act of Bhutan, 2007 and other National Policies

1. The Land Act of Bhutan, 2007¹²

- 48. The is envisaged to manage, regulate and administer the ownership and use of land for socioeconomic development and environmental well-being of the country through efficient and effective land administration, security of land tenure, equal opportunity to land, facilitation of operation of land market, effective use of land resources and conservation of the ecosystem.
- 49. The key features of the Land act are as follows:
 - (i) Any land transaction taking place within the municipality will be approved by the National Land Commission (NLC) Secretariat. Landowners need not go to court to transfer the *thram*. This can now be done at the local level (i.e. *dzongkhag*, *gewog*, *thromde*):
 - (ii) Power over land management has been streamlined and decentralized to local authorities like the *gewog tshongde*, *dzongkhag tshogdu*, and *thromde*. The local

¹² The Act was enacted on 27th June 2007 and supersedes the Land Act,1979 except for provisions pertaining to water channel and embankments and compensation on the crop damaged by cattle, and, any provisions of any law, bylaw, rules or regulations that are inconsistent with this Act.

- bodies are empowered to resolve land disputes, endorse land transactions, and convert land categories;
- (iii) Landowner with an independent *thram*has the exclusive right to transact for his/her land or surrender the land to the government. Transaction of a piece of land registered under joint ownership should have the consent of all co-owners to the extent of the share of the owner transacting the land if specified in the *thram*.
- (iv) The government is empowered to acquire registered land for public interest. Acquisition of land occupied by religious monuments will be avoided;
- (v) The acquisition will entail fair compensation with the owner provided with substitute land or cash payment or both as compensation. Acquisition of land in rural areas land owner will have discretion to opt for either substitute land or cash compensation offered by government. In rural areas, the offer of substitute land shall be in the order of preference of same village, *gewog, dzongkhag.* In urban area land owners shall be provided cash compensation. Substitute land can be offered if the land acquired is the only plot owned by the land loser. If the value of substitute land is inadequate additional cash compensation shall be provided. The government shall ensure that substitute land provided is commensurate with the value of land parcel acquired:
- (vi) If remaining land of the land parcel being acquired is less than 10 decimal, entire land parcel shall be acquired;
- (vii) Landowners in the *thromdes* will receive cash compensation calculated by the Property Assessment and Valuation Agency (PAVA), created by the act under the Ministry of Finance, for any land and property acquired. PAVA shall revise the compensation rate every 3 years. The government may provide substitute land if the plot acquired is the only land of the landowner;
- (viii) Any government institutions may acquire registered private lands for public purpose. As required, the government agency applying for land acquisition must submit the application to the NLC for approval. If approved, the *Dzongkhag* Land Acquisition Committees (DLAC) shall serve notices to the landowners at least 3 months prior to acquisition. The DLAC shall look for substitute land and process for forestry and environmental clearance. The compensation and valuation estimates for crops, land, fruit trees, and structures must be processed accordingly. The DLAC shall prepare a detailed report and submit it to NLC within 1 month. Land shall be acquired only after the substitute land has been registered and the acquiring government agency has fully paid the cash compensation to the landowners; and
- (ix) The land under acquisition shall be taken over only after registering the substitute land in the name of the affected landowner or the cash compensation has been made to the landowner.

2. The *Thromde* Act of 2007

50. The Thromde Act of 2007, which became effective in February 2008, empowers the RGOB to establish certain geographical, administrative, or economic area in the country as a thromde or throm (urban area). The thromde or throm is a local government unit that may be further classified into a gyelyong thromde, dzongkhag thromde, yenlagthrom, or gewog throm according to its socioeconomic profile. This government unit is responsible for providing urban infrastructure, services, and land use development plans. The thromde or throm is constituted on

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¹³ Latest Revision of Compensation Rates for Land, Structures, Cash Crops and Fruit Trees have been revised by PAVA in 2017 (21st April 2017), and in force with immediate effect, vide notification no.- FM/DNP/PA-1/2017/1341.

the basis of population, population density, land area, revenue, and type of economic activity in the area. The Thromde Act of 2007 authorizes the thromde or throm to secure finance for infrastructure development in accordance with the country's laws and regulations, with prior approval from the government.

51. The Thromde Act of 2007 includes the provision for land pooling guided by land development in carrying out planned development in line with the government goal of ensuring the timely and sustainable provision of urban services. Also defined in the act is the mechanism for land registration, prohibition of land transactions, and land use conversions in areas subject to land pooling.

3. The Land Pooling Rules in the Kingdom of Bhutan, 2009

52. The rules and regulations on land pooling in Bhutan draws from the Land Act and the Thromde Act, which were enacted by the government in 2007. These rules were framed with an objective to facilitate the planned and harmonious development of land in Thromde by providing for land pooling schemes. Compensation for non-land assets is provided on the basis of prevailing rates prescribed by the Property Assessment and Valuation Agency, under the Ministry of Finance, Bhutan. A gap analysis is presented in Appendix 1 (comparison of borrower's policy and ADB policy).

B. Comparison of the National Policies with Key Indicators of ADBs Safeguard Policy Statement 2009

- 53. A comparison of the key requirements as per ADB SPS 2009 with respect to provisions available with the relevant policy and legal framework (specifically the Land Act 2007 and its rules and the Land Pooling rules, 2009) of Bhutan has been made. The identified gaps and gap filling measures are:
 - screening past, present and future involuntary resettlement impacts and risks, the need to identify/survey displaced persons: The Project will undertake screening of all subprojects using the ADB involuntary resettlement checklist, to identify past, present and future involuntary resettlement impacts and risks;
 - (ii) Gaps in provision of stakeholder consultations and establishing a project-level GRM for projects that do not have significant resettlement impacts. The Project will establish project-level GRM.
 - (iii) Improve or at least restore livelihoods of all displaced persons: Gaps are with respect to lack of recognition of non-titleholders amongst affected persons/category and provision of measures to improve or at least restore livelihoods. These will be duly considered by project,
 - (iv) No special provision for vulnerable groups: define vulnerable group as per SPS, policy principle 2 and provide special assistance.;
 - (v) No provision for inflation adjustments: the entitlement matrix should include provision for inflation adjustment of all allowances and assistances;
 - (vi) No clear provision for engagement of third party monitor of negotiated purchases: to ensure a fair and transparent process, a third party independent monitor will be hired to certify the process the negotiated purchase was undertaken in a transparent, consistent and equitable manner.;
 - (vii) Disclosure requirements not applicable: disclosure of resettlement plan and resettlement framework to affected persons;
 - (viii) Requirement to monitor of resettlement plan implementation: Resettlement plan implementation to be closely monitored.

54. The details of identified gaps, ADB SPS requirements and how the gaps will be addressed through this RP are given in Appendix 1. In case of discrepancy between the policies of ADB and the government, ADB policy will prevail.

VII. ENTITLEMENTS, ASSISTANCE AND BENEFITS

A. Types of Losses and Affected Person (AP) Category

- 55. The anticipated types of losses due to the transmission line Sarpang Water Supply Development Project and the distribution line under the Shechamthang LAP infrastructure package are: (i) crop loss (titled persons), if pipe laying is carried out during agriculture season and (ii) loss of trees, if transmission pipe alignment is not provided with bends in stretches passing through tree plantations, as assured by the PIU.
- 56. According to ADB SPS, 2009 in the context of involuntary resettlement, affected persons are those who are physically relocated i.e., lose residential land, or shelter and/or economically displaced (loss of productive land, structures, assets, access to assets, income sources, or means of livelihood). The absence of formal and legal title to the land does not bar the affected person from receipt of compensation and resettlement assistance from the project. Vulnerable APs are eligible for additional compensation and assistance and are to be accorded priority in employment in project related construction activities.
- 57. Inventory of Loss Survey were conducted along stretch of transmission pipe alignment in Januray 2018 to determine the total number of affected persons and losses. Eligibility for compensation will be the date of start of the DMS prior to commencement of civil works in sections ready for construction. Sample form for DMS and inventory of loss survey are provided in Appendix 10. The date of DMS survey will serve as the cut-off date for eligibility. Persons who enter the affected areas and build assets/businesses over the affected land after the cut-off date will not be eligible for compensation. They will, however be given sufficient advance notice (atleast 60 days) and assisted to vacate premises and dismantle affected structures prior to project implementation. Information regarding the cut-off date for eligibility, types of compensation will be documented and disseminated throughout the project area. However, if there is any restriction caused to land owners to cultivate on their land parcels due to construction acticities, the affected households will be entitled for compensation for such losses.

B. Entitlements

- 58. The entitlement matrix (Table 4) summarizes the type of possible loss and corresponding entitlement in accordance with ADB and government policies, based on the principle of replacement cost. In addition to the estimated potential temporary impacts, the entitlement matrix safeguards unforeseen impacts.
- 59. In accordance with the entitlement matrix for the project, all affected persons will be entitled to a combination of compensation packages and resettlement assistance, depending on the nature of ownership rights on lost assets and scope of the impacts including socioeconomic vulnerability of the affected persons. The entitlement matrix for the subproject based on the above policies is in Table 5.

¹⁴ The Detailed Measurement Survey (DMS) gathered personal information on the APs, type of crops grown, yeild, number of persons employed, income and profits per month, vulnerability, if any of the owner or employees.

C. Relocation and Livelihood Loss

60. No relocation or loss of livelihood is envisaged under the subproject components proposed in Sarpang.

D. Loss of crops and trees

61. The resettlement plan recognizes that potential temporary impact linked to loss of crops and trees may be caused due to sub project activities. Hence, as a measure for livelihood protection, all potential affected persons will be served 30 days advance notice regarding commencement of civil work.

E. Procedures for assistance

- 62. **Temporarily affected persons (crop loss).** The following steps are envisaged to be conducted by PIU and PMSC:
 - **Step 1:** Conduct public awareness and information dissemination prior to construction works (through PIU and PMSC)
 - **Step 2:** PMU to pay compensations/ allowances to affected persons based on DMS and prior to commencenement of works. Project Manager to closely monitor these activities. Records for compensation paid to be recorded for accounting and audit purposes.
 - **Step 3:** The PMSCsafeguards and gender specialistand PIU Project manager will (a) jointly brief contractors about scheduling of work including simultaneous work on the lands belonging to 2 households who will have 2 pipes under different packages running through their lands and minimizing impact to affected people during contruction¹⁵.(b) update the Resettlement Plan in case of any alignment differences from DMS during construction (d) send the updated Resettlement Plan to ADB for review and approval after detailed designs and surveys are complete.

¹⁵ Contractor will be briefed on sectional completion to ensure that vast strateches are not dug up at one go, thereby minimizing extended disturbances to affected people

Table 5: Entitlement Matrix

	Type of		Definition of Entitled	Compensation and R&R Entitlement	Implementation	
	Loss	Application	Person	Policy	Issues	Responsible Agency
1	Loss of trees/crops	Standing trees/crops	Legal titleholders	1. Affected person will be notified and given 120 days advance notice to cut/clear the affected trees and seasonal crops. 2. Compensation for trees based on timber value at market price, and compensation for perennial crops and fruit trees at annual net product market value multiplied by remaining productive years; compensation for crops based on market price, and for timber and fruit trees and crops, labour costs and input costs; to be determined by the Property Assessment and Valuation Agency (PAVA). b 3. Gaps, if any between compensation determined as per PAVA rate and replacement cost will be covered through compensation added to resettlement allowance	Work schedules will avoid harvest season. Valuation of trees has to be determined by the Sarpang dzongkhag valuation committee in consultation with PAVA	Dzongkhag/Thromde administration/ PMU /PIUs will ensure provision of notice.
2	Temporary loss of land	Land temporarily required for project activities	Legal titleholders Legal titleholder/ non- titleholders	 Restoration of land to its previous or better quality. In cases where there are temporary disruptions/restrictions to agricultural activities/cultivation, 30 days advance notice will be served to affected persons Compensation for damaged assets at replacement cost.^c 	PIUs will identify and include details in the resettlement plan/s • Arrangement by the contractor on the activities to be taken up. • Impacts if any on the structures, assets and plantation due to the temporary occupation. • Extent of rehabilitation, restoration of the site.	The rental value and duration of lost income will be determined though survey and consultation with affected persons. A photograph of the status prior to occupation to be made by the PIU. PIU will ensure that the compensation is paid prior to handing over of site to the owner.

	Type of Loss	Application	Definition of Entitled Person	Compensation and R&R Entitlement Policy ^a	Implementation Issues	Responsible Agency
	T	Neigendunk			In cases where project activities restrict APs to cultivate land for a season or more, the AP will be entitled for compensation commensurate with value of crop which s/he would have harvested otherwise	The site will be taken up by the contractor after consent of PIU/PMU.
3	Temporary disturbance s during construction	Noise, dust, access restrictions due to construction, loss of minor non-land assets like boundary walls etc due to construction work	Households that may face construction related nuisances	Construction related nuisances such as noise dust and access restrictions will be mitigated through the contractor's environmental management plan (EMP). Any loss of non-land assets due to construction works will be reinstated by contractor as per provisions of the EMP.	Close construction supervision will be required Effective lower tiers of GRM will be required to manage such issues. .	PIU with support of PMSC will closely monitor the contractor and construction activities and ensure strict compliance with provisions of the EMP.
4	Any other loss not identified			Any unanticipated impacts of the project will be documented and mitigated based on the spirit of the principles agreed upon in this Resettlement Framework and the Land Act (2007) Unanticipated involuntary impacts will be documented and mitigated based on the principles provided in the ADB involuntary resettlement Policy.	PMU, PIUs and PMSC	PMU will ascertain the nature and extent of such loss. The safeguards cell will finalize the entitlements in line with the ADB Safeguard Policy Statement.

^a Compensation/Assistance under the heads of Transportation costs and monthly subsistence allowance shall be payable to displaced families only once. For example, if an affected household loses land, shelter and commercial business in one lot, the family will get each of these allowances only once. Statutory compensation rates will be adjusted for inflation till the year of compensation payment.

^b In case of crop/tree loss, the replacement cost will include the fair market value, inputs costs and labour costs.
^c Per ADB SPS, replacement cost includes: (i) fair market value; (ii) transaction costs; (iii) interest accrued, and (iv) transitional and restoration costs.

VIII. COMPENSATION MECHANISM

63. The compensation principle is that of replacement cost for all types of losses. The project will ensure that any loss or damage to any private properties including loss of trees and crops and any other unanticipated loss during construction work will be compensated at full replacement cost. The principlefor determining valuation and compensation for assets, incomes, and livelihoods is replacing the loss of affected assets and restoring the loss of income and workdays experienced by the displaced persons as detailed below. Titleholders and non-titleholders are both entitled to compensation as per the agreed Entitlement matrix under this resettlement plan. Appendix 3 provides applicable basis for estimation of trees and crop losses and sample illustration for such calculations. Compensation will be paid prior to commencement of civil works in the affected land parcel.

A. Assistance for loss of trees and crops

64. There will be loss of assets such as crops which will be compensated as per Entitlement Matrix. All compensation and assistances will be paid to the entitled affected persons prior to commencement of civil works.

IX. RESETTLEMENT BUDGET AND FINANCING PLAN

A. Resettlement Costs

65. The resettlement cost estimate (Table 6) includes compensation for potential crop loss, grievance redress and awareness generation cost, GRM and capacity building / training costs. The government will bear all resettlement plan costs and will be responsible for releasing the funds for resettlement in a timely manner. The estimated total resettlement cost for the subproject is Nu5.32million. The resettlement cost items and estimates are outlined in Table 6.

Table 6: Resettlement Cost

	Table 6. Resettlement 505t							
	Compensation for type of loss	Quantity	Days/ months	Unit rate	Total amount (Nu)	Remarks		
1	Tree and Crop losses				100,000	This includes compensation of value 7393 Nu (refer Appendix 3) estimated for loss of crops and trees most likely to be damaged, as identified during transect walk. The exact amount will be confirmed during DMS. Extent of loss will depend on scheduling of civil work and provision of alignment bends that may be needed.		
2	Water connection for twice affected households	2		10000	20,000			
3	Detailed measurement survey and census survey for RP updation		LS	300000	300,000			
4	Other							
Α	Grievance redress		LS	250000	234,000			
В	Consultation with APs		LS	100000	100,000			
С	Awareness generation		LS	200000	100,000			
5	Total (Water Supply Package)				854,000			
6	Contingency		11.5%		97,000			

	Compensation for type of loss	Quantity	Days/ months	Unit rate	Total amount (Nu)	Remarks
7	Provisional sum (for any safeguards support)		LS		116,000	
8	Grand Total				1,06,700	

X. IMPLEMENTATION ARRANGEMENTS

66. **Executing agency.** The Water and Sanitation Division (WSD) under the Department of Engineering Services, Ministry of Works and Human Settlements (MOWHS), Royal Government of Bhutan is the executing agency for the project, which will receive strategic directions from the project-level steering committee.

A. Project Management Unit

67. The Water and Sanitation Division (WSD) under the Department of Engineering Services, MOWHS will house the project management unit. (PMU) The PMU will be charge of overall planning and implementation under the guidance of the DES project director and the MOWHS.

B. Project Implementation Unit

- 68. The Sarpang Dzongkhag is the PIU and will manage day to day affiars related to Sarpang subprohjects and oversee the implementation of this resettlement plan. The Sarpang PIU comprises of one project manager, one engineer, one technican, and one environment cum gender officer.
- 69. The PMU and PIUs will be assisted by Social and Gender Specialist of the PMSC to monitor project compliance on social safeguards. The Project managers of the PIUs with support from other PIU staff will conduct field observations and consultations with local communities. The following are institutional roles and responsibilities to ensure social safeguards requirements are followed during design and construction stages.
- 70. **Program Management Unit in WSD** on behalf of responsible state agencies will:
 - ensure that the resettlement framework provisions are adhered to and the draft Resettlement Plans and DDRs prepared during project processing are updated based on detailed designs;
 - (ii) engage in ongoing meaningful consultations with stakeholders and affected persons particularly through implementation of the consultation and participation;
 - (iii) review, approve, prepare RPs/ DDRs for new subprojects or components if any, with support from the national social and gender specialists of PMSC;
 - (iv) ensure provision of timely payments and assistance to affected people, and all proposed compensation and mitigation measures by the dzongkhag/ thromde administrations to the affected persons before displacement/ impact occurs in sections ready for construction; ensure that compensations are paid to affected persons prior to start of construction activities;
 - (v) inform ADB regarding any unanticipated impacts identified during project implementation, prepare the required corrective action plan and implement the same;
 - (vi) support PIUs for establishment of project GRM at town level and ensure all grievances are addressed in a timely manner;
 - (vii) conduct oversight and develop effective mechanism to monitor implementation of resettlement plans/ IPPs (if any) to ensure smooth project implementation; and

- (viii) review the consolidated monthly reports by DMSC social and gender specialist and submit semi-annual monitoring reports to ADB (Guidance on preparation of semi-annual social safeguards monitoring report is provided in Appendix 11). The monitoring reports should record the progress of resettlement activities and any compliance issues, grievances, corrective actions taken, follow-up actions required and status of compliance with relevant loan covenants.
- ensure that bidding and contract documents include specific provisions requiring contractors to comply with all: (i) applicable labor laws and core labor standards on (a) prohibition of child labor as defined in national legislation for construction and maintenance activities, on (b) equal pay for equal work of equal value regardless of gender, ethnicity or caste, and on (c) elimination of forced labor; and (ii) the requirement to disseminate information on sexually transmitted diseases including HIV/AIDS to employees and local communities surrounding the project sites. In addition, requirements in the resettlement plan related to scheduling of works/activities to avoid/mitigate impacts, contract clauses related to priority employment in construction activities as well as operation and maintenance for affected persons/potentially affected persons will be included in the contract by PMU, with the support of PMC.
- 71. **Project Implementation Unit Sarpang**The Sarpang PIU will receive assistance from the national social and gender specialist of PMSC. The PIU field officers with oversight of PIU project managers will:
 - (i) update the draft resettlement plans prepared during project implementation in case of any design/ alignment changes;
 - (ii) screen impacts and prepare new resettlement plans in accordance with resettlement framework and government rules (if required);
 - (iii) engage in ongoing meaningful consultations with stakeholders and affected persons to assess and address their concerns;
 - (iv) ensure provision of timely payments and other assistance to the affected persons and ensure that all compensations have been paid by the dzongkhag/ thromde administrations and mitigation measures are in place prior to commencement of construction;
 - (v) implement the ADB approved resettlement plans
 - (vi) advise and/or recommend ways to minimize/ avoid social safeguards impacts;
 - (vii) prepare and implement corrective actions in the event of any unanticipated impacts occurred during implementation to minimize and/or avoid social safeguards impacts;
 - (viii) prepare and submit monthly social safeguards monitoring reports to PMU and support PMU in preparation of semi-annual safeguards monitoring reports for submission to ADB;
 - (ix) establish GRM at town level and address any grievances brought about through the GRM in a timely manner; and
 - (x) facilitate redressal of grievances at PIU level.

72. Roles of PMSC social and gender specialist (pertaining to social safeguards):

- (i) Coordinate and work with PIUs for the conduct of public consultations and day-to-day monitoring of subproject implementation;
- (ii) Lead the conduct of training activities as per capacity development program, including GRM implementation;
- (iii) Ensure that DDRs and Resettlement plans are updated when there will be changes in scope or components or alignments under the subproject;
- (iv) Assist MOWHS and PMU in the following aspects:

- a. ensuring overall compliance with government rules and regulations and ADB SPS in terms of social safeguard requirements for the subprojects;
- b. preparing the semi-annual social monitoring reports for ADB.
- (v) Ensure disclosure of DDRs and resettlement plans in locations accessible to the public and in form and language understood by the local stakeholders; and
- (vi) Support PIUs in implementing the resettlement plans.

Table 7: Institutional Roles and Responsibilities for Safeguards Implementation

Activities	Agency Responsible	
Subproject Initiation Stage	J	
Finalization of sites for sub-projects	PMU/PIU with PPTA support	
Obtaining NOCs for each site, as required	PMU/PIU	
Clearance and disclosure of updated safeguard documents on website, municipal notice boards and to affected people Disclosure of sub-project	PMU/PMC PIU/PMSC	
details		
Meetings with affected persons and communities	PIU/PMSC	
Formation of Valuation Committee	Vlauation committee will be set up	
	in Sarpang dzongkhag. PMU and PIU	
Resettlement Plan Preparation/ Updation Stage	PIU/PMSC	
Conducting Detailed Measurement Survey and Census of all affected	PIU	
persons		
Computation of entitlements	PIU/PMU	
Conducting FGDs/ meetings / workshops during SIA surveys, recording of	PIU	
preferences and priorities of affected persons (e.g. related to relocation,		
training etc.)		
Computation of Replacement Values of lost land/properties/lost income	Valuation committee/PIU/PMU	
Categorization of APs for finalizing entitlements	PMU/PIU/	
Formulating compensation and rehabilitation measures	PMU/PIU	
Disclosure of final entitlements and rehabilitation packages to affected	PIU/DSC	
Approval of recettlement plan	PMU/ADB	
Approval of resettlement plan	PMU/ADB	
Implementation Stage	DMI I/DII I	
Payment of compensation	PMU/PIU	
Taking possession of land	PIU	
Implementation of mitigation and rehabilitation measures	PIU/PMSC/Contractor,	
Consultations with affected persons during rehabilitation activities	PIU/ PMSC	
Grievance redressal	PIU/PMU/GRC	
Internal monitoring	PMU/PMSC	

DSC = design and supervision consultant, GRC = grievance redress committee, NOC = no objection certificate, PIU = project implementation unit, PMU = project management unit, PMSC = project management and supervision consultant, PPTA = project preparatory technical assistance.

C. Capacity Building

73. The safeguardsspecialist of the project consultants (PMSC, DSC), and other key project related staff of PMU and PIUs, will be oriented and trained by ADB on ADB safeguards policy and the approved project resettlement framework; resettlement plan preparation and updation process; monitoring, reporting and disclosure requirements, roles of different stakeholders in safeguards

implementation and GRM, envisaged consultation and participation process, reporting and monitoring requirements, core labour standards for contractors, handling issues in social inclusion, potential conflict resolution, typical implementation issues, and lessons learnt in safeguards implementation in other ADB funded water supply projects. The key focus area of the training program will be ADB resettlement policy and principles and the training will focus on the differences between the provisions of the ADB policy and Gol/GoB laws, as the awareness of these differences and the need to follow the provisions of ADB policy are critical for successful implementation of RPs.

- 74. The PMSC will be responsible for development of a training program based on a capacity assessment of target participants (contractor(s), PIU) and for implementation of the training program to build capabilities on resettlement policy, planning, mitigation measures and safeguards. Basic principles of resettlement planning, avoidance of involuntary resettlement impacts and minimisation measures with an emphasis on protection of the poor and vulnerable, access to project information and benefits by affected persons, grievance redress process and its importance, and monitoring shall be covered in the training. Training on involuntary resettlement and gender issues will be given to social and gender specialist of PMSC, gender focal persons of PIU and PMU, and contractors 'personnel.
- 75. Typical modules will be (i) sensitization to social safeguards, gender and vulnerability issues, (ii) resettlement planning and typical issues in implementation, (iii) introduction to social safeguards policy, including ADB policy, GRM, entitlements, compensation and social safeguards monitoring requirements and mitigation measures; (iv) monitoring and reporting on resettlement plan implementation, including monitoring methods and tools; and (v) core labour standards, including equal pay for equal work etc. The suggested outline of the training program is presented in Table 8.

Table 8: Indicative Capacity Building and Training Program

				Tentative
Description	Contents	Schedule	Participants	Schedule
Program 1	Module 1 – Orientation	1 day	Project	Prior to start of
Orientation	ADB Safeguard Policy		management	implementation
Workshop	Statement		unit (PMU)/	
	Government of India		Project	
	policy		implementation	
	Government of Bihar		unit (PIU)	
	policy			
	Module 2 –			
	Social/Environmental			
	Assessment and			
	Resettlement Planning/			
	initial environmental			
	examination (IEE)			
	Process			
	ADB policy and process,			
	iden t ification of impacts			
	and mitigation measures,			
	resettlement plan/ IEE			
	preparation,			
	implementation, and			
	monitoring requirements.			
	Incorporation of			
	safeguards and gender			
	into project design and			
	contracts, with particular			

Description	Contents	Schedule	Participants	Tentative Schedule
	reference to water supply projects			
Program 2 Workshop for Contractors and Supervisory staff	Involuntary resettlement/ environmental issues during construction Implementation of resettlement plan/ IEE Monitoring of resettlement plan/ IEE implementation Reporting Requirements	1 day	PMU, PIU & Contractors	Prior to start of implementation
Program 3 Experiences and Best Practices Sharing	Experience sharing on resettlement plan/ IEE and Implementation – - Issues and Challenges -Best Practices followed	Half day, on a regular basis	PMU PIU Contractors	Semi-annual; throughout project cycle.

XI. MONITORING AND REPORTING

76. RP implementation will be closely monitored to provide effective basis for assessing resettlement progress and identifying potential difficulties and problems. Monitoring will be undertaken by the PMU supported by PMSC. Monitoring will involve administrative monitoring to ensure that implementation is on schedule and problems are dealt with on a timely basis; socioeconomic monitoring during and after any resettlement impact utilizing baseline information established through the detailed measurement/census survey of affected persons proposed during resettlement plan updation, and overall monitoring. Monthly progress reports reporting status of RP implementation will be prepared by PIU assisted by PMSC, and consolidated by the PMU with the assistance of PMSC social and gender specialist. The executing agency will submit semi-annual monitoring reports to ADB for review. ADB will post all safeguard monitoring reports on ADB website. The PMU/ exeuciting agency will submit semi-annual monitoring reports to ADB for review. All safeguard monitoring reports will be posted on ADB website. A sample monitoring template is given in Appendix 11.

XII. IMPLEMENTATION SCHEDULE

77. All the compensation and assistance as per entitlement matrix will be completed prior to the start of civil works at each specific location. Construction will only be commenced after the full payment of compensation to the affected persons. All entitlements are to be paid prior to commencement og works. Written confirmation is required to be sent by the PMU to ADB stating that all compensation has been paid to APs. Construction work can begin only in sections where compensation has been paid. The resettlement plan implementation schedule is presented in Table 9.

Table 9: Implementation Schedule

	2018			2019						
	Q1	Q2	Q3	Q4	Q 1	Q2	Q3	Q 4	2020	2021
Appointment of contractors for civil works										
Conduct/complete detailed measurement surveys based on actual alignment, census and socio-economic surveys, issuance of ID cards and due diligence for RP updating										
Identify Vulnerable APs, if any*										
Update draft RP to reflect surveys, consultations, design changes, and due diligence										
Consultations and disclosure, awareness generation										
Review and approval (ADB)										
Training/capacity building of PIU safeguards officer and engineers, DSC safeguards and supervision (field level) personnel and contractors' personnel										
Refresher training of PIU on grievance redress cell functions/responsibilities, and briefing of GRC on its functions										
Payment of compensation and handover of site/alignment to contractors for start of civil work										
Internal monitoring, including of RP implementation										-
Assistance to APs/ potential APs in getting project construction/maintenance/operation related work/jobs										
Repair/reconstruction of affected facilities, structures, utilities, if any										

COMPARISON OF BORROWERS POLICY AND ADB POLICY

	Involuntary Resettlement Policy Principle	ADB Safeguard Policy Statement (SPS)	Land Act (2007) and Rules	Land pooling Rules	Measures to Bridge Gaps
1	Screen project	Screen the project to identify past, present and future involuntary resettlement impacts and risks. Conduct survey and/or census of displaced persons, including a gender analysis, specifically related to resettlement	Application of the requiring agency is screened/ reviewed at the level of Dzongkhag/ Thromde committee and national land commission where environment and other public interest are key considerations. However, no explicit mention of past and future involuntary resettlement impacts and risks exists in the Act. The Act requires feasibility study to be conducted as part of which affected land owner is given a prior notice. But beyond that no provision made for conduct of survey or census of displaced persons; gender perspective in referred feasibility study is missing.	Feasibility Study is a prescribed process to assess the need and suitability of an area for pooling. Gaps are similar to those in Land Act	Gap in screening past, present and future involuntary resettlement impacts and risks The Project will undertake screening of all subprojects using the ADB involuntary resettlement checklist, to identify past, present and future involuntary resettlement impacts and risks.
2	Consult stakeholders and establish grievance redress mechanism (GRM)	Carryout consultations with displaced persons, host communities and concerned nongovernment organizations (NGOs). Informally displaced persons of their entitlements and resettlement options	Act has no specific mention of stakeholder consultation in relation to project, its entitlements and resettlement options. Limited consultation opportunities made available which is with respect to discretion to choose substitute land as mode of compensation, if acquisition made in rural areas. No formal and project specific provision for grievance redress mechanism. No provision of consultation with host communities or NGOs	Consultation with land owners is required, public support is solicited through advertisements. Round of meetings (One public meeting required to held during feasibility stage and at least two	Project will ensure consultation with displaced person, communities and representative organizations/ NGOs to make them aware about project, entitlements and resettlement options. A formal grievance redress mechanism to be set up as per

1		rounds of nublic	the resettlement
		rounds of public	
		meetings to be	framework (this)
		held to discuss	document.
		local area plan)	
		are required	
		duing land	
		pooling	
		exercise.	
		Special	
		consultations	
		are held with	
		those who are	
		not willing give	
		their land for	
		land pooling	
		exercise.	
		exercise.	
		Formal	
		grievance	
		redress	
		mechanism	
		exists where	
		aggrieved party	
		can approach	
		to Thrompon of	
		Thromde for	
		review of	
		decisions of the	
		Thromde. If	
		unsatisfied with	
		outcome, the	
		person may	
		approach the	
		minister who	
		may delegate	
		an official of the	
		ministry to look	
		in to the	
		grievance.	
		griovarioc.	

	T	T	1		<u> </u>
3.	Principle of	IR should be avoided	Land Act also professes similar	Scope of	Partial gap. Project
	avoidance and	and if IR is un avoidable	principles, though absolute	feasibility study,	will explore
	minimization of	the impact is to be	avoidance is mentioned only for	as laid out in	alternate design
	involuntary	minimized by exploring	religious monuments; private	the rules, is	options to avoid or
	resettlement (IR)	project and design	registered land to acquired only	aligned with the	minimize IR impacts
		alternatives	in unavoidable circumstances	principle of	
			and on grounds of public	avoidance such	
			interests that need to be	as assessing	
			justified and verified. No explicit	the number of	
			mention relating to exploring of	land owners in	
			alternate design options	the proposed	
				land pooling	
				area, number of structures,	
				number of	
				vacant plots,	
				size of land	
				holdings etc.	
4	Improve or at least	Improve or restore the	The Act provides for fair	No provision of	Assets to be
	restore, the	livelihoods of all	compensation for land and	compensation	compensated at
	livelihoods of all	displaced persons	asset loss which may be in form	for land owners	replacement cost
	displaced, and	through:(i) land-based	of cash and/or substitute land or	agreeing to	without
	payment at	resettlement strategies;	both. Government to consider	land pooling.	depreciation.
	replacement cost	(ii) prompt replacement	provision of substitute land if	These land	Livelihood
	'	of assets with access to	land acquired is the only plot	owners are	restoration support
		assets of equal or higher	owned. Value of loss to be	given back	to be provided as
		value, (iii) prompt	determined by PAVA and as	reconfigured	per entitlement
		compensation at full	per rates fixed by it that shall	land plots	matrix
		replacement cost for	consider various features	(minus	
		assets that cannot be	associated with land/asset lost,	contributing	
		restored, and(iv)	determining the replacement	land) post	
		additional revenues and	value, associated with the land	developing of	
		services through benefit	and the assets. (#143, 144,	pooled land	
		sharing schemes where	148,149, 151 and 155).	area. The rule	
		possible.	However, the act is silent on	recognize that	
			aspects of livelihood	loss due to land	
			enhancement/restoration,	contribution is	
			recognition of non-titleholders	more than	
			as affected person category,	compensated	
				by value	

			and provision of compensation without depreciation.	addition provided to developed land plots that are given back to land owners. For non agreeing land owners, compensation is as per the Land Act (2007) provisions. No specific provision for restoration or enhancement	
5	Assistance for displaced persons	Provide physically and economically displaced persons with needed assistance	No such provision under the Land Act	of livelihoods No specific reference or provision	Entitlement Matrix outlines compensation and assistance for Affected persons.
6	Improve standard of living of displaced vulnerable groups	Improve the standards of living of the displaced poor and other vulnerable groups, especially those below the poverty line, the landless, the elderly, women, children, indigenous peoples, and those without title to land, to at least national minimum standards	No special provisions mentioned for vulnerable groups.	No specific reference or provision	Entitlement Matrix outlines assistance for vulnerable groups, as defined by ADB policy.
7	Negotiated settlement	Develop procedures in a transparent, consistent,	No specific mention and provision made	Public support is laid an	To ensure a fair and transparent

		and equitable manner if land acquisition is through negotiated settlement to ensure that those people who enter into negotiated settlements will maintain the same or better income and livelihoods status		additional emphasis. If a land owner refuses support for land pooling, the land is acquired and owner is compensated as per the Land Act (2007).	process, a third party independent monitor will be hired to certify the process the negotiated purchase was undertaken in a transparent, consistent and equitable manner.
8	Compensation for nontitle holders	Ensure that displaced persons without titles to land or any recognizable legal rights to land are eligible for resettlement assistance and compensation for loss of non-land assets. In the rural area, provide them with access to resources. In the urban area, provide them with access to housing.	The Act provides for granting of Kidu and rehabilitation land (Chapter 8, Land Rules and Regulations, 2007), and support through rehabilitation programme to those who are landless and marginal framers (with eligibility parameters defined and subject to approval). However, these provisions are in the context of natural disasters and ecological risks and not covering families affected by development project induced land acquisition.	Rules do not recognize or mention non- title holders as stakeholders in land pooling exercise	Entitlement Matrix outlines compensation and assistance for nontitle holders, including squatters, encroachers and sharecroppers.
9	Preparation of resettlement plan (RP)	Prepare a resettlement plan/indigenous peoples plan on displaced persons' entitlements, the income and livelihood restoration strategy, institutional arrangements, monitoring and reporting framework, budget, and time-bound implementation schedule.	Land Act and its rules requirements are restricted only to preparation of a detailed report on compensation for land and assets acquired/affected. The Act does not require preparation of a detailed resettlement plan meeting ADB SPS requirements.	Local Area Plan (LAP) is prepared with details that include identification land pooling area, proposed contribution ratio, location where draft LAP may be viewed, information to	Resettlement plan will be prepared as per ADB SPS requirements and for all subprojects with information on displaced persons, entitlements, income and livelihoods restoration strategy, institutional arrangements including those for

				and the U.S.	
				public	monitoring and
				regarding their entitlements to	reporting, budget and a time bound
				make	implementation
				submissions,	schedule.
				place and time	SUICUUIC.
				limit of making	
				such	
				submissions	
				etc. Given the	
				limited scope of	
				LAP, it can not	
				be treated as	
				equivalent to a	
				resettlement	
				plan.	
10	Disclose	Disclose a draft	No such provision made	LAP (which	The legal
	Resettlement Plan	resettlement plan,		lacks on	framework for this
	(RP)	including documentation		multiple	project shall include
		of the consultation		aspects, if	the requirement to
		processing a timely		compared with	make disclosure of
		manner, before project		resettlement	draft and final RP
		appraisal, in an		plan, as	and in a manner
		accessible place and a		described	which is accessible
		form and language(s)		above) is	(place, language,
		understandable to		widely disclosed in	time duration of its
		displaced persons and other stakeholders.			accessibility etc) to stakeholders
		Disclose the final		public.	StakeHolders
		resettlement plan and its			
		updates to displaced			
		persons and other			
		stakeholders			
11	Cost of	Include the full costs of	#136 of land rules and		Full Cost of
	resettlement	measures proposed in	regulations, 2007 establishes		resettlement will be
		the resettlement plan	that cost of compensation for		covered by the
		and indigenous peoples	land/assets loss to be the		executing agency
		plan as part of project's	responsibility of acquiring		and as per
		costs and benefits. For a	agency (implicit allusion to the		entitlement matrix.
		project with significant	project for which it is acquired).		

		involuntary resettlement impacts, consider implementing the involuntary resettlement component of the project as a stand-alone operation.	However, as described earlier, the Act itself is silent on provisions relating to other aspects such as loss of livelihoods, livelihoods restoration, entitlements of nontitleholders, and hence there is lack of clarity around inclusion of these missing resettlement cost components		
11	Taking over possession before payment of compensation	Pay compensation and provide other resettlement entitlements before physical or economic displacement. Implement the resettlement plan under close supervision throughout project implementation.	#158 of the Act affirms such provision in the act	Land Pooling scheme involves agreeing land owners (who have notified their support) and others nonagreeing or absentee owners (who have not notified their support). Agreeing owners have no compensation entitlements under the rules, while the other category are entitled to receive compensation as per the Land Act (2007). #158 of the Act requires payment of compensation	No gap

				prior to taking possession	
12	Implement Resettlement Plan (RP)	Implement RP under close supervision throughout entire project implementation	No such specific provision	No such specific provision	Resettlement plan implementation to be carried out under close supervision of safeguard personnel as proposed in the institutional arrangements for this project
12	Monitoring	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.	No such provision made	Monitoring is in the context of implementation of LAP which is not same as resettlement plan. Hence such provision specific to resettlement plan implementation	Monitoring arrangements to be put in place as per agreed resettlement framework and resettlement plans for each of the sub projects.

CERTIFICATE ON STATUS OF LAND AND AFFECTED PERSONS' PERMISSION TO LAY WATER TRANSMISSION PIPE





ROYAL GOVERNMENT OF BHUTAN DZONGKHAG ADMINISTRATION SARPANG

Dzongkhag Engineering Services

SD/Zorig/20/2017-2018/ 4542

Date: 29.01.2018

Sub: Certificate on the status of Land

This is to certify that the status of the land for Sarpang Water Supply and Shenchamthang LAP Infrastructure (roads, drainage, water supply) sub-projects in Sarpang Thromde under Sarpang Dzongkhag (district) funded under ADB, Secondary Towns Urban Development Project (STUDP) is as follows:

Sarping Water Supply

S. No	Sub-component	Status of Land
1	Construction of 1 nos of RCC Grit Chamber (Including dismantling of existing sedimentation tank) near intake at Lharing Cha-35m away	Government land
2	Providing & Laying of Raw Water DI Main of 16.053 km from the Source to the existing Water Treatment Plant	13.897 KM in Government Land and 2.156 KM private land (No Objection certificate from affected land owners is attached)
3	Construction of 2 nos. RCC Break Pressure Tank using DI Pipes & Fittings with Barbed Wire Fencing and Gate	Government land
4	Construction of 1 nos of River Crossing (8m)	Government land

Shechamthang LAP infrastructure: Roads, Drainage, Water supply

S. No	Sub-component	Status of Land
1	Providing and laying 2.98 km Water transmission line from WTP to Shechamthang	2.797Km in Government land and -0.183KM private land (No Objection certificate from affected land owners is attached)
2	Providing and laying 0.882 km Water transmission line from WTP to Sorpong Bucour	0.699 KM Government land and 0.183 Km private land (affected land owner's permission)
3	Water distribution network of 5.676 km in Shechamthang	pooled Government land
4	Shechamthang LAP Infrastructure	
-	The state of the s	pooled Government land

PARK-365173, PAX-365145, Coongday 365100, Drongrab 365104, Adm-365264, HBD-365260, Finance-365263, D6-365268, Census Officer-365100, Flanning Officer-365146, DBO-365277, LRD-365184, RNR-365174, DMO-365130, DHSD-365159.



र्ट्टाक्वात्तरवाञ्चर वाकर शरा

ROYAL GOVERNMENT OF BHUTAN DZONGKHAG ADMINISTRATION SARPANG



Dzongkhag Engineering Services

i. Primary Road - 1,3 km	pooled Government land
ii. Secondary Road - 2.44 lon	pooled Government land
iii. Road side drains along primary road - 1.30 km	pooled Government land
iv. Road side drain along seconary road - 4.88 km	pooled Government land
v. Storm water drain - 3.00 km	pooled Government land
vi. Roadside footpath - 0.35 km	pooled Government land

DADIN DAG progkhar Authorstration

Strpang

Senger Tentro)

OFFICIATING DZONGDAG

Sarpeng Dzongkhag

VOLUNTARY CONSTRIBUTION CONSENT FORM



Royal Government of Bhutan Sarpang Dzongkhag

Certificate of Permission to lay water transmission pipeline

We, the following land owners residence of Gakidling & Sompangkha Geweg. Surpang Deongkhag. Certify that we have been previously informed by Sarpang Deongkhag of our right to entitle any compensation for hos of property (house, land trees etc), that may be caused by the laying of 200 nm diameter dueble non-water transmission line financed by the Secondary Towns Urban Development Project in Surpang district.

We confirm that we voluntarily permit the project implementing/ executing agencies to lay the aftermentioned pipe in our property. We agree and also conform that no assets are last in our property.

Therefore, we prepare and sign this certificate for proof of our decision. Further, we certify that we have given our consent without any force' coercion from anybody, including project authorities.

L. Name & CID No.	Age	Occupation	Location	Area of Pipe Line Sq.m	Signature of the owner	Remerks
Tshering Dema ; 111307001448	42_	Gracife	Phuntshogang, Jogidangra	126	(Burgh	Mr. Kundh
Kusha Rai ; 211307001727	40	Maron	Phuntshogang, Jogidangra	39	No.	Sanaha May Monger Wibe
Santosh Rai; 311307001728	51	Farmer	Phuntshogang, Jogidangra	72		wife
Bhanu Humagai 411305002583	42	Engineer	Phuntshogang, Jogidangra	18	edu:	Damber Singly Rai Relation
Dhen Kumar Samal S11307001673	31	Farmer	Phontshogang, Jogidangra	66		South Kun Somal, Father
Lal Bdr Rat; 611307001782	37	Farmer	Phuntshogang, Jogidangra	57	Outs	Kirlinan Raj Fatha
Mondos Lungeli 711307001647	73	Farmer	Phuntshogang, Jogidangra	126	B	Pheny Gay
Harka 8dr Rana 811307002383	72	farmer	Relangthang	141	New P	7.6. Ran
Bal Bdr Pithakoti g 11307002476 & Son- Deo Bdr	72_	Farmin	Relangthang	190	465	

Pithakoti 11307002477	34	Farmer_	Releighting			
Bhim Bdr Pulami 1021307000295	28	Working BRC	Relangthang	90	Sugare	Paden Let Me Brother in last
Kausila Pradhan 1111307002450	68	Retired Could	Relangthang	54	Station	Pradimen Pradhan Bootherindas
Pema Wangchuk 1211804001341	65	fomer	Relangthang	78	Compliance	Cont of Contract o
Mon Bdr Rana 1311307002499	52	Former-	Relangthang	39	RF)	
Harka Bdr Rana 1411307002355	64	Formor	Relangthang	10.2	Bet	
Ubir Singh Rana 1511307002212	38	Civil Sevent	Relangthang	36	The	
Garjaman Pulami 1611307002374	68	Farmer_	Relangthang	575		
Harka maya 17Oahul	44	Homewife	Relangthang	52.8	1.	Yo Wasa
Late Birkha Bdr Biswakarma 1811311001067			Sarpang Bazar	25.8	AND THE REAL PROPERTY.	Finne Bli Binonkum Son, 52 gr.
Bhim Lhama Thireds, 1911311001063	54	former	Sarpane Bazar	25.8	Muy	Meshanie

Witnesses:

1. Name & Signature

2. Name & Signature

3. Name & Signature

Ruh Ghally

VOLUNTARY CONSTRIBUTION CONSENT FORM

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Royal Government of Bhutan Sarpang Dzongkhag

Certificate of Permission to lay water Distribution pipeline from water treatment plant to Sarpang Bazaar and Sheebangthang

We, the following land owners residence of Sompergikha Gewog, Sarpong Daongkhau. Certify that we have been previously informed by Sarpong Daongkhau of our right to criticle any compensation for loss of property (house, land trees etc.), that may be caused by the laying of water distribution. The financed by the Secondary Towns Urban Development Project in Sorpeng district.

We confirm that we voluntarily permit the project implementing/ executing agencies to lay the aforementioned pipe in our property. We agree and also conform that no assets are lost in our property.

Therefore, we prepare and sign this certificate for proof of our decision. Further, we cartify that we have given our consum without any force' coercion from anybody, including project authorities.

SL. No.	Name & CID No.	Age	Occupation	Location	Area of Pipe Line Squn	Signature of the owner	Remarks .
1	Late Birkha Bdr Biswakarma 11311001057			Serpeng Bazar	37,8	ASSES TO SERVICE STATE OF THE PERSON OF THE	Phone Out
12	Bhim Lhama Thinley Thungs 11311001063	sy	Farmer	Serpang Bagar	72	My.	Meriter

Witnesses:

1. Name & Signature

2. Name & Signature

3. Name & Signature

All & Rum Balo Gl

APPLICABLE COMPENSATION RATE FOR CASH CROPS / FRUIT TREES AND SAMPLE ILLUSTRATION FOR POTENTIAL CROP AND TREE LOSSES

Table 3.1: Compensation rate of fruit trees (PAVA 2017)

SN		YRT	0	1	2	3	4	5
1	Apple	5	676.63	1,096.03	1,934.83	2,354.23	2,773.63	5,738.79
2	Apricot	5	693.41	1,191.10	1,688.78	2,186.47	2,684.16	3,977.31
3	Areca nut	5	240.46	452.95	609.53	900.31	1,347.67	1,964.19
4	Avocado	5	592.75	1,040.11	1,487.47	1,878.91	2,382.19	3,187.44
5	Banana	2	159.37	243.25	243.25	243.25	243.25	243.25
6	Cardamom	5	41.38	46.97	52.56	58.16	63.75	107.65
7	Guava	5	520.06	805.25	1,090.44	1,375.63	1,660.82	2,083.02
8	Jackfruit	5	905.90	1,532.21	2,158.51	2,784.82	3,411.12	5,046.78
9	Lemon	5	497.69	1,056.89	1,616.09	1,895.69	2,035.49	2,544.36
10	Lime	5	408.22	631.90	855.58	1,079.26	1,135.18	1,488.87
11	Litchi	5	866.76	1,493.06	2,119.37	2,745.67	3,371.98	4,648.35
12	Mango	5	676.63	1,431.55	2,186.47	2,941.39	3,696.31	5,564.04
13	Olive	5	637.49	1,308.53	1,979.57	2,650.61	3,321.65	4,990.86
14	Orange	5	726.96	1,302.94	1,878.91	2,454.89	3,030.86	4,117.11
15	Papaya	4	251.64	314.55	377.46	398.43	531.24	531.24
16	Peach	4	520.06	910.10	1,300.14	1,564.36	2,326.27	2,365.42
17	Pear	5	548.02	995.38	1,442.74	1,890.10	2,337.46	3,481.02
18	Plum	5	587.16	1,084.85	1,582.54	2,080.22	2,577.91	3,844.50
19	Pomegranate	5	402.62	749.33	1,096.03	1,442.74	1,621.68	2,180.88
20	Pomelo	5	527.05	642.24	1,284.48	1,926.72	2,568.96	3,211.21
21	Tree Tomato	4	151.68	303.37	455.05	606.73	606.73	606.73
22	Bamboo 4"	5	15.38	15.38	15.38	15.38	61.51	124.42
23	Bamboo 2"	5	7.69	7.69	7.69	7.69	30.76	62.21
24	Walnut	5	989.78	1,554.58	2,119.37	2,684.16	3,248.95	4,767.18
25	Coconut	5	1,298.39	1,672.07	1,955.03	2,147.29	2,248.83	3,246.65
26	Persimmon	5	1,326.82	1,646.34	1,884.63	2,041.68	2,117.50	3,036.80
27	Passion fruit	2	616.02	805.57	950.44	950.44	950.44	950.44
28	Tamerind	5	748.71	892.22	997.82	1,062.81	1,089.89	1,548.86
29	Sapota	5	843.48	978.87	1,076.35	1,133.21	1,152.17	1,627.39
30	Grapes	3	278.90	398.05	483.34	920.65	920.65	920.65
31	Sugarcane	1	16.17	16.17	-	-	-	-
32	Pineapple	1	21.36	21.36	-	-	-	-
33	Watermelon	1	58.03	58.03	-	-	-	-

Table 3.2: Compensation for Forest Trees (PAVA 2017)

e) Formula for working out compensation of Forest Trees

1. Trees Bigger than 1 foot girth FC = (Vtree * Rpr)

Where, FC = Forest Compensation; Vtree = Total volume of tree in cft.

Rpr = Prevailing price of timber logs as regulated by Natural Resource Pricing Committee in that or nearby locality in cft. The rate of timber should be according to class of timber as approved by the DoF from time to time.

Method of Volume Calculation

Quinoa

Mustard

6.

The volume of tree should be calculated using the following formula:

Table 1: Cereals Average cost of production

Vtree = $g2/4\pi$ * height of tree (only merchantable height should be measured in feet)

Where, Vtree = Volume of tree in cft. and

g = girth of tree in feet or inches (girth should be measured by measuring tape)

2. Trees smaller than 1 foot girth FC = (Cseedling + Pplanting & est + Mmain)

Where, FC = Forest Compensation; and Cseedling = Cost of seedling (this should be according to class of timber and calculated at present rates)

Pplanting & est = Cost of planting (including establishment cost) based on present rates. Mmain = Cost of maintenance (year 2,3,4,5,6,...and above)

Table 3.3: Cost of Production for Field Crops

SI. No.	Cereal Name	Expenditure (Nu/acre)	Yield (Kg/acre)	Cost of Production (Nu/kg)
1.	Paddy	60,900	1627	37.43
2.	Maize	23,360	1474	15.85
3.	Barley	21,910	714	30.69
4.	Wheat	20,600	770	26.75
5.	Buckwheat	16,150	628	25.72

15

53.08

44.50

Source: DoA (2017), Cost of Production of Field Crops and Horticultural Crops grown in Bhutan, Department of Agriculture, Ministry of Agriculture and Forests, Thimphu

649

382

34,450

17,000

	1	2(=1/4046.86)	3	4(=2*3)	5	6	7(=5*6)	8(=4*7)
Crops/ Trees	Production kg per acre	_		Cost of Production- Nu per sqm or unit	Total Affected Length (m)	Impact width (m)	Area (sqm)* / Units	Total Loss (Nu)
Rice	1627	0.40204	37.43	15.04836	135	3	405	6095
Maize	1474	0.364233	15.85	5.773093	135	3	405	2338
Arecanut								
Trees (>5 yrs)				1964.19			3	5893
	approximate	elv 1500 Nu f	or 4-5 teak t	rees of 1-2 vear	s age and d	of airth le	ess than 1	foot; to

approximately 1500 Nu for 4-5 teak trees of 1-2 years age and of girth less than 1 foot; to Teak Trees be estimated as per PAVA 2017 formulae

*loss estimation for each crop is done with the assumption that entire of affected area will be under one single crop. While on ground, the affected area may be under mixed cropping. Above estimation is just for illustrative purpose and to indicate range of loss. As per above, crop loss may be in the range of 2338 Nu-6095 Nu while tree loss may be approximately 7393 Nu

Illustrative calculations are done using the DoA (2017) and PAVA (2017) rates provided in the tables above which is aligned to provisions made for such losses in the entitlement matrix for this project. These will be used to estimate for actual compensation as established during DMS exercise.

Note:

Above estimation is for illustrative purposes only. Extent of loss (crop and trees) may be nil if avoidance measures are taken up, as assured by the PIU, or more than indicative number above.

Land Plots/owners likely to be affected for crop loss are:

- 1. Bal Bdr Pithakoti (Th 889), Relangthang, Likley loss (refer table above) if work is scheduled during cropping season, will be 1-2 percent of his annual income.
- 2. Bhim Bahadur Pulami (Th 145), Relangthang. Relangthang, Likley loss (refer table above) if work is scheduled during cropping season, will be 0.5-1 percent of his annual income.

Actual estimation of crop loss and affected household identification will be made during DMS exercise and adequate compensation will be paid to affected as per the loss identified. Civil work will be taken up only after loss compensation has been paid to all crop

Tree loss may possibly be incurred by:

- 1. Bhim Lhama Thingh (Th 37), Sarpnag Bazar- Arecanut (2-3 trees), Likely loss (refer table above) if required alignment is not done, will be 4 percent of his total annual income
- 2. Pema Wangchuk (Th 799), Relangthang- Teak trees (1-2 years, less than 1 foot girth). Likely loss (refer table above) if realignment is not done, will be 0.2 percent of his annual income
- 3. land plots of Mon Bdr Rana (Th 1318), Harka Bdr Rana (Th 183), Ubir Singh Rana (Th 1320) and Garjaman Pulami (Th 1745) in Relangthang) where transmission line passes through orchard farms. Though it may be noted that orange trees are well spaced out and the transmission line passes along boundaries of these farms.

PIU/contractor will provide bends in transmission line alignments to the extent possible to avoid felling of trees. Exact loss and affected households, if any will be ascertained during DMS exercise and adequate compensation will be paid to affected households. Civil work will be taken up only after loss compensation has been paid to all crop/tree losers.

Compensation for loss will be made as per provisions

SOCIOECONOMIC PROFILE OF AFFECTED HOUSEHOLDS

SL No.	Owner Name, Community & CID No.	Head of The Family	Total Property of the Owner		n	Annual Income (Nu) and source	HH Size	Male			Area of the Plot	Location of Plot	Photo
1	Tshering Dema Budhist 11307001448	Mr. Kumbhu Tshewang ,	5 Acres Land Orange orchard , Vegetable Garden , Doma, Banana, Cardamom	650	Cl-10	186,260, pension, son salaried employee, agriculture	5	3	2	1	4.20 Acers	Phuntshogang, Jogidangra	Tshering Dema
2	Kusha Rai ; Hindu 11307001727	Kusha Rai ,	1.65 Acres Land Orange orchard Doma, Banana	1428	CI-4	145,120, works as mason supplementary income from land	6	2	1	3	1.65 Acres	Phuntshogang, Jogidangra	Sancha Maya Monger (Wife)
3	Santosh Rai; Hindu 11307001728	ShaBahadur Rai;	6.65 Acres Land Orange orchard Doma, Banana	1429	None	210,000, agriculture	6	1	1	4	6.65 Acres	Phuntshogang, Jogidangra	Santosh Rai
4	Bhanu Humagai Hindu 11305002583	Bhanu Humagai	6.5 Acres ; Working in Private Firm, Small Contractor liceence, hardware shop	583	Cl-4	180,000, small contractor	6	4	2		0.55 Acres	Phuntshogang, Jogidangra	Bhanu Humagai

SL No.	Owner Name, Community & CID No.	Head of The Family	Total Property of the Owner		n	Annual Income (Nu) and source	HH Size	Male	emale	School going children (number)	Area of the Plot	Location of Plot	Photo
5	Dhan Kumar Samal Hindu 11307001673	Shanta Kumar Samal	4.5 acre of land(dry & wet) 0.22 acre of urban land(2 plots at ranibagan), Brother owns a truck,2Jersey cow,orange orchard	1448	Cl-12	551,100, agriculture, brother owns commercial truck (joint family)	14	6	8		0.90 Acres	Phuntshogang, Jogidangra	Shanta Kr Samal (father)
	Lal Bdr Rai; Hindu 11307001782	Kirtiman Rai	4.93 Acres Land Orange orchard Doma, Banana	1412		162,720 Agriculture	6	3		2	1.28 Acres	Phuntshogang, Jogidangra	Kirtiman Rai (Father)
7	Mondos Lungeli Hindu 11307001647	Mondos Lungeli	1.8 Acres Land Orange orchard Doma, Banana	1747	CI-10	112,560, agriculture and other sources	4	2	2	3	1.8 Acres	Phuntshogang, Jogidangra	Purna Singh Lungeli (Son)
	Harka Bdr Rana Hindu 11307002383	Harka Bdr Rana	6.6 Acres Orange Orchard, Doma , Maize, banana	181	None	211,600 Agriculture and other sources	8	4	4		2.98 Acres 1.55 Acres	Relangthang	T B Rana (Son)
9	Bal Bdr Pithakoti 11307002476 & Son- Deo Bdr Pithakoti Hindu 11307002477	Bal Bdr Pithakoti	6.5 Acres Orange Orchard, Paddy field , Maize, banana	175 & 889	12 (worked in Bhutan Power Corp)	180,000 Agriculture and sons are in service	6	4	2		5.5 Acres	Relangthang	Bal Bdr Pithakoti and Son

No.	Owner Name, Community & CID No.	Head of The Family	Total Property of the Owner	Th No.	Educatio n	Annual Income (Nu) and source	HH Size	Male	emale	School going children (number)	Area of the Plot	Location of Plot	Photo
	Bhim Bdr Pulami Hindu 21307000295	Bhim Bdr Pulami	9 Acres Orange Orchard, Paddy field , Maize	145	Primary	360,000 Service (BPC) and agriculture	2	1	1		3 Acres	Relangthang	Bhim Bahadur's Brother in Law
11	Kausila Pradhan Hindu 11307002450	Kausila Pradhan	7 Acres , Bamboo	1563	10	480,000 Son as consultant engineer, house in Thimphu, Geluphu and other locations	3	1	2		1.7 Acres	Relangthang	Pratiman Pradhan (brother in law)
12	Pema Wangchuk Budhist 11804001341	Son- Karma Tshering 11804001704	4.42 Acres, Poultry Firm & Fishery pond	799	Non Formal Education	720,000 Owns poultry and fish farm	2	1	1	1	4.42 Acres	Relangthang	Karma Tshering (Son)
13	Mon Bdr Rana Hindu 11307002499	Mon Bdr Rana	0.99 Acers , Orange orchard, Cardamom	1318	Nil	138,100 Agriculture, supported by daughter who is in service	5	1	1	3	.50 Acres	Relangthang	Mon Bahadur Rana
14	Harka Bdr Rana Hindu 11307002355	Harka Bdr Rana	5.7 Acres, banana, Orange orchard	183	CI 5	158,400 agriculture	6	4	2	2	3 Acres	Relangthang	Harka Bdr Rana

SL No.	Owner Name, Community & CID No.	Head of The Family	Total Property of the Owner	Th No.	Educatio n	Annual Income (Nu) and source	HH Size	Male	emale	School going children (number)	Area of the Plot	Location of Plot	Photo
15	Ubir Singh Rana Hindu 11307002212	Ubir Singh Rana	3 Acres, Orange orchard	1320	Nil	360,000 Agriculture and service (engineer)	2	1	1	1	0.4 Acres	Relangthang	Ubir Singh Rana
16	Garjaman Pulami Hindu 11307002374	Garjaman Pulami	6.55 Acres, Orange orchard, Cardamom	1745	Nil	239,100 Agriculture and sons in service (private firm and as driver)	9	4	5	2	6.55 Acres	Relangthang	Garjaman Pulami
17	Harka maya Dahal Hindu	Yowaraj Kafley running cement agent at Sarpang	4.33 Acres, Orange orchard, Shop , Cement agent.	898	CI 8	120,000 Shop, cement supply agent and agriculture	4	2	2	3	1.63 Acres	Relangthang	Yowraj Kafley (husband)
18	Birkha Bdr Biswakarma (Late) Hindu		Auto Mechanic/small workshop	270	ВСО	400,000 Works as mechanic	5	2	3		2 Acres	Sarpang Bazar	Purna Bahadur (Son)
19	Bhim Lhama Thingh Hindu 11311001063			37	Bcom grad	150,000 agriculture	3	1	2		4 acres	Sarpang Bazar	Bhim Lhama

^{*}Numbers 18 and 19 are affected under both packages. However, the total area of land required for pipe laying is <10%.

DETAILS OF SUBPROJECT IMPACTS ON AFFECTED LAND PARCELS

			Table A	-1: Detail	s of Sub-l	Project Ir	npacts on	Affected La	nd Parcels		
							Tempor	ary Impact	Perma Subsurfac		Temporary Impact
SL No.	Owner Name	CID No.	Location of Plot	Thram No.	Area of affected plot (acre)	Length of Pipe (m)	Affected Area (sqm; impact width 3 m)*	% of affected land plot area	Permanent subsurface Impact Area (sqm; impact width 0.2 m)	as Perc. of affected land plot area	Potential impact description
1	Tshering Dema	11307001448	Phuntshogang, Jogidangra	650	4.2	210	630	3.7	42	0.2	Proposed TL passes through orange orchard but not likely to cause any tree/asset loss.
2	Kusha Rai	11307001727	Phuntshogang, Jogidangra	1428	1.65	65	195	2.9	13	0.2	Proposed TL passes through orange orchard but not likely to cause any tree/asset loss
3	Santosh Rai	11307001728	Phuntshogang, Jogidangra	1429	6.65	120	360	1.3	24	0.1	Proposed TL passes through orange/banana orchard but not likely to cause any tree/asset loss
4	Bhanu Humagai	11305002583	Phuntshogang, Jogidangra	583	0.55	30	90	4.0	6	0.3	Proposed TL passes along orchard boundary mostly and not likely to cause any tree/asset loss
5	Dhan Kumar Samal	11307001673	Phuntshogang, Jogidangra	1448	0.9	110	330	9.1	22	0.6	No loss/damage to structure/trees/crops
6	Lal Bdr Rai	11307001782	Phuntshogang, Jogidangra	1412	1.28	95	285	5.5	19	0.4	No loss/damage to structure/trees/crops
7	Mondos Lungeli	11307001647	Phuntshogang, Jogidangra	1747	1.8	210	630	8.6	42	0.6	No loss/damage to structure/trees/crops
8	Harka Bdr Rana	11307002383	Relangthang	181	2.98	175	525	4.4	35	0.3	No loss/damage to structure/trees/crops

			Table A	-1: Detail	s of Sub-I	Project Ir	npacts on	Affected Lar	nd Parcels		
							Tempora	ary Impact	Permai Subsurface		Temporary Impact
SL No.	Owner Name	CID No.	Location of Plot	Thram No.	Area of affected plot (acre)	Length of Pipe (m)	Affected Area (sqm; impact width 3 m)*	% of affected land plot area	Permanent subsurface Impact Area (sqm; impact width 0.2 m)	as Perc. of affected land plot area	Potential impact description
				181	1.55	60	180	2.9	12	0.2	No loss/damage to structure/trees/crops
9	Bal Bdr Pithakoti & Son- Dil Bdr Pithakoti	11307002476, 11307002477	Relangthang	175 & 889	5.5	300	900	4.0	60	0.3	Proposed TL passes through inside of agricultural plot (a section of it). Crop loss very likely if pipe laying carried out during cropping season. No other loss likely
10	Bhim Bdr Pulami	21307000295	Relangthang	145	3	150	450	3.7	30	0.2	Proposed TL passes through inside of agricultural plot (a section of it). Crop loss very likely if pipe laying carried out during cropping season. No other loss likely
11	Kausila Pradhan	11307002450	Relangthang	1563	1.7	90	270	3.9	18	0.3	No loss/damage to structure/trees/crops
12	Pema Wangchuk	11804001341	Relangthang	799	4.42	130	390	2.2	26	0.1	Proposed TL passes in between two teak plantations (1-2 years old), alignment bend may be required to avoid damage to teak plantations
13	Mon Bdr Rana	11307002499	Relangthang	1318	0.5	65	195	9.6	13	0.6	Proposed TL passes through inside of orange orchard. Alignment bend

			Table A-	-1: Detail	s of Sub-I	Project Ir	npacts on	Affected Lar	nd Parcels		
							Tempora	ary Impact	Permai Subsurface		Temporary Impact
SL No.	Owner Name	CID No.	Location of Plot	Thram No.	Area of affected plot (acre)	Length of Pipe (m)	Affected Area (sqm; impact width 3 m)*	% of affected land plot area	Permanent subsurface Impact Area (sqm; impact width 0.2 m)	as Perc. of affected land plot area	Potential impact description
											may be required to avoid loss of trees. Adequate spacing between trees exists
14	Harka Bdr Rana	11307002355	Relangthang	183	3	17	51	0.4	3	0.0	Proposed TL passes through inside of orange orchard. Alignment bend may be required to avoid loss of trees. Adequate spacing between trees exists
15	Ubir Singh Rana	11307002212	Relangthang	1320	0.4	60	180	11.1	12	0.7	Proposed TL passes through inside of orange orchard. Alignment bend may be required to avoid loss of trees. Adequate spacing between trees exists
16	Garjaman Pulami	11307002374	Relangthang	1745	6.55	95	285	1.1	19	0.1	Proposed TL passes through inside of orange orchard. Alignment bend may be required to avoid loss of trees. Adequate spacing between trees exists
17	Harka maya Dahal		Relangthang	898	1.63	88	264	4.0	18	0.3	No asset/tree/crop loss expected. Temporary disruption (1-2) days to

			Table A-	1: Detail	s of Sub-l	Project In	npacts on	Affected Lar	nd Parcels		
							Tempora	ary Impact	Permai Subsurface		Temporary Impact
SL No.	Owner Name	CID No.	Location of Plot	Thram No.	Area of affected plot (acre)	Length of Pipe (m)		% of affected land plot area	Permanent subsurface Impact Area (sqm; impact width 0.2 m)	as Perc. of affected land plot area	Potential impact description
											easy accessibility to house/shop, but not significant enough to cause loss of business
18	Birkha Bdr Biswakarma **	11311001067	Sarpang Bazar	270	2	43	129	1.6	9	0.1	No asset/tree/crop loss expected.
19	Bhim Lhama Thingh**	11311001063	Sarpang Bazar	37	4	43	129	0.8	9	0.1	Proposed TL passes through arecanut plantation (matured trees). Bend definetely required to avoid felling of trees, else will cause loss of 1-2 trees.
		Tota	I		54.26	2156	6468		431	0.2	

^{*}a trench of dimension 1 m depth and 60 cm width is proposed to be dug for laying of transmission pipe. Temporary impact is expected to be 3 meter width, to provide for temporary storage of dug earth (along the trench) and transmission pipe to be laid and additional space required for movement of labour and staff. Impact is expected to be temporary, lasting 1-2 days unless there is damage to standing crops or felling of trees. Permanent sub surface (pipes will be laid 1 meter underneath the surface) will be for a width of 0.2 m (200 mm dia pipe).

^{**}Two land owners (#18 and 19) are additionally affected by the other package (LAP Infrastructure sub project) under the STUDP project in Srapang. Besides the water supply transmission pipes (under this project package), the above referred land parcels will also accommodate water supply distribution pipes, as per proposed alignment under LAP infrastructure work package. The table indicates cumulative impact of two sub-projects on these two people.

CONSULTATION WITH LANDOWNERS ALONG SARPANG TRANSMISION LINE

A: Invitation for Meeting



कूटावर्धानदेशकूट शकरक्रटा रेतगाक्षेत्र तस्त्रीय तस्त्र

ROYAL GOVERNMENT OF BHUTAN DZONGKHAG ADMINISTRATION SARPANG



Dzongkhag Engineering Services

Date: - 16.1.2018

50/Zorig-20/2017-2018/ U3Z/

No. Phone

The Gup,

Geog Administration, Gakidling Geog,

Sarpang: Dzongkhag.

Sub:- Consultative Meeting with affected Land Owners for Construction of Water Supply Works.

Sir.

As you are aware that the implementation of Schechamthang LAP is under full swing and the sub-projects comprising Construction of Additional Water Supply from Larring Water Source till Chanaughtay Dangra, Laying of Distribution Mains from Chanaughtay Dangra till Schechamthang New Town and Construction of Road Network Systems within Schechamthang LAP are earmarked under ADB funded project. The tender for Construction of Additional Water Supply from Larring Water Source till Chanaughtay Dangra is under sale and soon other two projects shall be tendered out once the ground work preparations are completed by the experts. As such we were instructed by the ADB project to conduct public consultative meeting with the affected land owners before the construction is being carried out.

The main objective of the meeting is to get the consensus of the affected land owners and to avoid social problems during the execution phase. This meeting will not only enhance the smooth functioning of the project but will definitely give a platform to recognize the land owner's problems. Under ADB project it is also a mandatory to conduct such meetings. Therefore, you are instructed to arrange consultative meeting at Gakidling RNR Meeting Hall at 10.30 AM sharp on 26/1/2018.

Your presence during the meeting is must and very essential and the list of affected land owners are enclosed in separate sheet.

Yours sincerely.

(Karma Galay)

Drongda.

Copy to:

Mr. Icharam Dulal, ADB project Coordinator, MoW&HS for information and to inform Mrs. Sonam.
 Office.

2. Office copy.

PABX-J65173, FAX-J66125, Damping-Je5100, Dampink-J66124, Adm-J65264, 1803-J65230, Funnice-J65263, DE-J65368, Census Officer-J65102, Disco-J65166, DEQ-J65368, Census Officer-J65102, DMSO-J65126, DMSO-J65126, DMSO-J65126

SL No.	Owner Name & CID No.	Location of Plot
1	Tshering Dema; 11307001448	Phuntshogang, Jogidangra
2	Kusha Rai; 11307001727	Phuntshogang, Jogidangra
3	Santosh Rai; 11307001728	Phuntshogang, Jogidangra
4	Bhanu Humagai 11305002583	Phuntshogang, Jogidangra
	Dhan Kumar Samal 11307001673	Phuntshogang, Jogidangra
(Lal Bdr Rai; 11307001782	Phuntshogang, Jogidangra
	Mondos Lungeli 11307001647	Phuntshogang, Jogidangra
	Harka Bdr Rana 11307002383	Relangthang
	Bal Bdr Pithakoti 11307002476 & Son- Deo Bdr Pithakoti 11307002477	Relangthang
1	0 Bhim Bdr Pulami 21307000295	Relangthang
	1 Kausila Pradhan 11307002450	Relangthang
1	2 Pema Wangchuk 11804001341	Relangthang
1	3 Mon Bdr Rana 11307002499	Relangthang
1	4 Harka Bdr Rana 11307002355	Relangthang
1	5 Ubir Singh Rana 11307002212	Relangthang
1	6 Garjaman Pulami 11307002374	Relangthang
	7 Harka maya Dahal	Relangthang
1	8 Late Birkha Bdr Biswakarma 11311001067	Sarpang Bazar
	9 Bhim Lhama Thinley 11311001063	Sarpang Bazar

SL No.	Owner Name & CID No.	Location of Plot
	Late Birkha Bdr Biswakarma 11311001067	Sarpang Bazar
	Bhim Lhama Thinley 11311001063	Sarpang Bazar

SL No.	Owner Name & CID No.	Location of Plot
1	Late Birkha Bdr Biswakarma 11311001067	Sarpang Bazar
2	Bhim Lhama Thinley 11311001063	Sarpang Bazar

B: Minutes of the Meeting



मुराज्यानस्याश्चिरः जुड्डा रिराजाज्ञेषाःचित्रः



ROYAL GOVERNMENT OF BHUTAN

DZONGKHAG ADMINISTRATION, SARPANG: BHUTAN

Engineering Service Division

SD/Zorig-20/2017-2018/ 4558

Date: 29.1.2018

Minutes of Consultative Meeting.

Public Consultative Meeting was convened at Gakidling RNR Meeting Hall along with the affected land owners of the Sompangkha and Gakidling Geog under Sarpang Doongkhag. The theme of the meeting was to thrash out the social issues while Laying of Water Transmission Mains from Lorring to Chanaughtay Dangra and Laying of Water Distribution Mains from Chanaughtay Dangra till Schechamthang New Town is being carried out.

All the nineteen affected landowners had attended the meeting. In addition to this, three officials from Tarayana Foundation has also accompanied during the meeting as third party disposal as per the norms of the ADB requirements. The attendance sheet and their presence of signature is attached in separate sheet.

With the warm greetings, Municipal Engineer informed the floor that for any ADB earmarked projects; it is the prerequisite to conduct social analysis to safeguard the affected land owners. This will not only enhance the smooth implementation of the project but all the affected land owners shall not be deprived out of their right. Municipal engineer announced that basically, the ADB project is funding for three construction activities. They are mainly:

- Construction of Water Transmission Mains from Lorring till Chanaughty Dangra.
- ii. Laying of Distribution Mains from Chanaughtay Dangra till Schechamthang New Town.
- III. Construction of Primary Boads within Schechamthang New Town.

Municipal Engineer addressed the floor that while the projects of sl. no. i and ii are being executed, there are ample of chances that private properties may be affected. He also added that sl. no. (i) activity is under tendering process and shall be opened on 28/2/2018 and sl. no. (ii) and sl.no. (iii) activity shall be tendered out very shortly as soon after the ground work preparations are completed. He added withstanding for the upcoming activity (i) and (ii) and recognizing the need and its importance a study was conducted by the municipality to verify the affected property owners whereby they had come up with nineteen landowners. At the moment, it was observed that no properties were being affected except the land where no crops were being planted at this juncture. However, the sl. no. (iii) activity shall be carried out on the land pooled area of the Schichamthang LAP. That's how the consultative meeting of today was called to amicably thrash out the issues.

The points deliberated along with the affected land owners were reproduced as below:

PABX-365173, FAX-365145, Drongdag-365100, Drongrab-365194, Adm-365264, HRO-365230, Finance 365263, DE-365168, Census Officer-365102, Planning Officer-365146, DEO-365277, LRO-365284, RNR-365174, DMO-365120, DHSO-365159



र्राज ज़ेश अधिया बिरा

क्रेन्द्र्याचन्यार्स्ट्रेन् ब्रेड्री

ROYAL GOVERNMENT OF BHUTAN

DZONGKHAG ADMINISTRATION, SARPANG: BHUTAN



Ingineering Service Division

Mrs. Tshering Dema from Jogidangra under Gakidling Geog has raised her concern that the water transmission mains laid earlier were not properly done and due to un-proper trenching, the pipelines were laid on the surface and affected a lot during their cultivation. It was also reported that some leakages in the pipelines has caused damages to their orchard land. Similarly, the same issue may arise during the laying of new pipelines. Moreover, they raised their concern that the season for cultivation is nearing to arrive and the pipelines maybe laid after cultivation resulting destruction in the cultivated land. The issue was supported by all the landowners who were present in the meeting.

In return, the municipal engineer explained the following:-

- In the present design, the pipelines were to be embedded below three feet and
 this won't affect the individuals while the cultivation is being carried out.
 However, we will make sure that the contractor does the proper job in meeting
 the desired specifications.
- ii. With regard to leakages in the system, the highest workmanship shall be maintained and the water transmission mains shall be developed into water tight compartment. It will be the sole responsibility of the municipality to compensate the individuals if such effects are observed in future. A very close monitoring and supervision shall take place from the outset of the project till its completion by the project management unit, Sarpang and MoWHS as well.
- Municipal engineer clarified that tender for Laying of Water Transmission Mains are underway and municipal may soon initiate the construction after the award of work. There are ample of chances that laying of pipelines may incur destruction on your cultivated land. He addressed the floor that while the work plan is prepared, sequencing of work shall be done in such a manner to avoid destruction on the cultivated land. Since most of the pipelines run through state land, the activity shall take place only in the state land unless harvested. As far as possible the project management unit shall try their best to avoid the destruction in the cultivated land and if at all required, the compensation shall be paid to the individuals from the budget proposal made by the Dzongkhag. We will not predict any payment for now but shall be compensated as and when it is required based upon actual measurement.
- Mr. Bhanu Homagai from Jogidangra under Gakidling Geog has requested for individual house hold connections from the same project since they face acute shortages of potable drinking water supply and the present water transmission line unable to cater the required amount of drinking water. This issue was also supported by other six

PABX-365173, FAX-365145, Dzongdag-865100, Dzongrab-365194, Adm-365264, HRD-365230, Electron 365263, DE-365168, Census Officer-365102, Planning Officer-365146, DEO-365277, LRO-365184, ENEL-365174, DMO-365120, DHSO-365159



मृश्यायरवाङ्गर ब्रह्म। निराजाःस्वराज्ञ्चयाःचार्थरः।



ROYAL GOVERNMENT OF BHUTAN

DZONGKHAG ADMINISTRATION, SARPANG: BHUTAN

Engineering Service Division

affected landowners from the same area. While the question was raised by the municipal engineer, they reported that the present size of the pipeline is 32 mm dia from the source till midway and it's followed by 25 mm dia till distribution tank. The exact length of the pipeline could not be determined during the meeting. They also told the size of the distribution tank is 4000 liters built in the year 2003. The distribution tank is very old and is getting obsolete.

Against the issue the municipal engineer responded and clarified the following:-

- On inquiry, it was observed that existing water source is sufficient to cater the
 required amount of drinking water for such a small population. The problem is
 with the curtailing of the pipe size in the mid-way, using 25 mm dia and being
 distribution tank very small and obsolete is creating insufficiency of drinking
 water.
- ii. It was informed the floor that raw water transmission mains was solely calculated for Schechamthang New Town in the present design aspects in the first place. If individual household connections were given to Jogidangra affected landowners; firstly, the purpose of the municipality to supply treated drinking water will be defeated. We cannot provide raw water to the consumers without treatment as per drinking water rules. Secondly, the location of treatment plant is much lower than Jogidangra area and will be unable to cater the water after treatment. As such the floor was informed and convinced its inability to provide the Individual household connections as well.
- iii. The size of 25 mm dia pipe should be replaced by 32 mm dia and the higher capacity distribution tank should be constructed as an alternative. In contrast to facilitate the affected landowners, the municipal engineer informed the floor that the above activities shall be appraised under the same project for support or otherwise as second alternative; maybe the communities should come up with the proposal of the project through the Geog.
- Mr. Mon Bdr. Rana from Relangthang under Gakidling Geog had requested the municipality to lay the new pipelines and shift the existing pipelines from outside his fencing area. The municipal engineer told that new pipelines could be taken out of his fencing area if the distance of reach is permissible and with regard to relocation of existing pipelines, the decision could be offered only after field verifications.
- Mr. Kusha Rai from Jögidangra under Gakidling Geog had requested to shift the existing pipelines running through his retaining walls and to lay the new pipelines beyond the retaining wall. With regard to new pipelines, it was informed that new pipelines shall be

PABX-365173, FAX-365145, Dzongdag-365100, Dzongreb-365194, Adm-365264, HRO-365230, Finance-365263, DE-365168, Census Officer-365102, Planning Officer-365146, DEO-365277, LRO-365184, RMR-365174, DMO-365120, DH5O-365159



मृश्यूबावरवाश्चर अष्ट्र। रशजान्त्रयाच्याचान्त्र



ROYAL GOVERNMENT OF BHUTAN

DZONGKHAG ADMINISTRATION, SARPANG: BHUTAN

Engineering Service Division

laid beyond retaining walls and relocation of existing pipelines shall be decided only after field visit.

Mr. Pema Wangchuk from Jogidangra under Gakidling Geog has reported that the usage of machineries in trenching of pipelines shall not be permitted during execution period in the private land. In return, municipal engineer also stated that the trenching shall be done manually and the usage of machineries shall be kept at the discretion and amicable understanding between the contractor and the landowner.

In general, the municipal engineer requested the affected landowners to immediately report the project management unit, Sarpang Dzongkhag if any mismanagement is being carried out at site during the implementation stage rather than conversing with the contractor. This is basically to resolve the confronted issue amicably between each other and avoid un-necessary quarrels.

The representatives from Tarayana Foundation as third party have also interviewed the landowners during the consultative meeting and photographed the individuals for evidence.

Since there were no further submissions from the affected landowners and after thorough explanations, the landowners had accepted the undertaking and signatures granted.

The consultative meeting was adjourned.

(Tashi Chhophel) Rapportelii (Icipal Enginesi

Sarpang : Ozongkhai

PABN 365173, FAX-365145, Drongdag-365100, Drongrab-365194, Adm-365264, HRO-365290, Finance 365263, DE-365168, Census Officer-365102, Planning Officer-365146, DEO-365277, LRO-365184, RNR-365174, DMO-365120, DHSO-365159

THIRD PARTY STATEMENT ON AFFECTED HOUSEHOLDS INFORMED CONSENT, PARTICIPATION AND SUBPROJECT IMPACT

Third Party Statement

About 2km of the raw water transmission line from the source to the existing Sarpang water treatment plant to be constructed under the Sarpang water supply scheme will be routed through privately owned lands – most of which are used for agricultural purposes.

Ms.Sonam Pem, the independent third party from Tarayana Foundation, a registered Civil Society Organization in Bhutan is appointed to oversee and certify that the private land owners have agreed- without any coercion-to the passage of the transmission pipe through their properties and that they have been adequately consulted by the executing/ implementing agencies regarding the project and the compensation for any crop losses due to the pipe laying.

Sonam attended the consultation meeting organized by the District with all the stakeholders held on the 29th of January 2018 at the Renewable Natural Resource (RNR) Meeting hall in Gakidling gewog. The Dzongkhag Engineering Office (DEO) has already carried out a field assessment and has also done the measurement of land for the pipe laying work in the APs land. The APs were well aware of the project and had come prepared with the concerns they had with regards to this work.

Third Party Statement



Consultation Meeting

During the meeting, the affected persons (APs) were reoriented on the whole project first and then the specific issue of laying water pipes through their private land. All the APs were also reminded of the meters of pipe that will be laid on their land, and then they were asked to voice out concerns openly on this matter.

From the consultation, there were two concerns raised by the APs:

- The major concern all the APs was not on the pipe having to be laid on their land, but on the depth of the pipe laying work. This is mainly due to the past experience as the earlier transmission line was not laid properly and it had resulted into leakage of water on their land and damaged their orchards. The District engineers explained on the depth requirement of this pipe laying work and that their concerns related will be adequately addressed.
- The second concern was raised by a few APs was on the drinking water issue. To which the District Engineer said they Dzongkhag will look into it. The details are in the minutes of the meeting prepared by the DEO.

After the deliberations were done thoroughly, all APs signed on the no objection statement for the pipe laying work. This is also with the

Third Party Statement

understanding that there is no restriction on the land use after the pipes are laid.

The independent assessment team visited all the sites to see the land identified for the pipe laying work and to gathered information to ensure that none of the family falls under the vulnerable category.







Pictures from the site visits







Having attended the consultation meeting with the APs and seeing all the sites, I hereby certify that:

The land owners have:

 a. willingly and without any coercion agreed to the laying of the water transmission line through their properties;

Third Party Statement

- b. been adequately consulted and informed about the project (including construction schedules) and their eligibility for compensation for any crop/ structure losses.
- the laying of the pipe through does not adversely affect any vulnerable groups/poor families
- d. that the preferences and concerns of the land owners related to pipe alignment through their properties are recorded and any stipulated conditions related to pipe laying without transfer of land to government, will be met

Sam

Program Director Tarayana Foundation Thimphu: Bhutan

Sonam Pem

Programme Director

Tarayana Foundation

GRIEVANCE REDRESS MECHANISM AND GRIEVANCE REDRESS COMMITTEE NOTIFICATION



रतजाः मेर्यायवियाः गविरः। वयसः मेर्याः मेर्यायया।

ROYAL GOVERNMENT OF BHUTAN MINISTRY OF WORKS & HUMAN SETTLEMENT

DEPARTMENT ENGINEERING SERVICES THIMPHU: BHUTAN

"Construction Industry: Solutions through innovation and improved technology"

DES/PMU/ ADB-8551/8 19

4.12. 2017

The Director, Urban Development and Water Division, South Asia Department, Asian Development Bank 6 ADB Avenue, Mandaluyong City 1550 Metro Manila, Philippines

Sub: Grievance Redress Mechanism

Dear Sir,

The Ministry of Works and Human Settlement would like to inform that the Grievance Redress Mechanism (GRM) has been established in the Ministry and in the Project Implementation Units. The objective of the establishment of the GRM is to redress the social, environmental and other grievances of the aggrieved persons during the implementation of the Secondary Towns Urban Development Project (STUDP) BHU-8551. The flow chart, structure of the GRM committee, the procedure that would be followed is attached.

This is as per the agreement reached with the ADB during the mission from 13th November to 17th November 2017.

Thank you,

Yours sincerely,

Secretary

Cc:

- Dasho DzongdaTrashigang and Sarpang Dzongkhag
- 2. The Executive Secretary Samdrup Jongkhar Thromde, Samdrup Jongkhar
- 3. Director, Department of Engineering Services, MoWHS, Thimphu
- 4. Shinjini Mehta, Urban Development Specialist, SAUW, ADB, Manila, Philippines.
- 5. Chief Engineer, WSD, DES
- 6. Project Manager, ADB-8551, WSD, DES

Flow chart: **Local Contractor** (construction related) 2 days PIU records complaint 5 days Dzongkag/ thromde municipal committee 15 days Central **Grievance Redress Committee** 10 days Court

Grievance Redress Mechanism, STUDP

Figure 1: Grievance Redress Mechanism, STUDP

Procedure and composition of GRM Committee

 The Project Grievance Redress Mechanism follows a tiered system, starting at the local level. The GRM structure has been agreed with the concerned agencies and a notification of the GRM stricture and composition has been provided by the Ministry of Works and Human Settlements
 (MOWHS)



-). The GRM will ensure that grievances and complaints regarding land acquisition, compensation and resettlement or other social and environmental issues will be addressed in a timely and satisfactory manner. People in the towns will be made aware of their rights and the detailed procedures for filing of grievances. PIUs will be undertaking outreach activities to make people aware of the GRM and will be published on the thromde/ dzongkhag and MOWHS websites.GRM will also be displayed at notice boards in the PIU offices.
- 2. **First level of GRM.** Aggrieved persons may first approach the contractor's site representative/ project manager in case of complaints related to construction related nuisances. The complaint must be recorded in the site register and contractor should provide a resolution to the complaint within 2 days. In case, the complaint is not resolved at this level, the aggrieved persons can then file a complaint with the PIU office. Aggrieved persons are entitled to lodge complaints regarding any aspect of the land acquisition, entitlements, benefits or rates of payment as well as any project related social or environmental issues. Complaints can be made verbally or in written form. Complaints made to the PIU should be resolved within 3 days. All complaints must be recorded by the PIU, including actions taken to resolve the complaint. Complaints, their nature and resolution should be mentioned in the quarterly progress reports.
- 3. 2nd level of GRM: At this level, the PIU Manager/Municipal level will coordinate with the Dzongkhag/ thromde municipal Committee which should be in place prior to project implementation. This committee will be comprised of: (i) Dzongda (district administrator) or thrompon (mayor) as Chairman; (ii) municipal engineer (PIU Project managers) as Member secretary; (iii) District engineers; (iii) district/ municipal planning officer; (iv) district/ municipal legal officer; (v) district/ municipal environmental officer; (vi) district/ municipal land record officer, (vii) town representatives (elected); and (viii) gender focal person of PIUs; The aggrieved person / or the representative who filed the complaint will be called to present his case and deliberation on the case will be done through proper hearing or mediation. It will be the responsibility of the dzongkhag/ thromde committee to resolve the issue within 15 days from the date the complaint is received Minutes of meeting of the Dzongkhag/ thromde committee meeting will be kept and resolution provided will be recorded for purposes of project monitoring.
- If the complaint is unresolved at this level, the PMU, PIU or the District Administrator will inform the aggrieved person accordingly and assist them in elevating the complaint to the PMU/ Central Grievance Committee.
- 5. 3rd level of GRM. Grievances not redressed at the Dzongkhag/ thromde municipal committee within 15 days will be brought to the Central Grievance Redress Committee at MOWHS level. The Central Grievance Redress Committee will comprise of: (i) Secretary, MOWHS (Chairman); (ii) Director, DES (Member secretary); (iii) Project manager, PMU; (iv) Project coordinator, PMU;(v) Water and Sanitation Division chief; (vi) legal officer, MOWHS; (viii) environmental officer, MOWHS; (ix) gender officer (MOWHS); (x)representatives from local NGOs;.It will be the responsibility of the Central committee to resolve the issue within 10 days from the date the complaint is received. In the event, the grievance is still not resolved; the matter may be elevated by the aggrieved person to an appropriate court of law. The court will have the final authority to approve or reject the case. Aggrieved persons may seek recourse through legal system at any stage of the GRM process.

Composition of Dzongkhag/ thromde Municipal Committee: Chairman - Dzongda(district administrator)/ thrompon (mayor) Member - secretary- municipal engineer (PIU PMS) Other members - district engineers, planning officer, legal officer, environmental officer, land record officer, town representative (elected), gender focal person.

Composition of central Grievance Redress Committee Chairman – Secretary, MOWHS Member secretary – Director, DES Other members-PMU, PM; Project coordinator, WSD chief legal officer; environmental officer; gender officer (MOWHS)



SAMPLE GRIEVANCE REDRESS FORM

The		ect welcom	es complai	nts. suc	raestions
queries, and comments regarding project in to provide their name and contact informati and feedback.	nplementation	n. We encoւ	ırage perso	ns with	grievanc
Should you choose to include your pe confidential, please inform us by writing/typ					
Date Place	of Registration	n			
Contact Information/Personal Details					
Name Name	G	Sender	* Male * Female	Age	<u> </u>
Home Address	l			1	
Place					
Phone no.					
E-mail					
of your grievance below: If included as attachment/note/letter, please How do you want us to reach you for feed		te on your c	omment/grie	evance?	
FOR OFFICIAL USE ONLY Registered by: (Name of Official registering of Official	grievance)				
Mode of communication: Note/Letter E-mail Verbal/Telephonic					
Reviewed by: (Names/Positions of Officials F	Reviewing Griev	vance)			
Action Taken:					
Whether Action Taken Disclosed:	Ye No				
Means of Disclosure:					

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SAMPLE FORM FOR INVENTORY OF LOSS SURVEYS

1. 2. 3. 4. 5. 6. 7. 8. 9.	Date: Name of the Subproject: Name of the Place (s)/Village / settler Panchayat/Municipality. District: Region: Plot No. with details of Thram:	nent(s):	 3. Land & structure	,
10.	Ownership of the Land Representation 1. Private 2. Government 3. I	Religious 4. C	ommunity 5. Othe	ers
11.	Type and Use of Land Agricultural 2. Grazing 3.	. Fallow	4. Plantation	1. Barren
	6. Mixed use 7. Residential 8.	. Commercial	9. Other / No	
12.	Irrigation Facilities of Land Irrigated		use	
13.	3. Area to be Acquired / Affected Land (rakba)		
14.	4. Total Area of the Land/ Plot (In case a sq.m/acre/bigha/kata, specify)		and/ plot to be acqui	red/affected) (in
15.	5. Total Land Holding (affected + unaffe 1. Irrigated: 3. Other:	2. Un-irrigate		
16.	 Status of Ownership 1. Titleholder 2. Customary Right 4. Encroacher 5. Squatter 6. Of Type of Private Ownership 1. Individual/Single 2. Joint/Sha 	ther (specify):		
17.	7. Name of the Owner/Occupier (s):			
18.	8. Father's Name:			
19.	9. Rate of the Land (Rs./Per Acre) 1. Market Rate:	2. Governn	nent Rate:	
20.	O. Any of the following people associate A. Agricultural Laborer Total Numbers (If Yes): Names (If Yes):	1. Yes	2. No	

ndix 10

	(i) (ii)	1. Yes	2. No	
	(i)	es 2. N	No	
	(i)	1. Yes		
21.	Number of trees within the affected area			
	1. Fruit Bearing2. Non-fruit FodderTotal		3.	Timber4.

22. Details of Trees

SI No	Name of Trees	Type of Trees (1. Fruit Bearing, 2 Non-Fruit Bearing, 3. Timber 4. Fodder)	Age of the Trees	Number of Trees	Market price (Rupees)
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

23. Which crop do you cultivate in the affected land (start with ascending order as major crop)?

Total Yielding per Crop (Kg) in the affected area

	-				
		I		1	·
24. Ho	w many seasons ir	n a year you	cultivate in the affe	cted land	
	1. One season acture in the Affect		seasons 1. Yes	3. Three Seasons 2. No	
	a of the affected s	•	square meter / squa	re feet,	
a) L b) W c) H	asurement of Affeo ength /idth eight umber of Storey		re (sq m / sqft)		
27. Are	ea of the boundary	wall only (i	n Meter): a) Length	b) Height	
28. Are	a of the Total stru	cture (in Squ	uare Meter)		
a) L b) V	asurement of Tota ength /idth eight				
30. Sca a) 2	ale of Impact on sti 5% b) 50%	ructure c) 75%	d) 100%		
Type of	Construction of th	e Structure			
SI Nº	Particulars	(1). Simp	, (5), Concrete, (6) C	oo/slats, (2) Earth/clay/sar orrugated iron sheet, (7)	
1	Roof		•		
2	Floor				
3	Wall				
	·		Rs.):		

Total Affected Area under Crop (sq m)

Type of Crops

33.	Use of the Structure (select app A. Residential Category	propriate code from below)		
	1. House 2. Hut	3. Other (specify)		
	B. Commercial Category 4. Shops 7. Kiosk 10. Clinic 13. Vendors 16. Pvt. Office	5. Hotel 6. Sr 8. Farm House 9. Pe 11. STD Booth 12. V 14. Com. Complex 15. I 17. Other (specify)	etrol Pump Vorkshop ndustry	
	C. Mixed Category 18. Residential-cum-Comme	rcial Structure		
	D. Community Type 19. Community Center 22. Memorials	20. Club 21. 7 23 Other (specify)	rust	
	E. Religious Structure 24. Buddhist Shrine/Temple/ 26. Mosque 29. Sacred Grove	monastry 27. Gurudwara 30. Other (specify)	28. Church	
	36.Other (specify)	32. Hospital/Health Post 35. Bus Stop	33. School	
	G. Other Structure 37. Boundary Wall 40. Other (specify)		39. Cattle Shed	
34.	Status of the ownership of Structure 1. Legal Titleholder 2. Cust 4. Encroacher 5. Squ	tomary Right 3. License fi	rom Local Authority	
35.	Any of the following people asso 1. Yes	ociated with the Structure? 2. No		

People associated	Yes/ No	If yes, please give the number and names	Lease/rent paid, if yes monthly rent	Employee, if yes, onthly salary/ daily wage rate (INR)	Remarks
Tenants					
Employee in residential structure					
Employee in business structure					
 Community Buddhist 2. Hi Number of f 	indu 3. Christia	n; 4. Muslim; 5.	Others Female	Total	
1. Unmarried 3. Divorcee/ 5. Minor Orp 39. Vulnerability A. Is it a wo B. Is it head C. Is it a hol D. Is it landl E. Is it Elde	d Son > 35 yea Widowhan Y Status of the I man headed he led by physical usehold Below ess? 1. Yes 2 rly people witho	4. Physically/M Household: ousehold with de ly/mentally challe Poverty Line (BI	married Daughto lentally Challeng ependent? enged person? PL) 1. Yes 2. I ce? 1. Yes 2. N		
		ad of the House ousiness; 3. Serv		ce of Income) others (Specify)	
41. Total Annua	Il income of the	family from all s	sources Rs		
	ne (total turnov	er) per unit (Dec	simal/acre) from	affected land	
43. Annual incor Rs		er) from affected	d commercial str	ucture, if applicabl	e in
Rs			labour cost and	ommercial enterpri I operating cost inc	
45. If displaced,	do you have a	dditional land to	shift? 1. Y	es 2. No	

46. If yes, how far from the present location (km).....

47. Resettlement/ Relocation Option

	1. Self-Relocation 2. Project Assisted Rel	ocation	
48.	Compensation Option for Land loser 1. Land for land loss	2. Cash for Land loss	
49.	Compensation Options for Structure loser 1. Structure for structure lose	s 2. Cash for Structure loss	
1. S fror	Income Restoration Assistance (fill codes in Shifting Allowance; 2. Employment Opportun other ongoing development scheme; 4. Transtablish lost/affected business, 6. Others (special content of the conte	ities in Construction work; 3. Assist aining for Vocational activities; 5- As	

51. Details of the Affected Persons (Family/Households)

Family Details

SI. Nº	Name of the Family Member	Relation to Head of the Household #	Age (year s)	Sex ##	Occupation *	Marital Status**	Education***
1							
2							
3							
4							
5							
6							
7							
8							

Code: #1. Self-2. Father 3. Mother 4. Husband 5. Wife 6. Son 7. Son in law 8. Daughter in law 9. Grandfather 10. Grandmother 11. Daughter 12. Brother 13. Sister 14 Grandson 15. Granddaughter 16. Uncle 17. Aunty 18. Cousins ## 1. Male 2. Female

(NOTE FOR ENUMERATOR: All affected persons to be surveyed. If details of tenants / employees are obtained from the owners, such persons will also have to be located and surveyed using applicable fields in the above questionnaire).

^{* 1.} Service2. Business3. Agriculture4. Study5. Housewife6. Labour7. Unemployed8. Professional

^{9.} Pensioner10. Government Employee11. Private Employee12 Fisheries13 Infant14 Other

^{** 1.} Married2. Unmarried3. Widow4. Widower5. Others

^{*** 1.} Illiterate2. Literate3. Up to primary4. Secondary5. Graduate6. Post Graduate

MONITORING REPORT AND SAMPLE MONITORING TEMPLATE

1. A semi-annual monitoring report shall be prepared on Resettlement Plan implementation and submitted to ADB by the PMU. It will include: (1) the list of affected persons, with compensation, if any due to each and details of compensation paid with signed receipts annexed to the report, socioeconomic status and satisfaction levels of affected persons with the resettlement plan implementation process, compensation and mitigation measures; (2) the list of vulnerable affected persons and additional compensation / special protection measures planned/implemented for them; socioeconomic status and satisfaction levels of vulnerable affected persons with the resettlement plan implementation process, compensation and mitigation measures; (3) list of affected common facilities affected, plan to restore access and/or actions taken to restore access to the same or facilities of equal quality elsewhere; (4) list of roads for closure and actions planned / taken to minimize disturbance; (5) details of consultations held with APs (with number of participants by gender, issues raised, conclusion/ agreement reached, actions required/taken; (6) details of grievances registered, redressed, outstanding complaints, minutes of GRM meetings held; (7) details of information disclosure and awareness generation activities, levels of awareness among target population and behavior change, if any; and (8) any other relevant information showing resettlement plan implementation progress. The following checklist may be used for overall monitoring of resettlement plan implementation.

S. N.	Resettlement Plan Activities	Completed Y/N	Remarks
A. Pı	re-Construction Activities and Resettlement Plan Activities		
1	Approval of final Resettlement Plan by ADB prior to contract award		
2	Disclosure of final Resettlement Plan on ADB and EA websites		
3	Circulation of summary RP in two local languages to all stakeholders		
A. R	esettlement Plan Implementation		
1	Grievance Redress Cell and Committee established		
2	Entitlements and grievance redress procedure disclosed		
3	Finalization of list of APs, vulnerable APs and		
	compensation/assistance/allowances due		
4	Finalization of list of roads for full or partial closure; mitigation measures proposed		
5	Affected persons received entitlements as per amounts and program specified in		
	RP		
6	Payment of compensation, allowances and assistance (No. of APs)		
7	Additional assistance for vulnerable households given (No. of vulnerable APs)		
10	Reinstallation of affected common facilities, if applicable		
11	Grievances		
	No. of grievances registered		
	No. of grievances redressed		
	Outstanding complaints		
	Disclosure of grievance redress statistics		
12	Consultation, participation and disclosure as per Plan		
	onitoring	Т	
1	Survey on socio-economic status of APs (including vulnerable APs) completed and		
	compared with baseline survey results		
2	Survey on satisfaction levels of APs with RP implementation completed		
D.	Labor		
1	Implementation of all statutory provisions on labor like health, safety, welfare,		
	sanitation, and working conditions by Contractors. Ensuring no child labour used		
2	Equal pay for equal work for men and women		

NOTE: Where applicable, the information provided in the table should be supported by detailed explanatory report, receipts and other details.

SUBPROJECT SITE PHOTOGRAPHS





Images showing the two doubly impacted land pots (one with arecanut plantation; requires alignment change/bend)





Proposed alignment passing across roads at two locations





Proposed alignment passing inside but along boundaries of orange orchards