# GOVERNMENT OF PAKISTAN MINISTRY OF ENERGY (POWER DIVISION)



# NATIONAL TRANSMISSION & DISPATCH COMPANY (NTDC)

# 765KV DASU TRANSMISSION LINE PROJECT RESETTLEMENT ACTION PLAN (RAP)









November 2019

National Transmission & Despatch Company Ministry of Energy (Power Division) Government of Pakistan



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# ABBREVIATIONS

AAAC ACSR amsl BP C&W CAS DHP DTL EA EIA EMP EQS ESIA ESIC ESMP FDG GHG GOP GRC GRM GT Road IEE ILO IMC KKH KP LAA LAC NCS NGO NHA NRP NTDC OP OPGW OPL	All Aluminum Alloy Conductor Aluminum conductor, steel reinforced Above mean sea level Bank Procedures Communication & Works (Department) Compulsory Acquisition Surcharge Dasu Hydropower Project Dasu Transmission Line Executing Agency Environmental Impact Assessment Environmental Management Plan Environmental Management Plan Environmental and Social Impact Assessment Environmental and Social Impact Assessment Environmental and Social Impact Scell Environmental and Social Impact Scell Environmental and Social Management Plan Focus group discussion Greenhouse gases Government of Pakistan Grievance Redress Committee Grievance Redress Mechanism Grand Trunk Road Initial Environmental Examination International Labor Organization's Independent Monitoring Consultant Karakoram Highway Khyber Pakhtunkhwa Land Acquisition Act Land Acquisition Collector National Conservation Strategy Non- Governmental Organization National Highway Authority National Resettlement Policy National Transmission and Despatch Company Operational Policy Optical ground wire Official Poverty Line
PAP	Project Affected Person
PAPC	Project Affected Persons' Committee
PIRACO	Project Implementation and Resettlement of Affected Persons Ordinance
PEPA	Pakistan Environmental Protection Act
PIU	Project Implementation Unit
PKR	Pakistani Rupee
PMU	Project Management Unit
RAP	Resettlement Action Plan
RoW	Right of Way
RPF	Resettlement Policy Framework
SIA	Social Impact Assessment
TL	Transmission Line
ToR	Terms of Reference
UC	Union Council
UIB	Upper Indus basin



USD United States Dollar WAPDA Water and Power Development Authority WB World Bank

Currency unit: Currency exchange rate: Pak Rupees PKR 160 equals 1 US\$



## **Definition of Key Terms**

Asset Inventory	A complete count and description of all property that will be acquired.
Resettlement Allowance	Cash paid to cover resettlement related expenses other than losses of immoveable assets paid as compensation. A moving allowance can be paid to people who have to relocate as a result of the project impact. An allowance is distinguished from compensation, which reimburses the loss of an immoveable asset.
Baseline	A set of pre project conditions used as a basis for project.
Compensation	Payment in cash or in kind for an asset or resource acquired by the project.
Customary Law	A law passed down through oral tradition, which has now been adopted by the community as <i>riwaj</i> to use rights and management of natural resources.
Cut-off-Date	Cut-off date is the date the census begins. It determines the eligibility for compensation and entitlement.
Economic	Loss of income streams or means of livelihood resulting from restricted
Displacement	access to land and other resources resulting from project intervention.
Grievance Mechanism	This is an extra-judicial mechanism by which project-affected persons or general public can raise their concerns to project authority.
Involuntary Resettlement	Involuntary or forced resettlement in project context without any recourse or power of the to refuse resettlement.
Jirga	Jirga, a traditional dispute resolution mechanism, refers to the assembly of local elders to resolve the community concerns.
Kharif	Summer cropping season of the year (15th April – 15th September)
Katcha	House or building made of un-burnt bricks and/or mud with wooden/thatched roof.
Rabi	Winter cropping season of the year (15 September – 15th April)
Mouza/Village	A demarcated territory, for which separate revenue record (Cadastral map) is maintained by the Revenue Department.
Pacca	A house/structure is considered pacca, if both the walls and roof of the house are made of material that includes bricks, cement, sheets, slates, corrugated iron, zinc or other metal sheets, bricks, lime and stone or RBC/RCC concrete.
Patwari	Revenue record keeper/clerk at village level.
Project Affected Person	Persons (or households) affected by project-related changes in use
	of land, water or other natural resources either in full or in part, permanently or temporarily.
Physical displacement	Loss of shelter and assets resulting from taking of land associated with a project that requires the affected person(s) to move to another location.
Rehabilitation	Re-establishing incomes, livelihoods, living, and social systems at least to the pre-project levels.



Resettlement Strategy	The approaches used to assist people in their efforts to improve (or at least to restore) their incomes, livelihoods, and standards of living in real terms after resettlement.
Resettlement Action Plan	A time-bound action plan with budget setting out resettlement strategy, objectives, entitlement, actions, responsibilities, monitoring and evaluation
Resettlement Entitlements	Resettlement entitlements with respect to a particular eligibility category are the sum total of compensation and other forms of assistance provided to displaced persons in the respective eligibility category.
Replacement value	Cost of replacing lost assets and incomes, including cost of transactions, (taxes, duties and any other allied expenses).
Semi Pacca	A house/ structure is considered Semi Pacca, if both the walls and roof of the house are made of material that includes wood, planks, grass, leaves and wall are made of bricks walls with mud masonry or un-burnt brick.
Stakeholders	Any and all individuals, groups, organizations, and institutions interested in and potentially affected by a project or having the ability to influence a project.
Socioeconomic Census/Survey	A complete and accurate survey (i.e., census) of the project-affected population. The survey focuses on income-earning activities and other socioeconomic indicators.
Shamelat	Communal land
Tehsil	Tehsil is a sub-district (i.e. the layer of administration below a district).
Vulnerable groups	Distinct groups of people who might suffer disproportionately from resettlement effects



# EXECUTIVE SUMMARY

#### The Project

The National Transmission and Despatch Company (NTDC) of Pakistan, with funding from the World Bank (WB), plans to undertake Dasu Transmission Line (DTL) Project, a 250 kilometers (km) long, 765 kilovolt (kV), High Voltage Alternating Current (HVAC), a double circuit transmission line from the Dasu Hydropower Project (DHP) to Islamabad West Grid Station. The DHP is already under implementation by the Water and Power Development Authority (WAPDA) with the support of WB and its first phase (2160 MW) is expected to be commissioned by December 2023.

The proposed DTL will require 674 towers, of which 217 will be angle towers and the remaining will be suspension towers. The average size of each tower footing will be 20mx20m (400 square meters). The average height of each tower will be about 83m. The right of way (RoW) of the DTL will be 80m wide. The section of DTL runs through eight districts, i.e., Upper Kohistan, Lower Kohistan, Shangla, Battagram, Mansehra, Haripur, Abbotatabad, and Attock. The two Kohistan districts have six union councils and 28 villages along the alignment; Shangla district has four union councils and 18 villages; Battagram district has nine union councils and 32 villages; Mansehra district has eight union councils and 22 villages; Haripur district has seven union councils and 22 villages; and lastly the Attock district has four union councils and 13 villages through which the transmission line is passing.

NTDC have undertaken an environmental and social impact assessment (ESIA) of the proposed DTL Project in accordance with the national regulatory requirements and World Bank operational policies. A draft Resettlement Action Plan (RAP) was also prepared in 2017.

#### **Revised RAP**

The present RAP revision addresses changes in project design and its impacts in the project area. It has been prepared based on 100% census of Affected Persons (APs) in terms of loss of land, crops, trees, tube-wells and building structures. In addition, a socio-economic survey was carried out to obtain a detailed understanding of the socio-economic conditions of the APs and to provide baseline data for the monitoring of the implementation of the RAP and the impacts of the project. The finding of the survey was validated through Focus Group Discussions (FGDs) with men and women conducted in the project area and the consultation with stakeholders.

#### Census and Socioeconomic survey results

The DTL will affect a total of 1,088 households (total: affected persons 7,740); male population is 53.3% while the female population is 46.7% among the APs. Average family size is 7.1 persons per family.



Farming is the major source of income of the surveyed households. Apart from farming, other sources of income include government and private services, business and remittances.

Poverty is dominant in the project area, as 44% of the households earn less or close to the official poverty level (OPL) (PKR 20,301<sup>1</sup>). A notable approx. 7% earns more than PKR 100,000. Land is the major determinant of farm income and big holding size is the symbol of dignity and honor in the rural set up. All 1,088 households are land owners. However, generally people have small land holdings.

As far as the availability of infrastructures is concerned, almost all the houses in the project area are electrified while gas is available to a small number of the respondents, especially in KP (11%). Access to potable water supply is also low at approx. 30%. In terms of gender equality, women's participation is reported high in child caring (82%) and household activities (91%). Women's participation in farming (7%) and livestock management (9%) is low, and so is their participation in business and commerce.

#### Project impact - Summary

	Resettlement Impacts	Quantity (acres)	Nature of Impact
Α.	Land along DTL Route		
i)	Cultivated land		Decreased value and
	Under towers	66.7 acres	utility of affected land.
	Under line	2,282.3,acres	
ii)	Barren land		
	Under towers	29.8 acres	
	Under line	2,160.1 acres	
iii)	Commercial/Residential land	3.5 acres	Decreased value and utility of affected land.
			Built-up structures falling under the transmission line will need to be removed.
iv)	Forest land	377.5 acres	Nominal impact.
v)	Others	69.2 acres	
	Total	4,953.1 acres	
В.	Affected crops		

The following resettlement impacts are anticipated from project construction.

<sup>1</sup> According to the Economic Survey of Pakistan 2015-16, a new poverty line is estimated using patterns of consumption of reference group (using CBN) and it comes to PKR 3030 per adult equivalent per month using the latest available HIES 2013-14 data. Taking the average household size of 6.7, the poverty line of a household is calculated as  $3030 \times 6.7 = PKR 20,301/-$  per household.



	Resettlement Impacts	Quantity (acres)	Nature of Impact
i)	Total area of agriculture land to be impacted by tower installation and conductor stringing	2,313 acres	Crop damage
ii)	Area under access tracks	230 acres	Crop damage
	Total	2,543 acres	
С	Affected structures		
1	Total Number of Residential Structures	49	Loss of structure
2	Total Number of businesses (poultry farm)	1	Loss of structure
	Total affected structures	50	
D	Affected trees		
1	Privately owned Wood/ Timber Trees	27,321	Loss of trees
2	Privately owned Fruit Trees	880	Loss of trees
3	Government owned trees	1,528	Loss of trees
	Total affected trees	29,729	
Е	Project Affected Households	1088	
	Total number of affected persons	7740	
1	Households losing structures	29	
2	Households losing crops	648	
3	Households losing trees	510	
4	Vulnerable households	98	

### Cut-off date

Since land will not be acquired through the LAA of 1894, the cut-off-dates are based on the census dates over the 250 km length of the TL. There are eight cut-off dates for eight different districts (see Table 4.3), starting with the day of the census along the alignment in the district. People were informed of the cut-off dates during the census and local stakeholders' consultation.

#### Consultation

Public consultation (also including women) was carried out in July-August 2019 for revising the RAP. These consultations were held in a participatory manner with all stakeholders. Consultations were carried out through key informants' interviews, structured surveys, informal group meetings and consultative workshops. These consultation meetings proved very useful in information sharing and consensus building. Main topic discussed included description of project components, project activities and its impact assessment; compensation and allowances payment, eligibility criteria, compensation package, entitlement matrix; grievances redress procedures and general concerns of the APs. The following Table A



provides a summary of the consultation meeting over the project preparation period at different level – from local to national consultation.

Year	Total Number of Villages where Consultation held	Location	Total Number of Participants			
	Project Level Consultation					
2016	29	Transmission Line	167			
2019	6 Villages for GS 33 Villages for TL	Grid Station (GS) & Transmission line	171 in GS 249 in TL Total =420			
Oct 2019	District level Consultation meeting to share the revised and updated RAP	Besham	30			
Oct 2019	District level Consultation meeting to share the revised and updated RAP	Mansehra	51			
	Instit	utional				
	Number of Meetings	Office/Agencies				
2016	6	EPA, NHA, Wildlife, Forestry, MoCC, IUCN	7			
2019	7	EPA, Forestry, DFO- BTP, HFO (NGO), Irrigation Dept., NHA, Wildlife, National Integrated Development Association, Salik Development Foundation.	8			
	National Leve	el Consultation				
	Type of Participants	Location				
2016	Multi-stakeholders	Islamabad	81			
2017	Multi-stakeholders	Batagaram	84			
2017	Multi-stakeholders	Attock	59			

#### Table A: Stakeholders Meetings - Summary

The general concerns of the APs (also including women) were focused on payment of compensation based on the market rates, forms of payment, employment in the construction activities, and adequate mechanism for grievance redress. APs were informed that NTDC is working with local government agencies – for example, agriculture, forestry etc. – to finalize and come up with the market rates of the lost assets and compensation disbursement will commence once the compensation package is finalized. Similarly, jobs will be provided



preferably to local people in the construction activities. NTDC has also established a Grievance Redress Mechanism (GRM) to receive and address the grievances from the APs. The RAP will be disclosed to the APs and key stakeholders and posted on the NTDC website and other prominent places.

During project preparatory work, the NGOs in the project area were consulted. For DTL, consultations were done with The Human Federation, Al-Khidmat Foundation, National Integrated Development Association, Salik Development Foundation and Environmental Protection Society. The NGOs viewed the project positively, but empahsised on timely payment of compensation, good management of the environmental issues, employment for local people and community development programs by the project in the project area to benefit the affected communities.

#### Legal Framework and Entitlements

Since there will be no permanent acquisition of lands – and only temporary use for the construction of the line and towers – the Land Acquisition Acts of 1894 will not be used for the Project. Instead, the Telegraphic Act of 1885 and the WAPDA Act of 1958, which have been traditionally used for construction of transmission lines in Pakistan, provide the legal framework for compensation and entitlements. Under the Telegraphic Act, the land required for the towers is not acquired from the owner, nor the title of the land transferred. Compensation is only paid to the owner for any structure, crop or tree that exists on the land. NTDC has been installing the transmission lines and their towers, and determining the associated compensation, on the basis of this Act for earlier WB financed project. However, in this case NTDC has agreed to provide and allowance for the reduced access to the land under the towers. This has been explained in the entitlement matrix below. This entitlement will be equivalent to the market price of the land under the towers.

The entitlement matrix is developed based on the above discussed eligibility criteria, nature of losses and implementation issues of the proposed project as in Table B.

Type of Loss	Specification	Affected Persons	Compensation Entitlements <sup>2</sup>
Land Taken for Towers	Land under the Tower Sittings	Owners of the land	PKR 1,120,000 for each tower as compensation for the land taken for each tower. The amount may vary from on one tower to another due to location and a variety of other factors.

### Table B: Entitlement Matrix

<sup>&</sup>lt;sup>2</sup> Compensation for all assets will be paid to the owner of the asset.



Type of Loss	Specification	Affected Persons	Compensation Entitlements <sup>2</sup>
Houses/ Structures		All relevant APs	<ul> <li>Cash compensation at replacement rates for affected structure and other fixed assets free of salvageable materials, depreciation and transaction costs.</li> <li>In case of partial permanent</li> </ul>
			impacts full cash assistance to restore remaining structure, in addition to compensation at replacement cost for the affected part of the structure.
Crops	Crops affected	All APs owning crops	<ul> <li>Crop compensation in cash at full market rate for one year (winter and summer seasons) for impacts caused by grid construction, tower base, stringing and access roads.</li> <li>All other crop losses will be compensated at market rates based on actual losses.</li> </ul>
Trees	Trees affected	All APs owning trees	<ul> <li>For timber/ wood trees, the compensation will be at market value of tree's wood content.</li> <li>Fruit trees: cash compensation based on value of tree</li> </ul>
Business/ Employment	Temporary or permanent loss of business or employment	All APs (including agriculture workers)	<ul> <li>Business owner: (i) Cash compensation equal to one- year income, if loss is permanent; ii) in case of temporary loss, cash compensation equal to the period of the interruption of business up to a maximum of six months or covering the period of income loss based on construction activity.</li> <li>Workers/ employees: Compensation for lost wages for the period of business interruption up to a maximum of 3 months (at OPL level PKR 20,301 per month).</li> </ul>
Relocation	Transport and transitional livelihood costs	All APs affected by relocation	- Provision of allowance to cover transport expenses ( <i>PKR</i> <i>5,000</i> ) and livelihood expenses for three months ( <i>PKR</i> 60,903 per household).



Type of Loss	Specification	Affected Persons	Compensation Entitlements <sup>2</sup>
Community assets	Damage to roads and networks	Affected community	<ul> <li>Rehabilitation/ substitution of affected structures/ utilities (i.e. roads, water and wastewater networks, irrigation networks).</li> </ul>
Vulnerability assistance	Households below poverty line	All vulnerable APs	<ul> <li>Lump sum one-time livelihood assistance allowance (<i>PKR</i> 60,903) on account of livelihood restoration support.</li> <li>Temporary or permanent employment during construction or operation, wherever feasible.</li> </ul>
Community Support Program	Affected communities along the alignment	Affected communities	- Community support program such as roads, clinic, market etc. to be built in consultation with the affected people during implementation
Unidentified Losses	Unanticipated impacts	All APs	<ul> <li>Ad-hoc during project implementation according to the World Bank Operational Policies.</li> </ul>

## Institutional Arrangements

A Project Management Unit (PMU) has been established within NTDC and has been mandated to manage the design, procurement, and construction activities of the DTL project. The PMU is headed by the Chief Engineer/Project Director. For the implementation of RAP, several entities will be involved including the PMU itself, Environment and Social Impact Cell (ESIC) Dasu Transmission Line Project (DTLP) established within PMU, Project Consultants responsible for design and construction supervision of the project, relevant government departments, APs, and others.

The ESIC is already in place within PMU and is mandated to ensure compliance with the national regulatory as well as WB safeguard policy requirements pertaining to environment, social, and resettlement aspects. Currently the ESIC has only four members at the headquarters (i.e. Deputy Manager, Social and Environment: focal person for environmental, social and resettlement aspects; Assistant Manager (Social); Assistant Manager (Environment); and Assistant Manager (Occupational Health and Safety). Since there would be three contracts or lots for construction of the transmission line, the ESIC would need at least another three sets of ESIC specialists, one for each lot or contract in the field. The Project will hire these additional specialists from the market to strengthen its capacity for project implementation.



#### Grievance Redress Mechanism

A Grievance Redress Mechanism (GRM) has been designed by NTDC to ensure that the complaints and grievances of affected households are addressed and resolved in a timely and satisfactory manner. Two tiers grievance redress mechanism (GRM) (Project Level (PMU/CO), and NTDC - Head Quarter level) will be established. The APs will register their complaints at the CO (project level), which is supposed to resolve the issues within three weeks. In case of APs' un-satisfaction with the project level GRC, he/she can approach to higher tier (NTDC Headquarter, Lahore) and subsequently can move to court of law. GRM will ensure the access of APs to register their complaint and further its resolution that are consistent with local laws and WB involuntary resettlement policy.

#### RAP implementation schedule and budget

The RAP implementation schedule for the proposed project includes RAP preparation, disclosure, disbursement of compensation with its internal and external monitoring, evaluation and reporting. The time for implementation of RAP will be scheduled as per the overall project implementation.

The resettlement cost is estimated at PKR 2,182.6 million (USD 13.64 million) covering the compensation for crops, trees, structures, land under towers, allowances and other costs like hiring of consultants, trainings and capacity building, independent monitoring and GRM. This also includes a provision for PKR 640.0 million (USD 4.0 million) for establishing community support programs along the DTL Project.



#### RAP monitoring and evaluation

RAP activities under the Project will be subjected to monitoring and evaluation. NTDC will be responsible for internal monitoring of resettlement activities ensuring that the RAP is properly implemented. The result of internal monitoring will be included in the monthly progress reports. NTDC will engage the services of an independent monitor for monitoring of the RAP. External monitoring and evaluation reports will be prepared quarterly and semi-annually during the implementation of the project. Based on the external monitoring and evaluation report, if significant issues are identified, a Corrective Action Plan (CAP) to ensure the safeguard compliance will be prepared, reviewed and approved by World Bank and disclosed to APs. A post-project audit and evaluation will also be conducted by NTDC at the end of the project.



## 1. INTRODUCTION

## 1.1 Background

The National Transmission and Despatch Company (NTDC) of Pakistan, with funding from the World Bank (WB), plans to undertake Dasu Transmission Line (DTL) Project - a 250 kilometers (km) long, 765 kilovolt (kV), High Voltage Alternating Current (HVAC), double circuit transmission line from the Dasu Hydropower Project (DHP) to Islamabad West Grid Station. The DHP, the parent project of the DTL, is the first large scale hydropower project being implemented by WAPDA on Indus River in the northern region of Pakistan. The DHP's first stage of 2160 megawatts (MW) is expected to be online by December 2023. No existing transmission lines are present in the area that can evacuate the electricity to be generated by DHP and therefore the power plant will be totally dependent upon DTL to be completed in time. The DHP is already under implementation by the Water and Power Development Authority (WAPDA) with the support of WB.

A Resettlement Action Plan (RAP) was prepared for the DTL project in 2017. The present revised RAP addresses technical changes to the project and the impacts as well. The revised and updated RAP has considered impacts of additional changes with appropriate mitigation measures.

## **1.2 Project Description and Components**

The following sections describe the major project components, the construction methodology and the construction time and cost.

### **1.2.1 Project Description and Components**

The proposed project comprises a 765 kV, HVAC, double circuit transmission line from Dasu to Islamabad via Pattan, Thakot and Mansehra. The total length of the transmission line is about 250 km. The transmission line route from Dasu to Islamabad is shown in **Error! Reference source not found.** The proposed transmission line will require 674 towers, from which 217 will be angle towers and the remaining will be suspension towers. The average size of each tower footing will be  $20m \times 20m (400 \text{ m}^2)$ . The average height of each tower will be about 83 m.

Items	Dasu to Besham	Besham to Haripur	Haripur to Islamabad
Terrain	Mountainous (Difficult Terrain)	Semi-Mountainous / Hilly	Relatively Flat
Route Length	61 km	100 km	89 km
Elevation (amsl)	Max.1292 m Avg. 932 m	Max.1831 m Avg. 1029 m	Max.1006 m Avg. 549 m
Number of Towers	178	258	238



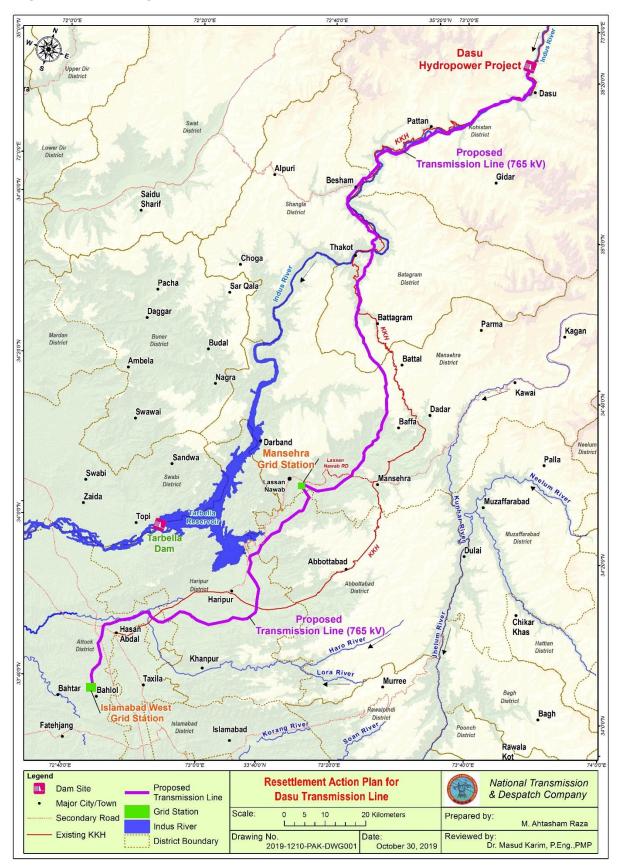
Average Span

## 346 m

## 387 m

### 373 m

#### Figure 1-1: DTL Alignment







The right of way (RoW) of the transmission line will be 80m wide (40+40 m each side of the centerline). The DTL will pass through two provinces i.e. Khyber Pakhtunkhwa (KP) and Punjab. The section of DTL in KP runs through eight districts - i.e. Upper Kohistan, Lower Kohistan, Shangla, Battagram, Mansehra, Haripur, Abbotatabad, and Attock. The two Kohistan districts have six union councils and 28 villages along the alignment; Shangla district has four union councils and 18 villages; Battagram district has nine union councils and 32 villages; Mansehra district has eight union councils and 22 villages; Haripur district has seven union councils and 22 villages; and lastly the Attock district has four union councils and 13 villages through which the transmission line is passing.

Apart from the DTL, a few other project components are envisaged for instance, (i) temporary access roads to the tower sittings in cases there are no access presently; (ii) temporary construction camps during construction either on NTDC office spaces and/or temporary rental arrangements; and (iii) batching plants. The impacts of the temporary access roads in terms of loss of crops or trees have been considered in the RAP. Contractor(s) would temporarily rent spaces from local people for construction camps and batching plants.

## 1.2.2 Access Tracks and Roads

The DTL route passes through the mountainous area from Dasu to Haripur (see DTL route map in **Error! Reference source not found.**). While selecting the DTL route particularly through the mountainous terrain, consideration has been given to the ease of access and availability of existing roads/track. However, some of the proposed tower sites are located on steep slopes making it very difficult to access the RoW while also posing safety issues for construction crew. The construction of temporary access tracks may solve the accessibility issue for some of the tower locations but a limited number of sites might still be inaccessible and unsafe to work on, using conventional construction methods. At such locations other options such as air transportation (helicopter) and cable trollies will need to be considered. The contractor will make arrangement for payment of compensation for the lease of land needed for these temporary access roads.

The DTL route that originates from the DHP switchyard crosses the Indus River between first two angle towers. The first angle tower location is accessible through the Karakoram Highway (KKH) while the RoW from second angle tower and up to Komila town is accessible through the Right Bank Access Road of DHP. After angle tower-15, the line route diverges again to the other side of the river making it accessible through Jalkot road.

There is no existing road to access the location of angle tower-17; also, the topography of the area might make it difficult to transport the construction material by conventional methods. The next tower locations up to angle tower-36 can be accessed through KKH but due to the presence of steep mountains along the highway, access to exact tower locations is quite difficult. The tower locations from angle tower-36 to angle tower-64 are accessible through local roads and tracks some of which are suitable for construction material transportation while others may need some improvement.

The next DTL section crosses Besham town and runs along the KKH up to Maira town (angle tower-98). While some of these tower locations are near the highway making them easily accessible, others may need a little effort to be accessed. The line route sways away from the KKH at this location and passes through several villages. The access to these tower locations can be made by the local village roads some of which are in good condition.

The next section up to Mansehra valley crosses many villages and towns. The access to most of the tower locations in this section is easy as village roads can be used which are mostly in appropriate condition. Some of the DTL sections are on high elevation and some cross dense forest through the valleys, the access to these tower sites will be a challenge for the construction crew; hence there may be a need to make special arrangements for construction material transport. The road connecting Mansehra city to Lassan, Kamita, Chamhatti, Kangar and Barila, and Soha road passing through Kag, Soha, Beer, Thatti and Lakhala villages are the main roads in this section that provide most of the access to the tower locations.

The line route section in the Haripur district can be accessed through KKH and link roads from Haripur city. From angle tower-185 to angle tower-190, the route is aligned mostly on plain areas and is accessible through small village and town roads in the vicinity of Haripur City. Khanpur road and the road to Hattar industrial state can be used to access the line route till it crosses the Grand Trunk (GT) Road.

From Mano Nagar (angle tower-207) to Islamabad Grid Station (angle tower-217), the line route mostly remains in the plain and semi plain areas. The DTL route from angle tower-207 to angle tower-212 can be accessed through the GT Road link roads. The section from angle tower-212 to angle tower-217 can be accessed through Motorway Jang Bhathar Interchange link roads on Bahol Town side of the Motorway.

## 1.2.3 Construction Methodology

The proposed DTL project construction work will follow NTDC guidelines and specifications. The key stages in the construction process of overhead high voltage transmission line are summarized in Table 1.2.

Stage	Activity	Description
1	Site Preparation	<ul> <li>This may include:</li> <li>Vegetation clearance where the line passes over or close to trees which could infringe safe clearances.</li> <li>Verification of local utilities and underground services prior to works and establishing of safeguards and obtaining of necessary agreements.</li> <li>Geotechnical and geographical surveys in advance of works where necessary.</li> <li>Any intrusive works undertaken in accordance with archaeological chance find procedures.</li> </ul>

Table 1.2: Typical Activities for Overhead Transmission Line Cons	struction
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Stage	Activity	Description
2	Site Enabling Works	<ul> <li>This may include:</li> <li>Determining access requirements (routes and detailed arrangements agreed in advance with land owners).</li> <li>For tower locations where no vehicle access is required, access will be via the RoW/surrounding land with no new access construction. Normal practice in Pakistan is to transport construction materials from the closest road access by personnel or donkeys where possible.</li> <li>For tower locations where it is determined vehicle access is required, access will be via: existing access roads</li> <li>In certain circumstances where ground conditions prevent normal access, it may be necessary to construct a temporary access track.</li> <li>In mountainous areas, cable trollies may also be used to access the site and to transport material to the tower location and other parts of the RoW.</li> </ul>
3	Civil Works	Tower foundations are constructed first, either four or one foundations per tower depending on the final tower design. The foundations are mechanically excavated and filled with concrete. Piled foundations may be required in some areas where ground conditions are unstable. The dimensions of the excavation will differ depending on the type of tower to be installed. Concrete would be delivered by ready mixed concrete truck from batching plants strategically located along the route. Foundation strengthening works typically require increasing the bulk of concrete in the foundation, depending on the additional tower loads that are expected. This normally involves excavation around the existing foundation and application of additional concrete.
4	Steel Erection	Steelwork sections for the towers will be delivered by access road, cable cars/trollies and helicopter (if possible). The assembly of each tower at ground level would proceed as far as possible until the utilization of a crane becomes necessary to enable the higher sections of the tower to be completed. It is normal practice to use cranes to erect steelwork, subject to good access being available. In very rare cases where terrain is difficult and to minimize disturbance, steelwork may be delivered by helicopter.
5	Conductor Stringing	Stringing is undertaken using a winch to pull the conductor along the towers and a 'tensioner' at the other end to keep the conductor above the ground. Typically, the sections depend on the requirement of angle towers decided during the construction phase. These winch locations are not fixed and can be selected to minimize impact at sensitive locations.
6	Testing of Equipment	Overhead line components including conductors, insulators, towers, joints and fittings are designed and tested to prove compliance with structural, mechanical and electrical requirements.

Stag	ge Activity	Description
7	Reinstatement of Tower Construction Area	At completion, the area would be cleared and tidied up. Fences and hedges would be repaired and access routes and disturbed land would be reinstated in agreement with the land users and title owners. Any site security fences would be retained throughout the dismantling and construction process.

## 1.2.4 Project Cost and Construction Time

The construction cost of DTL will be US\$ 470 million. The cost of RAP implementation, project management and construction supervision will be in addition to this cost. The RAP for DTL will be financed by the Bank. Keeping in view of the harsh topographic and social conditions in area through which DTL will traverse and extent of the works construction period would be at 3-4 years. Therefore, the date for the completion of the DTL will be April 30, 2024.

## 1.3 The Project Area

The direct impacts of the project in terms of physical or economic displacement, loss of structures, crops and trees, decrease of access to land, will take place in the project corridor comprising the Right of Way (RoW) and the associated access roads that are expected to be needed for project construction. For the purpose of this RAP, the project area is limited to the ROW of the transmission line. The need for the access tracks is described in the previous section. The exact assessment will be done by the Contractor and land will be arranged on lease for these access tracks. The impacts of the Mansehra Grid Station are treated separately in the RAP.

## 1.4 **Project Benefits and Impacts**

## 1.4.1 Socioeconomic benefits

The following benefits are expected due to project construction and operation. First, the DTL will allow the discharge of the power generated at DHP to the energy grid, thus contributing to further electrification of currently non-electrified areas, strengthening of the grid and improvement of the quality of electricity supply. Although most of these benefits will be felt at regional and national level, local benefits are also expected, at least with regard to the quality of electricity supply, voltage improvement and reduction of outages. Second, during construction, there will be temporary employment opportunities for local contractors and local labor. It is estimated that the project construction will utilize 500-600 staff. Although many of these positions will require specialised skills, there will be employment opportunities for non-skilled staff. The project will seek to maximize such opportunities for local labor through special conditions in the bidding documents. Third, during construction, there will be induced business opportunities for small businesses or people providing goods and services to project construction or its staff (i.e. machinery, trucks, vehicles, catering, cleaning, entertainment, etc.). Such opportunities may also be created to a lesser extent during operation, i.e. for RoW



maintenance, tree trimming, land clearing, guarding, etc. Fourth, improved access to electricity or better electricity supply is related to positive gender impacts. The improved access to electricity and power will facilitate tasks carried out by women and girls and thus promotes gender equality, women's empowerment, girls' access to education, health care and employment. Finally, the project has included a community benefit sharing mechanism in the form of community support program which will be financed by NTDC in the area. An amount of four (4) Million US\$ has been reserved for this. This will be implemented as a part of the RAP implementation.

## 1.4.2 Impacts

Adverse project impacts are related to involuntary physical and economic displacement due to project construction. In specific, (i) loss of structures, i.e. houses, businesses, etc., that are located inside the RoW of the transmission line; (ii) temporary loss of income due to crop and tree damage during tower installation and stringing of the wires; and (iii) likely reduction of land value due to restriction on land use within the RoW of the transmission line, particularly land under the tower sittings. The project has addressed these issues with measures that are discussed in subsequent chapters.

## 1.5 Objectives of the RAP

The primary objective of the revised RAP is, thus, to provide necessary details for compensation, resettlement and rehabilitation by identifying (i) the extent of losses; (ii) the policy framework for compensation payments, income restoration, relocation and rehabilitation; (iii) eligibility and entitlement (iv) mechanisms for timely disclosure of information to the APs and other stakeholders (v) institutional framework for participation and implementation; (vi) grievance redress mechanism; (vii) responsibilities for monitoring the implementation process and (vii) resettlement budget and implementation schedule. It follows the standards and principles of the World Bank OP 4.12 Involuntary Resettlement Policy.



# 2. PROJECT RIGHT-OF-WAY AND IMPACTS

## 2.1 Temporary Use of Land for Row

A RoW of 80m (40m each side of the transmission line centerline) will be temporarily used for the construction of the DTL, including all works related to excavating for the towers foundations, transporting and assembling the towers, erecting and installing the towers, stringing the wires). At the end of the construction period, the RoW (with the exception of the footprint of the towers) will be reinstated and returned to its owners. NTDC will have signed agreements with the title owners for land under the towers specifying the restriction of access to land under towers. The project will not acquire any land permanently; land will be required temporarily for the construction of the DTL with due compensation and assistance to the households affected by the project construction.

During operation of the DTL, the land used for the right-of-way can be cultivated. However, restrictions will apply for instance, no buildings will be allowed in the RoW and in case of tree cultivations, tree height should be kept at 2.5 meters for line operational and safety reasons. Maintenance crews will be allowed to access the line for maintenance and repair; further, any damage to crops and trees during maintenance activities will be compensated by NTDC.

## 2.2 Rationale and Practices by NTDC

Under the Telegraphic Act, 1885, which is used for the construction of transmission lines in Pakistan, the land required for the towers is not acquired from the owner(s), nor the title of the land transferred. Compensation is paid to the owners for any structure, crop or tree that exists on the land. Since there is no acquisition, the Land Acquisition Act of 1894 is not invoked in the case of transmission line construction in Pakistan. For DTL Project, NTDC has agreed to pay compensation in the form of a one-time allowance is paid for reduced access to the tower sittings only. This is further discussed in Chapter 4.

According to standard practice, NTDC will compensate APs for the loss of structures, crops and trees in the RoW of the DTL. Compensation would thus be provided for 50 structures (all residential except one poultry farm), 30.7 acres of cultivated land under the towers (damage to crops), 2,282.3 acres of cultivated land in the rest of the RoW (damage to crops), 27,321 privately-owned wood/timber trees, 1,528 state-owned wood/timber trees and 880 fruit trees.

### 2.3 Measures to Minimize Resettlement Impacts

The original alignment of the DTL has purposely avoided populated areas and existing settlements, in an effort to minimize physical displacement of APs. During the revision of the RAP, additional effort has been made through refinement of the engineering design and fine-tuning of tower setting to avoid individual structures in the RoW of the transmission line, to the extent possible. As a result, physical resettlement impacts have been minimized and overall impacts have been largely reduced.

Considering several alternatives (including Pallas Valley that was considered environmentally more sensitive) routing the line along the main Indus River, establishing a switching station at Mansehra (about 140 km from Dasu) and then taking it to the Islamabad west station (about 110 km) was found to be the best alternative. Since the route along the Indus River is extremely narrow and cannot accommodate more than one line of towers, the voltage of the line was enhanced than initially planned<sup>3</sup>. System studies were carried out to test the HVAC 500 kV, High Voltage Direct Current (HVDC), composite HVDC and HVAC combination and HVAC 765 kV. Considering all factors, HVAC 765 kV double circuit transmission line option was selected. This had an added advantage (compared to initially planned HVAC 500 KV Line) that it can carry the power generation from the second stage of DHP as well as other power plants planned on Indus River downstream from Dasu (such as Pattan and Thahkot) minimizing the need of another transmission line and thus minimizing the social impacts.

## 2.4 Impacts on Land Under the Towers

An area of **66.7 acres will be occupied by the towers of DTL**. The impact will affect 430 households. Although the footprint of the towers is not acquired under the provisions of Telegraphic Act of 1885, it is recognized that access to the land under the towers (20X20m=400 sq m) is decreased and cultivation may become more difficult as compared to the pre-project conditions. The Project will pay a negotiated compensation of PKR 1,120,000 for land under each tower to compensate.

Land Use Category	Number of Towers	Affected Land (Acres)	Affected Households
Cultivated land	310	30.7	236
Barren/ Hilly (non-cultivated land)	302	29.8	170
Commercial/ Residential land	3	0.3	3
Forest land (Private)	32	3.2	21
Forest land (State)	17	1.7	-
River, Stream/ nullah bed, etc.	7	0.7	-
Roads and motorways (RoW)	3	0.3	-
Total	674	66.7	430

### Table 2.1: Details of land under the towers

Source: Field Survey (2019)

<sup>3</sup> Initial plan at the time or parent project approval was to take two lines of HVAC 500 KV towers, first at Stage I and second at Stage II thus cost of US\$350 million was included in Stage I and another US\$435 million for second line of towers all together four circuits. Proposed line would cater to both stages and other plants downstream so most optimal investment.



### 2.5 Impacts on Land Under the Line

An area of **4,886.3 acres will be under the line of DTL (but not under the towers)**. The impact will affect 684 households. This land will be cleared from vegetation to allow stringing of the wires and installation of the line.

#### Table 2.2: Details of land under the line

Land Use Category	Affected Land (Acres)	Affected Households
Cultivated land	2,282.3	412
Barren/ Hilly (non-cultivated land)	2,160.1	246
Commercial/ Residential land	3.2	3
Forest land (Private)	244.8	23
Forest land (State)	127.8	-
River, Stream/ nullah bed, etc.	60.4	-
Roads and motorways (RoW)	7.7	-
Total	4886.3	684

Source: Field Survey (2019)

## 2.6 Impact on Crops

Crops in the RoW will have to be removed during line and towers construction. The impact is temporary (usually for one season). Operation and maintenance activities may also impact on crops but usually such impacts are not significant. The cropping pattern of the affected area is shown below.

#### Table 2.3: Affected area by crop type

Cropping Pattern (%)	Area by Crop Type (Acres)
47	1,072.5
48	1,095.4
0.8	18.3
0.1	2.3
0.7	16
1.0	22.8
2.4	54.8
100	2,282.1
	(%) 47 48 0.8 0.1 0.7 1.0 2.4

Source: Field Survey (2019)

## 2.7 Impact on Trees

The inventory survey results indicate that a total of 27,321 privately owned wood/timber trees, 1,528 state-owned wood/timber trees and 880 fruit trees exist within the RoW. These trees will need to be felled to allow tower installation and conductor stringing activities. Details of this tree felling requirement are presented below.



## 2.7.1 Privately-owned Timber Trees

A total of 27,321 wood/timber trees will need to be felled. Details are presented in Table 2.4.

Turne of Trees		Total			
Type of Tree	Up to 2 2 to4 4		ge (Feet) 4 to 6	Above 6	Quantity
Kiker (Acacia)	1,580	10	-	20	1,610
Tali (Dalbergia sissoo)	527	162	-	-	689
Safeda (Eucalyptus)	1,197	-	-	-	1,197
Poplar	3,680	45	-	-	3,725
Draek	15	-	-	-	15
Chird	12,217	418	35	-	12,670
Beri (Ziziphus mauritiana)	98	77	-	3	178
Bain	131	-	-	-	131
Bakain	-	21	-	-	21
Bhar	9	-	-	-	9
Chanar	1710	240	-	-	1,950
Као	1003	867	-	-	1,870
Drawa	103	-	-	-	103
Gound	99	-	-	-	99
Kamber	2320	198	-	-	2,518
Phulai	11	-	-	-	11
Phawari	89	-	-	-	89
Plosa	12	-	-	-	12
Sareen	4	-	-	-	4
Jangle Toot	20	-	-	-	20
Zaitoon (Wild Olive)	350	50	-	-	400
Total	25,175	2,088	35	23	27,321

Table 2.4: Privatel	y-owned wood/timber	r trees in the RoW
	<i>y</i> omnoù mooù, mooi	

Source: Field Survey (2019)

The number of affected households is as shown in Table 2.5 below:

Table 2.5: Affected households due to the loss of private wood/timber trees	3
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Type of Tree	Quantity	Affected Households
Kiker (Acacia)	1,610	27
Tali (Dalbergia sissoo)	689	42
Safeda (Eucalyptus)	1,197	14
Poplar	3,725	11
Chird	12,670	166
Beri (Ziziphus mauritiana)	178	16
Other	7,252	198
Total	27,321	474

Source: Field Survey (2019)

## 2.7.2 Privately owned fruit trees

A total of 880 fruit trees will need to be felled. Salient features of these trees are presented in Table 2.7.

		Total Quantity		
Type of Tree	Up to 5	5 to 10	Above10	
Orange (citrus)	311	-	-	311
Mulberry	60	15	-	75
Apricot	-	61	-	61
Walnut	-	69	-	69
Banana	10	-	-	10
Guava	55	69	-	124
Apple	3	-	-	3
Fig	227	-	-	227
Total	666	214	-	880

#### Table 2.6: Privately-owned fruit trees in the RoW

Source: Field Survey (2019)

The affected households are given in Table 2.7 below.

Type of Tree	Quantity	Affected Households
Orange	311	3
Mulberry	75	5
Apricot	61	3
Walnut	69	1
Banana	10	3
Guava	124	12
Apple	3	1
Figs	227	8
Total	880	36

#### Table 2.7: Affected households due to the loss of fruit trees

Source: Field Survey (2019)

### 2.7.3 State / Forest Trees

A total of 1,528 government-owned trees will need to be felled. All of them are young (i.e. girth less than 2 ft) and are mostly cheer trees. Further details are given in Annex B.

#### Table 2.8: State-owned trees

Type of Tree	Number of trees
Acacia	1
Eucalyptus	13
Cheer	1,177
Beri (Ziziphus	15
mauritiana)	
Kao	157
Drawa	103
Phalai	62
Others	177
Total	1,528

Source: Field Survey (2019)



## 2.8 Impact on Buildings and Structures

The inventory survey results indicate that a total of 50 structures, owned by 29 households, exist within the RoW of the DTL. Salient information of these structures is presented in Table 2.9. Buildings in the RoW will be removed. These impacts are permanent in nature and hence significant.

Table 2.9: Structures	located in the RoW
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Category	Affected Structures (Quantity)	Affected Households	Size of the Structures (m <sup>2</sup> )
Pacca house	6	6	941.7
Pacca room	2	1	69.5
Pacca veranda	4	-	212.3
Pacca kitchen	3	-	43.5
Pacca bathroom	2	-	30.7
Semi pacca house	20	20	1729.3
Semi pacca room	2	-	119.2
Semi pacca veranda	1	-	36.4
Semi pacca kitchen	1	-	12.9
Semi pacca boundary walls	4	-	99.9
Gate	1	-	9.0
Katcha house	1	1	98.0
Katcha room	1	1	39.1
Katcha veranda	1	-	4.3
Poultry farm	1	-	160.7
Total	50	29	-

Source: Field Survey (2019)

## 2.9 Impacts on Infrastructure

The DTL route crosses a number of highways, roads, and local tracks. While the DTL project is not likely to cause any damage to these infrastructures, any potential impact will be reinstated by the Contractor. In addition, coordination with the relevant agencies such as the National Highway Authority would be needed in case the DTL crosses any major road or highway.

## 2.10 Significance of Impacts

## 2.10.1 Impact of crop damages to Livelihoods

The project's impacts on crops discussed in Section 5.4 will affect the livelihood of the APs. Most of the land holdings in the project area are small. Therefore, any damage to crops on these lands is likely to be significant for those depending on these lands for their livelihoods. Analyses of the project's impacts on agricultural land has indicated that a majority (up to about 56%) of APs will have to bear crop damage over more than half of their land holdings.



Since agricultural income is their main livelihood source, the extent of impact on their land holdings can be taken as the extent of impact on their respective livelihoods. These impacts are significant but temporary since they will only take place during the construction phase – usually two crops are affected by the transmission line projects; the first during the tower erection and the second during the conductor stringing.

Impacted Land as % of	K	Pun		jab	Total	
Total Land (Impact on Livelihood)	Number of APs	% of Total APs	Number of APs	% of Total APs	Number of APs	% of Total APs
Up to 10%	10	5.7%	6	10.0%	16	6.8%
10% to 25%	25	14.2%	9	15.0%	34	14.4%
25% to 50%	38	21.6%	18	30.0%	56	23.7%
50% to 75%	49	27.8%	15	25.0%	64	27.1%
75% to 100%	54	30.7%	12	20.0%	66	28.0%

#### Table 2.10: Severity of impacts on crops (under the towers) to landholders

Source: Field Survey (2019)

#### Table 2.11: Severity of impacts on crops (under the line) to landholders

Impacted Land as % of	K	Р	Pun	jab	Total	
Total Land (Impact on Livelihood)	Number of APs	% of Total APs	Number of APs	% of Total APs	Number of APs	% of Total APs
Up to 10%	33	12.4%	9	6.2%	42	10.2%
10% to 25%	31	11.6%	2	1.4%	33	8.0%
25% to 50%	70	26.4%	98	67.6%	168	40.9%
50% to 75%	74	27.8%	13	9.0%	87	21.2%
75% to 100%	58	21.8%	23	15.8%	82	19.7%

Source: Field Survey (2019)

### 2.10.2 Impacts of tree felling to livelihoods

The privately-owned fruit trees that need to be felled to allow transmission line construction discussed in Section 5.5.2 can potentially affect livelihood of the owners. However, an analysis of the tree inventory indicates that very few of the owners have a sizeable number of fruit trees that could provide any meaningful livelihood; please see Table 2.12. Hence the tree felling caused by the project is not likely to have any significant impact on the livelihood of the APs.

#### Table 2.12: Severity of tree felling to APs

Number of APs
26
18
6
3

Source: Field Survey (2019)



The felling of fuel or timber trees is not likely to cause any impact on the livelihood of their owners since they will be allowed to salvage the wood (in addition to receiving the cash compensation).

## 2.11 Vulnerability Impact

The inventory survey results indicate that a total of 98 vulnerable households exist within the RoW of DTL project. All of them have monthly income less than the Official Poverty Line (OPL) of PKR 20,301.

## 2.12 Temporary Access Tracks and Camps

The entire length of the DTL will be divided in five segments and construction of each segment will be assigned to a separate construction team. Hence construction camps will also be required at five separate locations. The prospective places of these construction camps include Dasu Power Plant, Besham, Mansehra, Haripur and Islamabad area. However, the exact location of these camps will be decided by contractors as per their work plan. Preference will be given to establishing these camps within the WAPDA-or NTDC-owned premises. Otherwise the land for these camps will be obtained on a rental or lease basis. Preference will be given to uncultivated land away from communities.

Access road or tracks are rarely built for transmission line construction in the Country. In plain areas, temporary tracks are used to access the RoW from the nearby existing road. In mountainous areas, access is more difficult while building access tracks/roads is not always possible or feasible. For the DTL construction, it has been assumed that on average, 200 m of access track will be used for each tower location though it may not be possible for the earlier part of the route because of very steep slopes. Preference will be given to barren land while selecting these access routes.

Though exact locations and hence ownership of the land under these access tracks is not known at this stage, it can however be estimated that about 230 acres of cultivated land may be temporarily impacted by the access tracks (200m long x 15 m wide x 310 towers located in cultivated areas).

## 2.13 Summary of Impacts

Table 2.13 summarized the impacts discussed earlier.

	Resettlement Impacts	Quantity (acres)	Nature of Impact
Α.	Land along DTL Route		
i)	Cultivated land		Decreased value and utility of
	Under towers	66.7 acres	affected land.
	Under line	2,282.3 acres	

#### Table 2.13: Summary of Project Impacts



	Resettlement Impacts	Quantity (acres)	Nature of Impact
ii)	Barren land		
	Under towers	29.8 acres	
	Under line	2,160.1 acres	
iii)	Commercial/Residential land	3.5 acres	Decreased value and utility of affected land.
			Built-up structures falling
			under the transmission line
			will need to be removed.
iv)	Forest land	377.5 acres	Nominal impact.
V	Others	69.2 acres	
	Total	4,953.1 acres	
В.	Affected crops		
i)	Total area of agriculture land to	2,313 acres	Crop damage
	be impacted by tower installation and conductor		
	stringing		
ii)	Area under access tracks	230 acres	Crop damage
	Total	2,543 acres	
С	Affected structures		
1	Total Number of Residential Structures	49	Loss of structure
2	Total Number of businesses (poultry farm)	1	Loss of structure
	Total affected structures	50	
D	Affected trees		
1	Privately owned Wood/ Timber Trees	27,321	Loss of trees
2	Privately owned Fruit Trees	880	Loss of trees
3	Government owned trees	1,528	Loss of trees
	Total affected trees	29,729	
Е	Project Affected Households	1088	
	Total number of affected persons	7740	
1	Households losing structures	29	
2	Households losing crops	648	
3	Households losing trees	510	
4	Vulnerable households	98	



# 3. SOCIOECONOMIC INFORMATION AND PROFILES

# 3.1 General Introduction

A census was carried along the DTL route within the 80m ROW to obtain a full inventory of project impacts and detailed understanding of the social and economic conditions of the APs and to provide baseline data for monitoring of RAP implementation and the impacts of the project. The main objective was to obtain the socioeconomic and cultural characteristics of the population in the project area in order to understand their interrelationships, social dynamics, and inequalities and to identify opportunities and constraints in accessing project benefits. This also included those with special characteristics (based on gender, ethnicity, level of income, geographical remoteness etc.).

# 3.2 Methodology

The methodology adopted in the preparation of RAP include (a) a detailed desk review of project documents; (b) secondary information including official records, population census and statistics, and (c) complete census of the households affected by the ROW. The census, using a pre-structured questionnaire aimed at registering and documenting the number and status of APs likely to be physically or economically displaced as a result of the project and, therefore, entitled to compensation. Primary sources of information further include Focus Group Discussions (FGDs) with selected households and general community, individual interviews with APs and key informants and transect walk in the area, which helped the survey team to physically observe the socio-economic conditions in the project area. Meetings were held with stakeholders including the affected communities.

The socioeconomic profile of the affected population was collected through interviews of all the affected households aided by questionnaire. The key variables covered in the surveys and qualitative interviews included (i) identification of the affected population; (ii) demography, (iii) social organization (iv) literacy level, (iv) occupational structures, (v) income and expenses levels, (vi) access to public services, (vi) personal property, (vii) project's impacts on the poor, indigenous and/or ethnic minorities, and other vulnerable groups, (viii) identification of gender and resettlement impact and (ix) impacts, priorities and needs of the women. General consultation meetings were conducted with affected communities and villages.

# 3.3 Identification of AHs

Any household (and/or person), whose land, asset/infrastructure, source of income or access to resources/workplace is likely to be affected by the project's operations, is an AP. These include mainly the residents, owners and users of land or assets/structures within the RoW of the transmission line and the associated infrastructure. The total number of such affected households is 1,088 (7740 persons)



#### **3.4 Profile of the Respondents**

Table 3.1 shows that all respondents inhabit rural areas along the DTL. In many instances, they are very remote and often hard to access.

No.	Settlement Type	Surveyed Households (No)	Surveyed Households (%)
1	Rural	1088	1088
2	Semi Urban	0	0
3	Urban	0	0
	Total	1088	1088
			1000

 Table 3.1: Settlement types of surveyed households

Source: Field Survey (2019)

Table 3.2 reveals that almost all of the respondents (with one exception) are resident-owners. None of the respondents was a resident tenant, resident owner cum tenant or resident absentee.

#### Table 3.2: Details of the respondents

No.	Respondent Type	Household (No)	Household (%)
1	Resident Owner	1087	99.9
2	Resident Tenant	0	0
3	Resident Owner cum Tenant	0	0
4	Resident Absentee	0	0
5	Business owner	1	0.1
	Total Surveyed households	1088	100
	Source: Field Survey (2019)		

Source: Field Survey (2019)

#### 3.5 Demographic Data

Household surveys were carried out to understand the demographic and socio-economic characteristics of the population in the project area. According to the survey, the male population is slightly higher compared to female population in the project area. On average the male population is 53.3% while the female population is 46.7% among the affected people. Average family size is 7.1 persons per family.

Age and sex are important demographic characteristics which have a bearing on employment and mobility. The data regarding the distribution of affected people by age is presented in Table 3.3.

Table 3.3: Age distribution	of affected people
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Age range	No	%
18 - 30 Years	1383	17.9



Age range	No	%
31 - 40 Years	2444	31.6
41 and 50 Years	3046	39.4
51 Years and above	867	11.2
Total	7740	100

Source: Field Survey (2019)

Sex distribution of affected people is presented in Table 3.4 below.

#### Table 3.4: Sex distribution of affected people

Age range	Male	%	Female	%
18 - 30 Years	695	16.8	688	19.1
31 - 40 Years	1259	30.5	1185	32.8
41 and 50 Years	1698	41.1	1348	37.3
51 Years and above	478	11.6	389	10.8
Total	4130	100	3610	100

Source: Field Survey (2019)

#### 3.6 Education and Literacy

In term of education distribution, approx. 20% of the respondents (heads of households) were reported illiterate (respondents have had Deeni (religious) education). The rest 80% had some degree of education, with only 2% having a post-graduate degree. The results are shown in Table 3.5.

#### Table 3.5: Literacy of affected Households

Education	Respo	ondents
Education	No.	%
Illiterate (Deeni/religious education))	219	20
Primary	185	17
Middle	234	22
Matriculation	210	19
Intermediate	150	14
Graduate	65	6
Master and other professional degrees	25	2
Total	1088	100

Source: Field survey (2019)

The availability of schools along the DTL route is an important factor in the direction of increasing literacy levels. The relevant figures for the surveyed villages are given in



Table 3.6 below.



	% of Surveyed Villages					
Province	Primary schools for boys	Primary schools for girls	Middle schools for boys	Middle schools for girls	High schools for boys	High schools for girls
KP	87	85	47	39	31	29
Punjab	77	68	27	29	16	15

Table 3.6: Availability	y of schools along the DTL ro	oute
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Source: Field survey (2019)

#### 3.7 Ethnicity, Tribes, Language and Religion

Population settled along the proposed DTL route belongs to several caste groups, tribes and ethnic minorities<sup>4</sup>. Most of the ethnic groups are Maiya, Pashto, Hindko, Kohistani, Gujri, Bahasa Melayu, Punjabi and Kashmiri.

The detailed census has shown that there are more than 50 major caste groups and tribes settled along the DTL route. The major castes, caste groups and tribes include: Manzar, Dubair, Kandia, Ranolia, Pattan, and Kayal, Koka Manke Khel, Darram Khel, Afghan, Gujar/Ajar, Syed, Mian, Quershi, Swati, Akhun Khel, Mada Khel, Tanaoli, Dhunds, Gukhars, Mughals, Rajputs, Turks, Utmanzai, Hassanzai, Nusrat Khel, Jadoon, Karlal, Sarrara, Tareen, Dilazak, Tarkheli, Mishwani, and Pathan. Urdu is widely spoken.

#### 3.8 Livelihood Sources

The main income generating activities are farming, employment in government and private sector, wage labor, operating own business such as running a grocery, livestock rearing and working abroad.

The details are presented in Table 3.7. Farming is most dominant occupation in the area with approx. 24% and 27% of households depending on farming as the primary source of income, in KP and Punjab respectively. Employment to government or the private sector and wage labor are also important.

No.	Occupation	Respondents in KP (%)	Respondents in Punjab (%)
1	Farming	24	27
2	Government service	14	16
3	Private service	21	23
4	Business	8	4
5	Livestock	6	5
6	Employed abroad	3	2

#### Table 3.7: Distribution of respondents by occupation

<sup>4</sup> No Indigenous Peoples (IPs) were identified in the project area. In Pakistan, the World Bank for operational purposes considers only the Kalash people as IPs.



No.	Occupation	Respondents in KP (%)	Respondents in Punjab (%)
7	Wage labor	23	21
8	Others	1	2
Sc	ource:Field Survey (2019)		

#### 3.9 Household Income

Table 3.8 shows that approximately 9% of the surveyed households fall in the income category of less than PKR 15,000 which is below the OPL level which is PKR 20,301<sup>5</sup>. A further 35% reported income in the range of PKR 15,000 to 25,000, which is around the poverty line. Only 7% of the households' report income above PKR 100,000.

No.	Income Level (PKR/Month)	Number of Households	Percentage (%) of households
1	Less than 15000	98	9
2	15100 - 25000	381	35
3	25100 - 40000	326	30
4	41000 - 60000	152	14
5	61000 - 100000	54	5
6	110000 - 150000	44	4
7	Above 150000	33	3
	Total:	1088	100

#### Table 3.8: Monthly Income of the Households

Source: Field Survey (2019)

The census results have shown that approx. 50% of households have more than a single source of income, with 22% of them having three or more sources.

#### 3.10 Household Expenditure

Household expenditure, including food and non-food items such as fuel, education, health, clothing, utility charges and other miscellaneous expenditure was also surveyed. The results are largely compliant with the income data.

Table 3.9 shows that approx. 13% of the households spend less that PKR 15,000. Notably, almost all (96%) households spend less than PKR 60,000.

<sup>5</sup> According to the Economic Survey of Pakistan 2015-16, a new poverty line is estimated using patterns of consumption of reference group (using CBN) and it comes to PKR 3030 per adult equivalent per month using the latest available HIES 2013-14 data. Taking the average household size of 6.7, the poverty line of a household is calculated as  $3030 \times 6.7 = PKR 20,301/-per$  household.



Sr. No.	Household Expenditure (PKR/month)	No. of Households	%
1	Less than 15000	142	13
2	15100 - 25000	283	26
3	25100 - 40000	337	31
4	41000 - 60000	282	26
5	61000 - 100000	44	4
	Total:	1088	100
-			

Table 3.9: Distribution of Household Monthly Expen	nditure
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Source: Field Survey (2019)

#### 3.11 Housing Conditions

The survey results show that 90% of the sampled households in KP and 96% in Punjab are living in Pacca houses. About 9% and 3% (respectively) live in Semi pacca (made of brick and mortar) and 1% in both provinces lives in katcha houses (made of mud, stones, wood, and or thatch).

#### 3.12 Household Possessions

The possession and use of household durable goods have multiple effects and implications. For instance, access to satellite dish or television helps household members to remain updated about daily events, information, and educational materials. Similarly, a refrigerator prolongs food storage and keeps food fresh and healthy. Ownership of transportation allows greater access to services away from the local area and enhances social and economic activities.

Table 3.10 presents the percentage of households that possess various durable commodities and means of transportation. Field survey shows that electric iron and fans emerged as the main needs of the households as all the respondents have these items at their houses. Televisions and mobile telephones are common devices possessed by most households for information and communication. Refrigerators are also largely available. With regard to transportation, motorcycles are the most widespread (approx. 69% of the households).

Item	Households
Television	98%
Fan	100%
Sewing Machine	55%
Computer/ laptop	32%
Tractor	12%
Mobile Phone	98%
Refrigerator	95%
Washing Machine	70%
Bicycle	4%
Car	15%
Motorcycle	69%

#### Table 3.10: Possession of Household Goods



Air conditioner	7%
Pick up / Van	6%
Electric Iron	100%
Satellite dish	32%
Oven	17%
Raksha	2%
Source: Field Survey (2010)	

Source: Field Survey (2019)

The findings demonstrate a rather good quality of life that contradicts with the fact that approx. 44% of the households reported to have incomes below or around the OPL. This will be further reviewed and verified during the implementation phase.

#### 3.13 Land Use

As mentioned earlier, the RoW of the DTL is 80m wide. Hence the total area of the RoW of the 254.6 km long DTL is approx. 20 million square meters or 4,953 acres. Of this total area, cultivated land covers 2,313 acres (47%), barren land covers 2,190 acres (44%) and forests cover 377 acres (7.6%). The rest are riverbeds, streams, roads, etc. Details are shown in Table 3.11.

#### Table 3.11: Land Use within the RoW of DTL

Land Use Category	RoW Length (km)	Area within RoW (Acres)
Cultivated land	117.1	2,313
Barren/ hilly (non-cultivated land)	110.9	2,190
Commercial/ residential land	0.2	3.5
Forest land (private)	12.6	248
Forest land (state)	6.6	129.5
River, stream/ nullah bed, etc.	3.1	61.1
Roads and motorways	0.4	8
Total		4953

Source: Field Survey (2019)

# 3.14 Land Holding

Land is the major determinant of farm income and big holding size is the symbol of dignity and honor in the rural set up. All 1,088 surveyed households are land owners. Generally, the affected people have small land holdings, as approx. 60% in KP and 72% in Punjab have less than 5 acres of land. Only approx. 13% in KP and 16% in Punjab have more than 12.5 acres. In addition, most of these lands are not cultivated particularly in the mountainous areas of the DTL route.



#### Table 3.12: Land Holding Size

Land Holding Size (Acre)	% of affected Households		
	KP	Punjab	
Less than 1	25	32	
1 – 5	35	39	
5 – 12.5	27	13	
12.5 – 25	8	9	
25 and above	5	7	

Source: Field Survey (2019)

# 3.15 Crops, Fruits and Vegetables

As per Table 3.13, the main crops of the area include wheat and maize, while other crops such as rice, pulses, tobacco, and millets are also grown. The table depicts the percentage of the area cultivated under the specific crops.

#### Table 3.13: Croping pattern

Crops	Kharif Crops, %		Rabi Crops, %	
	KP	Punjab	KP	Punjab
Wheat		85		80
Maize	80		85	
Barley				3
Basmati Rice	6			
Vegetables		6		4
Pulses	3			
Chilies	1		1	
Tomato		2		
Potatoes		1		2
Tobacco		2		
Millets (Bajra /			2	
Jowar)				
Peanut				11
Other	10	4	12	

Source: Field Survey (2019)

# 3.16 Access to Infrastructure

Access to safe drinking water and sanitation is essential for health, security, livelihood, and quality of life, and is especially critical for women and children. Improved water supply and sanitation interventions could thus provide a wide range of benefits like longer lifespan, reduced morbidity and mortality from various diseases, and low health costs.



Table 3.14 lists the available social amenities in the project area.



#### Table 3.14: Access to social amenities in the Project Area

Social Amenities		Availability (%)	
	KP	Punjab	
Electricity	91	92	
Sui-Gas	11	34	
Fuel	17	51	
Water Supply	34	31	
Hospital	40	59	
Road	90	92	
Source: Field Survey (2010)			

Source: Field Survey (2019)



Table 3.14 indicates that almost all houses in the project area are electrified. However, the survey revealed that people are not satisfied with the power supply. They complained about the frequent power failures and low voltage. Potable drinking water supply is available to only approx. 30% of the households. The field survey revealed that people often have a small well in their houses and extract water via electric pumps or manually in case of power failure. Health facilities in the project area are not adequate; on the other hand, most of the surveyed households have reported to have access to road network.

#### 3.17 Gender Analysis

Women in the project area have no recognized role in the authority structure of the villages. Most of the women stay at home and only travel outside the village in case of visiting relatives, and weddings and to hospitals in nearby towns. However, the traditional attitude of not sending girls to school is changing now, because parents realized and understand that basic education is necessary for each individual without the discrimination of sex.

#### 3.17.1 Women's Participation Level

The women participation in different activities was assessed as part of the socioeconomic survey of affected households. In addition, 45 more women were interviewed in focus group discussions organized in villages along the DTL route. As shown in Table 3.15 women are mostly active in housekeeping and child caring while they participate in the social obligations of the household. Their involvement in other economic activities is very limited.

Activities	Participation
Housekeeping	91%
Child caring	82%
Farming	7%
Livestock	9%
Business Activities, embroidery, Tailoring etc	15%
Employment government and private	13%
Sale & Purchase	2%
Social obligations (marriage, birthday & other functions)	98%
Elected Representation (councilor /political gathering)	5%
Source: Field Survey (2010)	

#### Table 3.15: Women participation in various activities

Source: Field Survey (2019)

#### 3.17.2 Gender Status

As reported, the daily work of a female is housekeeping, child rearing, and fetching water, laundry, cooking and taking care of animals and other social obligations like marriage, birthday & other functions. Most of females are expected to meticulously follow the cultural tradition of modesty, which is the main factor constraining participation of women in the social activities.



#### 3.17.3 Women's Participation in Decision-Making

During consultation it was found that the majority of decisions are taken jointly by men and women at household level. Obviously, this is more apparent in educated families and younger generations. However, the fact that women are not seen outside the house makes it difficult to approach them for information dissemination or stakeholder engagement activities. The problem is exacerbated for such activities taking place outside the village. The project will need to design effective dissemination strategies to address these restrictions.

#### 3.17.4 Concerns of Women related to the Project

During the socioeconomic survey, women of the project area pointed out the following major issues relating to project activities: (i) Jobs should be provided to educated male and female along the TL area; (ii) Women demanded the compensation as per replacement value of the affected land and their assets; (iii) Working women, school teachers/ students of the area will need secured travel/mobility during the construction activities; (iv) Local women mobility will be restricted because of construction activities; (v) Timing of construction activities should be adjusted in such a way that it should not disturb the mobility of local population especially women and children during their routine (schools timing and working/jobs timing), with particular attention to women's health needs; (vi) Alternate route should be provided during construction in case of blocked access; and (viii) Women who are doing the embroidery work for domestic and commercial use; their skill should be enhanced by providing training and setting up of the embroidery centers in the project area.



# 4. LEGAL AND POLICY FRAMEWORK

# 4.1 General Introduction

This section describes the legal and policy framework used in the project for access and use of land for project construction. Since there would be no permanent acquisition of lands – and only temporary use for the construction of the line and towers – the Land Acquisition Act of 1894 will not be used for acquiring land in the Project Area. Instead, the Telegraphic Act of 1885 and the WAPDA Act of 1958 have been traditionally used for construction of transmission lines in Pakistan.

# 4.2 Legal Framework Used in Transmission Lines

Two legal instruments are used for temporary use of land for construction of transmission lines, i.e, Telegraph Act, 1885 and WAPDA Act 1958 that provide the framework for access and use of land for the DTL.

# 4.2.1 Telegraph Act, 1885

The first is the Telegraphic Act of 1885. This law was enacted to define the authority and responsibility of the Telegraph authority. Under this Act, the land required for the towers is not acquired from the owner, nor the title of the land transferred. Compensation is only paid to the owner for any structure, crop or tree that exists on the land. NTDC has been installing the transmission lines and their towers, and determining the associated compensation, on the basis of this Act.

No.	WB Involuntary Resettlement Policy Principles	Telegraph Act, 1885	Approaches to Address the GAPs
1	Compensation for the land taken for project implementation (loss of economic value)	No provision	Compensated will be paid at the negotiated value of PKR 1,12000 for each tower. Community support program has also been designed to share benefits of the project.
2	Screen the project early on to identify past, present, and future involuntary resettlement impacts and risks. Determine the scope of resettlement planning through a survey and/or Census of displaced persons, including a gender analysis,	No equivalent Requirements	Screened and categorized. Scope defined, social assessment and gender analysis undertaken.



No.	WB Involuntary Resettlement Policy Principles	Telegraph Act, 1885	Approaches to Address the GAPs
	specifically related to resettlement impacts and risks.		
3	Carry out meaningful consultations with APs, host communities, and concerned nongovernment organizations. Inform all displaced persons of their entitlements and resettlement options. Ensure their participation in planning, implementation, and monitoring & evaluation of resettlement programs. Pay particular attention to the needs of vulnerable groups, especially those below the poverty line, the landless, the elderly, women and children, and Indigenous Peoples (IP), and those without legal title to land, and ensure their participation in consultations. Establish a grievance redress mechanism to receive and facilitate resolution of the APs' concerns. Support the Social and cultural institutions of APs and their host population. Where involuntary resettlement impacts and risks are highly complex and sensitive, compensation and resettlement decisions should be preceded by a social preparation phase.	No equivalent requirements other than consultations being a key requirement of PEPA 1997	Consultations conducted during the preparation of present RAP; additional consultations will be carried out during the implementation per framework included in RAP. Grievance Redress Mechanism (GRM) included in the present RAP. Resettlement planning has addressed the needs of vulnerable groups.
4	Improve, or at least restore, the livelihoods of all APs. through (i) land based resettlement strategies when affected livelihoods are land based where possible or cash compensation at replacement value for land when the loss of land does not undermine livelihoods, (ii) prompt replacement of assets with access to assets of equal or higher value, (iii) prompt compensation at full replacement cost for assets that cannot be restored, and (iv) additional revenues and services through benefit sharing schemes where possible.	No equivalent Requirements	The present RAP addresses Livelihood allowance, livelihood restoration program, training, and finally a community development and support program.



No.	WB Involuntary Resettlement Policy Principles	Telegraph Act, 1885	Approaches to Address the GAPs
5	Provide physically and economically displaced persons with needed support	No equivalent requirements	The present RAP addresses these requirements. It includes payment of compensation, requisite allowances and community support program.
6	Resettlement assistance and allowance for the reduced access to land under towers.	No equivalent requirements	Resettlement assistance will be paid to the APs even without having legal title of the land to be affected.
7	Crop losses compensation provided to landowners and share-crop/lease tenants whether registered or not.	Crop losses compensation provided only to registered landowners and share-crop/lease tenants	Compensation for crop losses will be provided to landowners and share-crop/lease tenants whether registered or not
8	Disclosure requirements	No equivalent requirements	Information related to quantification of land, structures and other assets, entitlements have been disclosed to the affected persons. The amounts of compensation and financial assistance will be disclosed to relevant individuals only. The present RAP will be disclosed locally as well as internationally.

#### 4.2.2 WAPDA Act, 1958

The WAPDA Act<sup>6</sup> of 1958 is the other relevant legal framework, which allows "right of entry" for the purpose of construction - for instance, (i) survey of any land, erect pillars erect pillars

<sup>6</sup> The Water and Power Development Authority is the parent organization of NTDC.



for the determination of intended lines of works, make borings and excavations and do all other acts which may be necessary for the preparation of any scheme; and (ii) pay or tender payment for all necessary damage to be done as aforesaid. The Act further states that "in case of dispute as to the sufficiency of the amount so paid or tendered, the dispute shall be referred to the Deputy Commissioner (DC) of the district whose decision shall be final."<sup>7</sup>

The Telegraphic and the WAPDA Act mentioned above provide the basis for the legal framework used in the DTL Project. The use of the Telegraphic Act of 1885 as the legal instrument is justified by the fact that there is no land acquisition foreseen for the DTL project. Compensation is paid for loss of structures, crops and trees, allowances are foreseen to restore the livelihood of affected people and vulnerable groups but no land ownership change takes place. Past WB transmission line projects in Pakistan have also used the Telegraphic Act of 1885 as the basic legal framework for access to land for construction and maintenance purposes.

# 4.3 Compliance with WB OP4.12 IR Policy

The approaches and measures taken to land taking and access, identification and mitigation of impacts as prescribed in the project entitlement matrix and the process followed in the design and planning the RAP complies with the WB OP 4.12 requirements as follows:

- The project minimized and reduced the overall impacts by taking a strategy of temporary use for construction and avoiding permanent acquisition of land or loss of ownership of land;
- (ii) All affected owners/tenants are considered for compensation for reduced access for land under tower footings, crop losses and loss fruits and trees at market rate for one to two crop seasons;
- (iii) Those requiring relocation from the project ROW are entitled to compensation and transfer or relocation allowance;
- (iv) Affected households/persons and communities along the ROW of the DTL project were meaningfully consulted and will be involved in the project implementation;
- There are provisions for livelihood allowances and training program for restoration of income at least at the pre-project level;
- (vi) Special attention has been paid to gender issues and to vulnerable groups for additional assistance;
- (vii) The project has conducted a complete census along the ROW and established an inventory of impacts and losses to address the involuntary resettlement issues in the form of the RAP;

<sup>7</sup> Section 14 Right of entry (paragraph 1/2) of the WAPDA Act 1958.



- (viii) A grievances redress mechanism (GRM) has been established to deal with dispute and grievances over compensation and all matters related to the RAP;
- (ix) A participatory GRC and monitoring and evaluation (M&E) system has been established to involve affected persons and community members in project implementation.

In the case of married couples/households, the compensation will be paid to the one who owns the assets. This is usually the man but if these assets are jointly owned by couple, then the amount is paid to both the parties. However, when assets are owned by single/unmarried/separated women, they will receive compensation directly. Compensation will be paid through cross cheques to the entitled individuals. In case of married couples, if assets are jointly owned then then the amount is paid to both the parties. These provisions for payments were also discussed during consultation with women.

Further, to minimize the gaps and to comply with the OP4.12 requirements, the RAP policy has taken measures – for example, analysis of gender issues, consultation with women and other vulnerable groups, grievances/dispute resolution, and livelihood restoration measures to that affected persons can regain and restore their livelihood in post-project period.

# 4.4 "Good Practices" in Dasu TL Project

The overall impacts of the project have been significantly reduced by the temporary nature of the use of land without any acquisition or land transfer/loss of ownership but with full compensation for the DTL. However, for the tower siting, a special provision has been made in this project to pay compensation for land under the towers due to lack of easy access unlike the line alignment. Although the footprint of the towers is not acquired under the provisions of Telegraphic Act of 1885, it is recognized that access to the land under the towers (20X20m=400 sq m) is decreased and cultivation may become more difficult as compared to the pre-project conditions. The Project will pay a negotiated compensation of PKR 1,120,000 for each tower to compensate for this land. Title to the land shall still remain with the owner(s).

The project has designed a benefit-sharing program in the form of Community Support Program along the 250 km alignment for the affected communities. This is beyond mitigation and compensation for their temporary impacts and losses to maximizing development benefits. The objectives of benefit sharing programs are promoting local development in a socially and environmentally sustainable way and meeting the needs and expectations of affected communities in the project area. This is further discussed later in the RAP.



#### 4.5 Reflections and Lesson Learned

In this project, based on past transmission line project implementation experiences, the following are highlighted as "lesson learned," for better management and implementation of the DTL.

**Payment of Tower Pads:** Under the Telegraphic Act, 1885, which is used for the construction of transmission lines in Pakistan, the land required for the towers pad/foundations is not acquired from the owner(s). Compensation is only paid to the owners for any structure, crop or tree that exists on the land and within Right of Way (RoW). Since there is no acquisition, the Land Acquisition Act of 1894 is not invoked in the case of construction of transmission line in Pakistan. However, the access to land under towers is reduced. The issue of non-payment for this reduced access had been one of the serious concerns raised by the APs and has resulted in delays in tower siting. This has been an experience of NTDC in most of its TL projects. In view of this lesson learned from the previous projects and to avoid delays and ensuing social tension, NTDC has agreed to pay a negotiated compensation for the land under towers as a special provision.

Timely arrangement of funds for avoiding delays in compensation payment: Resettlement and land acquisition issues should be dealt with arranging funds for the timely disbursement of compensation payment to avoid protracted delays. The delay in payment of compensation can delay the implementation of the whole TL and can deteriorate the community and implementing agency relationship. NTDC has faced this problem in several of its transmission and distribution projects. Keeping this lesson in view, in the case of DTL, RAP implementation will be financed by WB and funds are earmarked for compensation payment before the commencement of work without any impediment to avoid APs grievances. This should expedite the project implementation tasks.

# 4.6 **Project Safeguard Policy and Entitlements**

The Project entitlements for losses and other benefits are based on extensive public consultation with the affected communities along the ROW alignment (see Chapter 6). In view of the impacts and consultation carried out during project preparatory stage, the legal and policy framework adopted in this project would cover the following persons and /or losses.

#### Assets and Incomes:

- (a) **Structures** will be compensated in cash at replacement cost. Any transaction costs will also be paid. Materials that can be salvaged are allowed to be taken by the owner, even if compensation has been paid for them.
- (b) **Crops** will be compensated for owners, tenants and sharecroppers based on their agreed shares. The compensation will be on the basis of the full market rate for one year of harvest including both rabi and kharif seasons (i.e., two seasons).



- (c) Fruit and other productive trees will be compensated based on market value of tree. Trees used as sources of timber will be compensated for based on the market value of the wood production, having taken due consideration of the future potential value.
- (d) Businesses will be compensated with cash compensation equal to one year of income for permanent business losses. For temporary losses, cash compensation equal to the period of the interruption of business will be paid up to a maximum of six months or covering the period of income loss based on construction activity.
- (e) **Workers and employees** will be compensated with cash for lost wages during the period of business interruption, up to a maximum of three months or for the period of disruption.
- (f) Relocation assistance is to be paid for APs who are forced to move from their property. The level of the assistance is to be adequate to cover transport costs and also special livelihood expenses for 3 months or based on the severity of impact.
- (g) **Community structures and public utilities**, such as roads, water supply and sewerage lines, irrigation networks will be fully replaced or rehabilitated to ensure their level of provision is, at a minimum, to the pre-project situation.

#### 4.7 Entitlement Matrix

The entitlement matrix is developed based on the above discussed eligibility criteria, nature of losses and implementation issues of the proposed project, as presented in Table 4.2.

Type of Loss	Specification	Affected Persons	Compensation Entitlements <sup>8</sup>
Land Taken for Towers	Land under the Tower Sittings	Owners of the land	PKR 1,120,000 for each tower as compensation for the land taken for each tower. The amount may vary from on one tower to another due to location and a variety of other factors.
Houses/ Structures		All relevant APs	- Cash compensation at replacement rates for affected structure and other fixed assets free of salvageable materials, depreciation and transaction costs.
			<ul> <li>In case of partial permanent impacts full cash assistance to restore remaining structure, in addition to compensation at</li> </ul>

#### Table 4.2: Entitlement Matrix

<sup>&</sup>lt;sup>8</sup> Compensation for all assets will be paid to the owner of the asset.



Type of Loss	Specification	Affected Persons	Compensation Entitlements <sup>8</sup>
			replacement cost for the affected part of the structure.
Crops	Crops affected	All APs owning crops	<ul> <li>Crop compensation in cash at full market rate for one year (winter and summer seasons) for impacts caused by grid construction, tower base, stringing and access roads.</li> <li>All other crop losses will be compensated at market rates based on actual losses.</li> </ul>
Trees	Trees affected	All APs owning trees	<ul> <li>For timber/ wood trees, the compensation will be at market value of tree's wood content.</li> <li>Fruit trees: cash compensation based on value of tree.</li> </ul>
Business/ Employment	Temporary or permanent loss of business or employment	All APs (including agriculture workers)	<ul> <li>Business owner: (i) Cash compensation equal to one- year income, if loss is permanent; ii) in case of temporary loss, cash compensation equal to the period of the interruption of business up to a maximum of six months or covering the period of income loss based on construction activity.</li> <li>Workers/ employees: Compensation for lost wages for the period of business interruption up to a maximum of 3 months (at OPL level PKR 20,301 per month).</li> </ul>
Relocation	Transport and transitional livelihood costs	All APs affected by relocation	<ul> <li>Provision of allowance to cover transport expenses (<i>PKR</i> 5,000) and livelihood expenses for three months (<i>PKR</i> 60,903 per household).</li> </ul>
Community assets	Damage to roads and networks	Affected community	<ul> <li>Rehabilitation and/or restoration of affected structures/ utilities (i.e. roads, water and wastewater networks, irrigation networks).</li> </ul>
Vulnerability assistance	Households below poverty line	All vulnerable APs	<ul> <li>Lump sum one-time livelihood assistance allowance (<i>PKR</i> 60,903) on account of livelihood restoration support.</li> <li>Temporary or permanent employment during</li> </ul>

Type of Loss	Specification	Affected Persons	Compensation Entitlements <sup>8</sup>
			construction or operation, wherever feasible.
Community Support Program	Affected communities along the alignment	Affected communities	- Community support program such as roads, clinic, market etc. to be built in consultation with the affected people during implementation
Unidentified Losses	Unanticipated impacts	All APs	<ul> <li>Ad-hoc during project implementation according to the World Bank Operational Policies.</li> </ul>

# 4.8 Cut-Off Date

The cut-off-date in this project is based on the date(s) of the census along the DTL. Since it is a long linear project covering 250 km involving 8 districts, the cut-off date are different for different districts, starting with the date of the census in each district (see Table 4.3). The cut-off dates were announced during the census and consultation meetings. Persons who encroach on the area after the cut-off date are not entitled to compensation or any other form of resettlement assistance. The cut-off-date(s) was discussed with the implementing agency and the affected people and announced during the survey as well as consultation meetings. Any one moving to the project site after the cut-off-date would not be eligible for any compensation and/or assistance under the project.

	District	Cut-off date.
1	District Upper Kohistan	22 July 2019
2	District Lower Kohistan	31 July 2019
3	District Shangla	12 August 2019
4	District Batagram	23 August 2019
5	District Mansehra for TL line	29 August 2019
6	District Abbottabad	05 September 2019
7	District Haripur	20 September 2019
8	District Attock	30 September 2019

Table 4.3: District Wise Cut-off Date DTL

# 4.9 Valuation and Compensation Determination Procedures

NTDC has its own permanent set up with *patwari*/surveyor, valuator, and other field level investigators for valuation of different types of losses in collaboration with respective government line departments such as Communication and Works (C&W) Department, Agriculture Department, Forest Department for determining rates at market rate. For example – (i) crops will be valued at current market rates of gross value of harvest as valued by the Agricultural Department; (ii) houses, buildings and other structures will be valued at replacement cost plus labor cost based on the area, type and material of the affected item. No deductions will be made for depreciation, salvageable materials or transaction costs and



taxes; (iii) loss of fruit bearing trees will be compensated for based on their type, productive age and the market value of the produce for the remaining period of its average life; and (iv) the value of trees that would have been used for timber will be calculated based on the average volume and quality of wood produced and taking into consideration the size classes as determined by girth, diameter at breast, height and volume as assessed by the Forest Department.

In this project, the determination of compensation for tower land is based on negotiations with the affectees, based on recent market data (September, 2019) as the basis; and the rates are eventually above market value. Finally, in case of delay in RAP implementation, the compensation will be adjusted as per the inflation rate.



# 5. COMPENSATION, RELOCATION ASSISTANCE AND LIVELIHOOD RESTORATION

#### 5.1 Compensation and Assistance

The objectives of the compensation and other assistance under the project are to ensure that those affected can maintain their living standards despite the losses and are not impoverished due to the project. In addition to compensation for losses, relocation assistance will be provided to those who would be required to move out of the ROW for construction and/or safety reasons. The project has also designed programs for livelihood allowances, and training to restore their incomes. These are discussed in the rest of this chapter.

# 5.2 **Procedures and Payments of Compensation**

For the affected households along the DTL, NTDC will make payments in three stages – (i) construction of tower foundation; (ii) erection of the tower; and (iii) the stringing of the conductor.

The construction work will start after clearing of the path for the access to the site and clearing of the land under tower for making the foundation. This will result in clearing of crops, vegetation, trees, structures and other assets. As per the standard operating procedure, NTDC will get the rates from all the concerned line departments before starting the work. The NTDC surveyors and the patwaris will survey the area, assess the damages and prepare the compensation along with the concerned Sub divisional officer (field) of NTDC. Based on that assessment, the compensation amount will be paid for all losses (crops, trees, and structures) to the affected households directly by the NTDC through the cross cheques before the commencement of the work.

If there are structures on the land under the tower or in the ROW, the assessment for the loss will also be prepared by the NTDC patwari and surveyors by using the rates provided by the C&W department of the relevant province and the compensation will be paid directly by the NTDC. As mentioned in the entitlement matrix, NTDC will also pay allowances (PKR 1,120,000 for each tower) for land under the tower sitting for reduced access to the land. The landowner(s) will retain the title of the land.

If the affected households have any issues regarding the compensation rates offered by the NTDC or any other grievances, then there is a proper GRM of NTDC at Project Management Unit/Project Implementation Unit level and NTDC headquarter level to redress the grievances (for more, see Chapter 7). In case GRM fails to resolve the issues then the APs have the right to approach the court for his grievances.

# 5.3 Structure Relocation and Assistance

The relocation of structures from the RoW was discussed in detail with the house owners and owners of other structures during the consultation process. Owners of structures in the RoW



will receive compensation by the project and will undertake to rebuild their houses/businesses on their residual land and/or place of their own choices. The relocation strategy also defines that partially affected structures will also be compensated. The owners, particularly those affected by tower sittings, will receive an additional allowance for the land. NTDC will pay compensation to those losing structures in advance for relocation with at least 60 days of notice to vacate the affected structures. There are only 29 households (50 affected structures) along the 250 km length of the Project, who would require relocation.

# 5.4 Livelihood Restoration Programs

APs losing access or suffering access restrictions to more than 10% of their land holding will receive livelihood disturbance allowance in addition to the compensation that they are entitled. Livelihood disturbance allowance will be equal to market value of gross harvest of the affected land for 1 year (inclusive of winter and summer crop and additional to standard crop compensation).

The forms and levels of livelihood restoration assistance vary and will be commensurate with the duration, level and severity of impacts on livelihoods and productive assets as well as vulnerability of the APs. The APs entitled for livelihood restoration assistance are: (i) All APs subject to relocation; (ii) All APs who suffer severe impacts (i.e. land loss more than 10% of land holding); and (iii) Venerable APs requiring additional assistance.

# 5.5 Training for Livelihoods

In addition to livelihood allowance, the Project has made provisions for training, focusing on strengthening the skills of APs who could be able to exploit job opportunities that will be generated by the project.

Training will take the form of three to five-day on-site training at the project location to be provided by the contractor(s) on skills that will facilitate APs to be employed during project construction. The contractors will be required to hire local skilled and unskilled laborers. The training part will be included in the conditions of contract for the contractor with adequate provisions to develop local skills and capacity.

# 5.6 Additional Support for Vulnerable Groups

All vulnerable affected households will be provided rehabilitation/income restoration assistance at the rate of PKR. 60,903/Household (i.e. PKR 20,301/month for 3 months). Vulnerable APs will be given priority in project–related training and employment opportunities as support staff, drivers, clearing, skilled and unskilled labor. To this end, the NTDC will incorporate clauses in the contracts of civil works contractors that they will give preference to vulnerable and other project APs while recruiting personnel. The compliance to this term will be presented regularly in the internal monitoring reports.



#### 5.7 Benefit Sharing and Community Support Programmes

#### 5.7.1 Background and Objectives

During consultation meetings, people asked how the project would benefit them. It was felt that APs and communities want additional benefits beyond compensation. Since the affected communities are remote and rural, they lack many amenities and services. The project construction and operations are expected to create many indirect economic benefits and opportunities through assistance to local communities to realize their development aspirations. Through this project, as an example of "good practice", NTDC is committed to share development benefits with the community and wants to support communities and aims to build synergies of community and government for bringing about social and economic development in the project area through a community support program.

#### 5.7.2 Selection Criteria

Beneficiaries of Benefit Sharing program are spread over the entire length of DTL. The NTDC will identify central locations or markets along the TL alignment where maximum villages around or population will benefit from the benefit sharing projects.

However, identification of these locations, stakeholder engagement is essential in initiating and designing benefit sharing programs. The approach requires participation of community, government line departments and NTDC towards successful identification of projects. All relevant social and environmental guidelines will be followed for screening, identify and preparing project proposals.

# 5.7.3 Type of Potential Projects

The range of projects will be identified through focus group discussions using priority ranking through participatory rural appraisal (PRA). The following would likely be potential community-based projects.

- Improved drinking water supply: In the affected villages, shortage of safe drinking water has been an issue. Water supply schemes need considerable improvement and repairs which will be provided with community and government partnership. Improvements envisaged under this activity include provision of pumping stations, replacement of worn out pipelines, building of water storage tanks, etc. under tripartite approach to ensure sustainability.
- Educational facilities: Most primary and elementary school require additional resources like teachers and equipment to improve quality of education. Some of the schools are defunct because of lack or absenteeism of teachers. Some schools require additional classrooms, repairs, furniture, equipment and amenities.



- Establish health clinics: Project will strengthen health clinics presently provided to neighboring villages with training of LHWs. Rehabilitation of the existing health clinic with community support will also be done along the alignment based on the need assessment.
- Access roads: Rural access roads are beneficial for connecting villages to markets or central locations for goods and services.
- Assistance Sports and Culture clubs: Provide goodwill grants for promotion of sports and culture activities to engage youth. Provide support to local government, sports clubs, sports competitions, local festivals and cultural events to generate goodwill for the NTDC.

The above assessment only identified the sectoral level interventions, which is not sufficient to operationalize the CSP for sharing the project benefits with the communities and social uplift of the area. For CSP operationalization, these sectoral level interventions should be transformed into specific schemes/projects with details of their location, number, and other parameters necessary for their design and implementation. As the overall responsibility for operationalizing the CSP will be with the PMU, PMU with the support of consultants will select and NGO/Consultant to identify these specific project/schemes.

PMU will develop Terms of Reference (ToR) and select an NGO/Consultant experienced in such assessment with good track record. They will undertake the need assessment, based on detailed consultations with the affected villages and main market centers including women, small and marginal land holders, landless, and other vulnerable groups. They will recommend the specific CSP schemes/projects, including detailed implementation and monitoring plans and budget.

The detailed CSP should also include operation and maintenance plans, which would require consultations and engagements with local or state government departments. PMO will ensure collaboration with the government departments and finalize the recommendations. ToR and the final CSP should be cleared by the Bank.



# 6. STAKEHOLDERS CONSULTATION AND DISCLOSURE

#### 6.1 General

This chapter describes the project stakeholders, their views towards the Project and the process adopted in consulting affected households and communities along the DTL alignment on the physical and economic losses due to project construction.

#### 6.2 Stakeholders Mapping

Project stakeholders – both primary and secondary (Table 6.1) – include the APs and beneficiaries in the project, NTDC and other related government departments/agencies, district administration, the local governments, contractors, construction workers, in-migrants and followers, supply/service providers, financing institutions like the World Bank, mass media/civil society members, consultants and project advisors.

#### Table 6.1: Primary and Secondary Stakeholders

Type of Stakeholder	Stakeholder's Profile
Primary	<ul> <li>All APs, households, communities, project beneficiaries – for</li> </ul>
Stakeholders	instance, residents of the project area.
Secondary stakeholders	<ul> <li>Project owner/NTDC, other related departments/agencies of the GoP, District administrations, project contractors, construction workers, in- migrants and followers, supply and service providers, financing institutions like the World Bank, mass media/civil society members, consultants and project advisors</li> </ul>

# 6.3 Consultation Framework Used in the Project

The guiding principle underlying consultations was that the social safeguards planning and implementation must follow a consultative and participatory process to ensure success of the project. This was further reinforced by the requirements of the World Bank OP 4.12 and Bank's Access to Information Policy (2010), which give high priority to public consultation and participation in designing and implementation of a socially and environmentally compliant project (see Table 6.2).

Table 6.2:	Frameworks for	<sup>r</sup> Consultation
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Legal/Policy Sources	Regulations/Safeguard Policy Requirements
Government of Pakistan	<ul> <li>Pakistan Environmental Protection Agency (PEPA) Regulations 2014 and 2000</li> <li>Environmental Protection Agency (EPA) 1997 Guidelines for Public Consultation requires public consultation and involvement in project planning and implementation. The policy and procedures require proponents to consult with affected community and relevant NGO during preparation reports.</li> </ul>



Legal/Policy Sources	Regulations/Safeguard Policy Requirements
World Bank	<ul> <li>OP.4.01, Clause 14, notes that for all Categories A and B projects proposed for IBRD or IDA financing, during the EA process, the borrower consults project-affected groups and local nongovernmental organizations (NGOs) about the project's environmental aspects and takes their views into account. The borrower initiates such consultations as early as possible. For Category A projects, the borrower consults these groups at least twice: (a) shortly after environmental screening and before the terms of reference for the EA are finalized; and (b) once a draft EA report is prepared. In addition, the borrower consults with such groups throughout project implementation as necessary to address EA-related issues that affect them.</li> <li>OP 4.12/Involuntary Resettlement: (i) Displaced persons should be meaningfully consulted and should have opportunities to participate in planning and implementing resettlement plans; (ii) APs should be informed about their options and rights pertaining to resettlement; (iii) APs may be involved in the planning, implementation, and monitoring of the resettlement program, especially in the process of developing and implementing the procedures for determining eligibility for compensation benefits and development assistance; (iv) Establish appropriate and accessible grievance mechanisms; and (v) Particular attention be paid to the needs of vulnerable groups among those displaced, especially those below poverty line, the landless, the elderly, women and children or other displaced persons who may not be protected through national land compensation legislation.</li> <li>WB Access to Information Policy (2010)– RAP should be disclosed to the APs for local inputs, including documentation of the consultation process, in a timely manner, before appraisal formally begin, in an accessible place and in a form and language that are understandable to key stakeholders. All documents will be disclosed in a language that the community and APs understand.</li> </ul>

The consultation and participation adopted includes: (i) a public participation and consultation mechanism established in the early scoping stage for effective public participation (ii) formulated through extensive consultations for the formulation of fair compensation rates in a transparent manner ensuring smooth implementation of relocation and income rehabilitation.

As part of the project preparatory work, detailed consultations were carried out through village meetings and focus group discussions (FGDs) with the communities including women in the project area. Separate meetings were held with the institutional stakeholders in the form of one-to-one meetings. Consultations were also carried out at the community level during the draft RAP preparation. Elements of the policy framework and entitlements were discussed during the consultation period. Details of this consultation process are described below, while complete record of primary stakeholders is presented in Annex A.

# 6.4 Consultation Conducted in 2016 and 2019

Three separate teams conducted the community consultations in 2016, covering resettlement and social aspects of the project. During the consultations, participants were briefed on the



proposed DTL project and its various elements as well as activities, its need and objectives, its potential/likely impacts on the local environment and people, and the mitigation measures – including compensations – planned to address impacts. Subsequently, their concerns and comments regarding the proposed project were recorded.

Additional public consultations and information disclosure sessions took place during July and August 2019. The APs were informed well in time regarding the time and venue, and successive follow up calls were used to confirm the meetings. Meetings were held in an open encouraging atmosphere where APs expressed their concerns and views freely.

Meetings were held in the form of open hearings, FGDs and individual interviews with men and woman. In total 1,313 men and 46 women were engaged in these meetings along the villages of the DTL alignment. The people engaged and their villages are presented in Annex A. These meetings proved very useful in information sharing and group consultation and consensus building. Concerns raised during the village meetings are presented below.

Year	Total Number of Villages where Consultation held	Location	Total Number of Participants			
	Project Level Consultation					
2016	29	Transmission Line	167			
2019	6 Villages for GS 33 Villages for TL	Grid Station (GS) & Transmission line	171 in GS 249 in TL Total =420			
Oct 2019	District level Consultation meeting to share the revised and updated RAP	Besham	30			
Oct 2019	District level Consultation meeting to share the revised and updated RAP	Mansehra	51			
	Instit	utional				
	Number of Meetings	Office/Agencies				
2016	6	EPA, NHA, Wildlife, Forestry, MoCC, IUCN	7			
2019	7	EPA, Forestry, DFO- BTP, HFO (NGO), Irrigation Dept., NHA, Wildlife	8			
	National Leve	el Consultation				
	Type of Participants					
2016	Multi-stakeholders	Islamabad	81			
2017	Multi-stakeholders	Batagaram	84			
2017	Multi-stakeholders	Attock	59			

#### Table 6.3: Stakeholders Consultation – Summary Table



#### 6.5 Key Issues and Concerns

During project preparatory work, the NGOs in the project area were consulted. For Dasu Transmission Line, consultations were done with The Human Federation, Al-Khidmat Foundation, National Integrated Development Association, Salik Development Foundation and Environmental Protection Society. The NGOs viewed the project positively, but empahsised on timely payment of compensation, good management of the environmental issues, employment for local people and community development programs by the project in the project area to benefit the affected communities.

Table 6.4 lists concerns raised by the people during consultation meetings and the response or measures to be undertaken by the project.

No	Concerns	Responses	Responsibility
1	Who and how the prices for loss of crops and trees would be determined?	NTDC will use their own staff (i.e., surveyor and patwaris) in valuation of crops and trees with rates provided by relevant government departments. Once the rates are determined, they will be shared with all the APs.	NTDC with assistance and support from relevant government depts. /agencies
2	What rates will be adopted for compensation?	Compensation will be given on replacement cost basis.	NTDC based on assessment by its patwaris and surveyors
3	When will payments be made for the lost assets?	Payments will be initiated prior to project construction work	NTDC through PMU
4	Who should we contact in case of any complaint/ objection?	A GRM will be established for complaint resolution and APs will be given the representation in the GRC and they can contact their representatives in case of any grievance.	NTDC
5	Is the contractor going to hire local people for the TL construction purposes?	Local people will be preferred for employment during construction stage. For this purpose, contractor will be bound by a clause in contract documents to hire local labor during construction phase, if available. This will be monitored through internal monitors.	NTDC & Construction Contractor
6	How can NTDC ensure Transparent and fair compensation procedures	Effective monitoring mechanism will be introduced to make the compensation process more transparent and APs representative will be a part of this process. Monitoring report will be prepared periodically and in case of non- compliance, correction action will be proposed/implemented for immediate remedial measures.	NTDC Third party independent monitoring
7	Is the daily and regular normal	NTDC and the contractors will ensure to minimize disturbances and disruption by the	Contractor & NTDC

#### Table 6.4: Summary of APs Concerns and Project Response



	life of the people and communities be affected during construction?	construction of the TL line. If necessary, the contractor will provide temporary alternative route for smooth movement of people and community members	
8	How would the community and project affected people know of the project construction schedule?	NTDC through the PMU and field staff will regularly inform the affected communities along the ROW of the construction schedule. Pamphlets, brochures etc. will be distributed to the community on the project details	NTDC/PMU and Field Staff
9	Consultation process should be continued throughout the project cycle.	Meaningful and informed consultation and information disclosure will be carried out by the Resettlement Unit (RU). The issues along with the proposed measures discussed during the meetings will be documented.	NTDC/PMU
10	What happens if local infrastructures like roads, water channels are affected or destroyed during project construction?	NTDC will ensure with the help of design consultant that impact on the infrastructure is minimized and affected infrastructure is restored. If any local infrastructures are affected, these will be repaired by the contractors.	NTDC & design consultant
11	How can the project benefit the local affected people and communities to improve their living standards?	The TL project will design a benefit-sharing program to benefit the affected communities through establishment of community support/area development program in consultation with communities in the alignment	NDTC through PMU and field staff

The entitlement matrix for the project was prepared taking into consideration the feedback from the consultation meetings. Further, it was discussed and agreed with PAPs during the inventory preparation and rate determination. It was again discussed in the consultation on October 30, 2019

# 6.6 Community Attitudes to the Project

During consultations, a positive attitude was generally found among the public. People look at DTL construction as a source of employment and improved quality of life through electrification needed for industrialization in the country. Their main concerns, as reflected in the section above, are related to compensations for those affected by the construction of the project and likely impacts to their life style and culture.



#### 6.7 Consultation with Women in the TL Project

#### 6.7.1 Overview of the process

Special attention was given to make the consultation process gender inclusive and responsive and tailored to the needs of disadvantageous and vulnerable groups. To explore gender related issues, female staff were included in the team of surveyors. Formal meetings with women were held to explore their needs, problems and priorities related to project execution. In addition, individual interviews were also held with the affected women to effectively integrate their voices in the planning and implementation of the project. Women actively participated in the meetings and showed their support for the project. A list of women consulted is given in Annex A.

#### 6.7.2 Women's views and concerns about the Project

Most of the women were unaware of the project. Information dissemination activities were thus welcome during the meeting. Women initially looked at the proposed project with a negative view as it may likely affect negatively due to loss of crops, trees and other sources of income. Many social- cultural issues were also raised – for example, village girls and women may find difficulties in their mobility in the presence of the project construction crew. This was raised as a concern.

Several suggestions were put forward during the meetings. First, the timing of the construction activities should be adjusted in a way so that to reduce any disruption – particularly for women and children during school hours. Women also demanded to provide project jobs to educated women in the project. They also voiced concerns about payment of compensation for their losses and demanded payments prior to construction work. Finally, many women asked for training and skill development for embroidery work for home-based income opportunities. These issues will be considered during designing of the training program under livelihood restoration and community support program.

During the census, inventory preparation, socioeconomic survey and the consultations, the affected women and vulnerable groups were explained the structure of compensations, the types of allowances and the mechanism of disbursements. It was explained during the consultations that if assets are owned by the women, they will directly receive the compensation and compensation will be paid through cross cheques. In case of joint ownership of assets (e.g. married couples), the compensation will be paid to all parties.

# 6.8 Disclosure and Communications

The RAP will be disclosed to the affected people and will be available on the NTDC website and Bank's website for the public at large. NTDC will take the following steps for disclosure of the RAP.

• Before the start of the RAP implementation, an information booklet containing a summary of the compensation principles will be prepared specifically for the purpose.



This information booklet or brochure will be translated into Urdu and distributed to all Project APs. This will enable the APs to be aware of their entitlements, unit rates of compensation/income restoration and rehabilitation assistance and payment procedures available for various types of APs as given in the Entitlement Matrix. In addition, the information regarding the GRM will be reflected in the booklet.

- After approval, a shorter version of the RAP (i.e., project footprint, objectives and benefits, policy framework, entitlement matrix, RAP implementation framework, responsibility, timeline, costs and budget, M&E framework) will be translated into Urdu by NTDC and disclosed to APs and other stakeholders by the Project Office through PMU. The translation of the of RAP will include the Cut-off date, but exclude the cash compensation amounts to be paid to the PAPs.
- RAP will be disclosed to women through a meeting either by a community organization or project staff. Both versions of RAP (English and Urdu) will be available at the offices of Project Director, Contractor, and Revenue Department as an official public document.
- A schedule explaining the date, time and venue for disbursement of compensation through cheque will be prepared in Urdu and distributed to all APs.

The purpose of disclosure is to seek and generate active interest among the affected people to be involved in the project implementation. Information disseminated through the disclosure will further empower the community and enhance interaction with the Project as key stakeholders.

# 6.9 Communication and Consultation Plan During DTL Project Implementation

Dasu TL is a large project covering 250 km of alignment. So, it is important to maintain a good communication strategies and link are maintained with the project stakeholders along the alignment for better management and implementation of the project. Communication is a powerful instrument for promoting accountability, transparency, participation and dialogue in project implementation.

The Project will prepare a Communication Plan (CP) and hire a communication specialist during the implementation phase of the project. The CP should provide detailed roadmap that will guide all communications on the project with internal and external stakeholders. This, in turn, would contribute to increased support from the stakeholders and ultimately, smoother implementation of the project.

A CP will strengthen project internal communication flow, enhance teamwork, and increase support for the project. It will also manage relationships with key stakeholders and increase the public visibility of all project activities, benefits, impacts, and progress and lessons learned. Finally, a CP will promote a positive image of the project and elicit public and external support. A broad framework for the detailed roadmap is described in Table 6.5 below:



Description	Target Stakeholders	Timing	Responsibility
<ul> <li>Consultations and participation during verification of resettlement impacts and AP list</li> <li>Location: various places in project area</li> </ul>	<ul> <li>Potential APs; and communities within and around subproject area</li> </ul>	- Before implementation of projects	- PMU and RAP Consultants
<ul> <li>Consultations with the APs/ communities during RAP implementation</li> <li>Location: various places in project area</li> </ul>	- APs/ Communities within RoW of DTL	- Before commencement and during implementation of project activities.	- PMU and RAP Consultants
<ul> <li>Establishment of GRM and GRCs</li> <li>Location: various places in project area</li> </ul>	- APs/ Communities within ROW of DTL	- Before commencement of project activities and quarterly during implementation.	- PMU and RAP Consultants
<ul> <li>Grievance redress</li> <li>Location: various places in project area</li> </ul>	- CO staff; consultants; relevant line departments; and APs (as needed).	- limplementation Stage	- PMU and RAP Consultants
<ul> <li>Consultations with the APs/ communities during internal monitoring</li> <li>Location: various places in project area</li> </ul>	- APs/ Communities within RoW of DTL	- Construction Stage	- CO and RAP Consultants
<ul> <li>Fortnightly meetings at project sites</li> <li>Location: Site offices</li> </ul>	- PMU staff; consultants; and APs (as needed).	- Construction Stage	- PMU and RAP Consultants
<ul> <li>Consultations with the APs/ Communities during the Independent Monitoring</li> <li>Location: various places in project area</li> </ul>	- APs/ Communities within RoW of DTL	- Construction Stage	- M&E Consultants
- Consultation workshops to review RAP implementation, any outstanding issues and grievances, views and concerns of APs; and	- APs/ Communities within RoW of DTL; relevant line department; relevant NGOs	- Six-monthly during implementation phase	- PMU and RAP Consultants

#### Table 6.5: Consultation and Participation Framework



Description	Target Stakeholders	Timing	Responsibility
actions needed to address them			
<ul> <li>Location: site offices within project area.</li> </ul>			
<ul> <li>Consultations with the APs/ Communities during the site visits by the WB Review Missions.</li> </ul>	<ul> <li>PMU; project consultants; APs</li> </ul>	- Construction/ Operation Stage	- PMU; WB Mission
<ul> <li>Location: various places in project area.</li> </ul>			



# 7. GRIEVANCES REDRESS MECHANISMS

## 7.1 Introduction

NTDC has developed a document referred as "The Grievance Redress Mechanism (GRM)", outlining a process for documenting, addressing, responding and employing methods to resolve project grievances (and complaints) that may be raised by APs or community members regarding major project specific activities such as, environmental and social performance, the stakeholder engagement process, compensation and allowances payment and resettlement and/or unanticipated social impacts resulting from project activities that are performed and/or undertaken by NTDC. The document describes the scope and procedural steps and specifies roles and responsibilities of the parties involved. It applies to all World Bank, ADB and other foreign donor funded projects, including the proposed one. The GRM implementation will be supported from the RAPs and ESIA budget. GRM implementation cost component from this RAP is indicated in Table 9.4.

## 7.2 Structure of the Grievance Redress Mechanism

The project will have two-tier GRM with designated staff responsibilities at each level. The levels comprise the following:

## GRC at PMU Level (GRC-P)

NTDC will appoint a Grievance Redressal Committee (GRC-P) at PMU level to resolve all grievances and complaints of the APs and the Complainants. The GRC-P shall comprise of the following members:

- Project Director (or his representative), NTDC as Convener of GRC
- Deputy Manager (Social & Environment), NTDC as Secretary of GRC
- Representative of Land Acquisition Collectors (LAC) as Member
- Independent Consultant (a retired Land Acquisition Collector (LAC) (or equivalent who has knowledge of the land acquisition and process to resolve issues) as Member
- Representative from Consultant (male and female)
- Any notable personality from the area to be nominated in writing by the relevant District Administration in consultation with the community.

Further, representative from any other Department may be called as and when required by the GRC. If required, NTDC will also take the help of local *jirga* (traditional council of elders) for review and resolution of any disputes when needed, particularly in the two districts of Kohistan where Jirga play important role in dispute resolution.



There will be a complaint box at each CO Office and a dedicated telephone number for registration of any complaints. CO will also designate a person, not below the rank of an Office Assistant, who shall record the complaints and immediately report them to CO Head/Executive Engineer and concerned officials.

The GRC-P, through an authorized representative, will acknowledge the Complainant about his complaint, scrutinize the record, explore the remedies available and request the Complainant to produce any record in favor of his claim. After thorough review and scrutiny of the available record on complaint, visit the field and collect additional information, if required. Once the investigations are completed, the GRC shall provide with a decision within 21 days of receipt of the complaint. If the aggrieved person is not satisfied, he/she will be allowed to elevate the complaint to next level of GRM for resolution of his/her grievances within 07 days after communication of decision by the GRC-P.

GRC-P has provision for representatives (both male and female) from the community. However, the area is conservative and culturally sensitive and female involvement is very limited in activities outside their homes. Keeping this in view, female representation in GRC-P will be difficult. If there are any specific grievance(s) lodged by any female in the project area, the gender specialist in the project will facilitate the process.

## GRC at NTDC Headquarter (HQ) Level

NTDC will constitute a Grievance Redressal Committee (GRC-HQ) at HQ level. The committee will have the following composition:

- General Managers Projects Delivery North/South (as relevant), Member-Convener
- Additional Director General ESIC as member
- Gender Focal Point or NTDC female manager as member
- Representative of the Land Directorate as member
- Representative of the Legal Department as member

This GRC-HQ, through authorized representative, will acknowledge the complainant about his complaint, scrutinize the record of the GRC-P, investigate the remedies available and request the complainant to produce any record in favor of his claim. After thorough review and scrutiny of the available record on complaint, visit the field and collect additional information, if required. Once the investigations are completed, the GRC-HQ shall give decision within 21 days of receipt of the complaint. If the complainant is still dissatisfied with the decision, he can go to the court of law, if he/she wishes so.



Gender representation will be ensured by appointing a female member in both GRCs. The mechanism will ensure the access of APs to a GRM that openly and transparently deals with the grievances and makes decision in consultation with all safeguard system.

## 7.3 Grievance Redress Mechanism

The intention of GRM is to resolve a complaint as quickly and at as low a level as possible to avoid a minor issue becoming a significant grievance. Irrespective of the stage of the process, a Complainant has the option to pursue the grievance through the court as his or her legal right in accordance with law. The details of the process are given below:

### Grievance Redress Procedure

a. The grievance or complaint will be addressed to the Convener of GRC-P/HQ with copy to DMD (AD&M). This can be launched in writing, through telephone or verbally at office. If the complaint is verbal, the office will arrange to convert verbal complaint in written form;

b. A serial number will be assigned to it together with the date of receipt;

c. A written acknowledgement to the Complainant will be sent promptly and, in any case, not more than 3 working days. The acknowledgement will contain:

i. The name and designation of the authorized representative (if the designated representative is in another office then the relevant address will also be included) who will deal with the grievance.

ii. Information that necessary action will be taken within the specified working days from the date of receipt of the grievance by the authorized representative concerned.

d. If the office receiving the grievance/complaint is not the one designated to consider and resolve it, the receiving office will forward it to the designated office, but after having complied with the requirements at (b to c) above;

e. The GRC will provide an opportunity of hearing to all the concerned parties and examine the relevant record before making the final decision;

f. The GRC or its representative designated to consider the matter will make every effort to ensure that grievances/appeals are considered and resolved preferably within the stipulated period; and

g. The complete records of all activities will be kept and filed into the grievance database maintained by both GRCs. The GRCs will also be responsible to compile records of the GRM and make quarterly reports to the WB or any other concerned Authority.

## Follow Up and Close Out



The complaint will be considered as resolved and closed when:

- The designated GRC has decided/resolved the grievance/complaint;
- Where the Complainant has indicated acceptance of the response of the GRC in writing;
- Where the complainant has not responded to the Grievance Redress staff within one month of being sent the final decision of the grievance officer on his grievance/complaint;
- Where the Complainant fails to attend the proceedings of the GRC within the stipulated period of the resolution of the complaint; and
- Where the Complainant withdraws his/her complaint.

## 7.4 Documentation of GRC Cases

All records of GRC cases shall be properly maintained by the PMU Office, including minutes of minutes and decision made by the GRC. The complaints received in writing or received verbally (or by phone) will be entered and properly recorded and documented. The meeting minutes at various GRCs will be recorded and decisions made will be as part of the input in the case record document and filed properly by respective GRCs. The log frame for recording the grievances and the minutes of the GRC meetings is attached as Annex-B.

The outcomes of GRC deliberations and decisions will be notified in written form by the Chair of the GRC within a week from the date of the meeting. The decisions taken are mandatory on the NTDC with regard to any additional awards or compensation to be paid to the disputants. The records of all GRC cases must be available for review and verification by NTDC, WB, Independent monitoring consultants and other interested stakeholders.



# 8. INSTITUTIONAL SETUP FOR RAP IMPLEMENTATION

# 8.1 Institutional Setup and Organogram

A Project Management Unit (PMU) has been established within NTDC and has been mandated to manage the design, procurement, and construction activities of the DTL project. The PMU is also responsible to ensure compliance with the national as well as WB environmental and social safeguard requirements including preparation of environmental and social assessment documents including the present RAP. The PMU will also ensure implementation of the RAP in line with the national as well as WB safeguard policy requirements. The PMU is headed by the Chief Engineer/Project Director.

In the past, NDTC has implemented similar transmission line projects. The institutional set up for this project has been designed based on past experiences. As a result, the focus has been on the field teams to ensure better communications and rapport with the affected communities, timely valuation of loses and assets, and payments of compensation. Additionally, NTDC has adopted a GRM system to address issues and complaints to avoid delays in project implementation. For the implementation of RAP, several entities will be involved including the PMU itself, Environment and Social Impact Cell (ESIC) established within PMU, Project Consultants responsible for design and construction supervision of the project, relevant government departments, APs, and others. Roles and responsibilities of these entities are described below.

## 8.2 Institutional Setup

## 8.2.1 The PMU

As described above, the PMU has been established to manage the entire DTL project including design, procurement, construction, testing and commissioning. The PMU is headed by Chief Engineer/Project Director. The PMU has its own technical staff, contract specialist, procurement specialist, ESIC (further discussed below), and other necessary officials and staff.

With respect to the RAP implementation, the PMU's role will be to supervise and support ESIC to ensure that all aspects of RAP are effectively implemented and that the project complies with the national regulatory as well as WB safeguard policy requirements.

## 8.2.2 The ESIC

The ESIC is already in place within PMU and is mandated to ensure compliance with the national regulatory as well as WB safeguard policy requirements pertaining to environment, social, and resettlement aspects. Currently the ESIC has only four members at the headquarters (i.e. Deputy Manager, Social and Environment: focal person for environmental, social and resettlement aspects; Assistant Manager (Social); and Assistant Manager (Environment). The provision for an Assistant Manager (Occupational Health and Safety) has



been approved and will be hired soon. Since there would be three contracts or lots for construction of the DTL, the ESIC would need at least another three sets of ESIC specialists (Assistant Manager - Social; Assistant Manager - Environment; and Assistant Manager - OHS) – one for each lot or contract from the market to strengthen its capacity for project implementation.

For the RAP implementation, the ESIC Field Team will have the following specific functions and responsibilities:

- Assist and supervise the Project Consultants for the implementation of the approved RAP in accordance with the procedure and schedule given in this document. The ESIC will hold monthly meetings with the Project Consultants to review the RAP implementation progress, to identify related gaps and issues, and to determine corrective actions needed;
- Maintaining close liaison and coordination with various project entities including Project Consultants, project affected persons and Grievance Redress Committee (GRC);
- Maintaining liaison with regulatory agencies/authorities and WB specialists, as needed;
- Preparation and dissemination of RAP implementation progress reports in coordination with the Project Consultants;
- Assist and supervise the Project Consultants for updating RAP, if required, at the final design stage, including additional inventory surveys, measurements, assessment, and valuation in coordination with concerned departments.

# 8.2.3 Field-Level Construction Camp Offices

Under the PMU-Director, the Project will have three Field-level Construction Camp Offices for project implementation purposes. The main function of the Camp Offices (CO) will be to coordinate and supervise the construction activities in the field. For the purpose of RAP implementation, the CO will include the following, in addition to its own technical staff including an Executive Engineer: (i) Representative of ESIC or a suitable staff designated by NTDC at CO; (ii) Representatives of contractor; (iii) Representatives of the Project Consultants; (iv) NTDC Patwari. The rresponsibilities of CO ESIC Team include the following:

- Maintain liaison and interaction with the APs and local communities to address their concerns;
- Provide proper guidance to APs for the submission of their requests for compensation as per eligibility and entitlement;
- Help the APs to forward their complaints, if any, to the GRC;



- Maintain close liaison with PMU, ESIC, contractor, and relevant government departments for RAP implementation;
- Distribute the notices to the entitled APs regarding payment of compensation; and
- Facilitate the APs for completing the necessary documentation to receive their entitled payments.

## 8.2.4 **Project Consultants**

Project Consultants will be responsible to supervise the construction contractors. They will also be responsible to support for RAP implementation. A representative of the consultants will be needed at each CO to support this with one senior specialist with supervision and reporting responsibilities. Their key responsibilities in this context will include:

- Support implementation of the approved RAP in accordance with the procedure and schedule given in this document and in coordination with the CO. Maintain an up-todate record of RAP implementation. Hold regular meetings with ESIC and CO regarding the RAP implementation progress, to identify related gaps and issues, and to determine corrective actions needed;
- Facilitate timely payment of compensation to the APs;
- Support PMU and CO in operating the grievance redress mechanism (GRM) for the project;
- Maintain close liaison and coordination with various project entities including CO, ESIC and GRC;
- Maintain close liaison and coordination with various government departments including Revenue, Forest, C&W and Agriculture;
- Develop a framework for community consultations and information disclosure to ensure APs are well aware of the project impacts, eligibility, entitlements, compensation and allowances, schedule of compensation disbursement, complaints and grievance redress procedure, and all relevant project related information;
- Maintain close liaison and coordination with local communities particularly with APs. Inform APs about the process of compensation disbursement. Facilitate them in preparation of required documents for compensation payments;
- Maintain liaison with regulatory agencies/authorities and WB specialists, as needed; and
- Establish and maintain a database for inventory of losses, details of various categories of APs, compensation amount for each AP, details of compensation payment made to



APs, grievances received, grievances resolved, consultations, and details of vulnerable APs.

## 8.2.5 Coordination with Government Departments

The line departments which are relevant for RAP implementation include Forest Department in case of damage to any forest trees; Agriculture Department for valuation of crop damages; Public Health Engineering Department in case of any government-owned tube-wells are affected; National Highway Authority in case of crossing of any national highway/motorway; WAPDA for works inside DHP premises; C&W Department in case of any damage to local roads as well as valuation of affected buildings and structures. The CO will be responsible to contact the concerned department in a timely manner and maintain liaison during the construction works.

# 8.2.6 Project Affected Persons' Committee

The project affected person committee (PAPC) will be formed at the field level with participation from each village. The PAPC will have a chairperson, a secretary and members. The PAPC will be responsible for the following activities:

- Disclosure of project and RAP information among the communities particularly the APs.
- Help and facilitate the APs in completing the requisite documents for compensation payments
- Ensuring payment of compensation in accordance with the entitlement matrix given in the approved RAP.
- Facilitate early resolution of grievances and complaints raised by the communities particularly APs.
- Interaction between the community particularly APs and the CO, Project Consultants and ESIC.
- Participate in the survey of the affected communities and APs
- Participate in the consultations to be carried out by CO, ESIC, project consultants, and monitoring consultants.

In sum, the primary purpose to PAPC is to facilitate the implementation of the project with inputs from the affected communities and to develop a sense of ownership of the project

# 8.2.7 Independent Monitoring Consultant (IMC)

NDTC will hire an IMC to conduct independent monitoring for the implementation of RAP. The role of the IMC is described later in details.



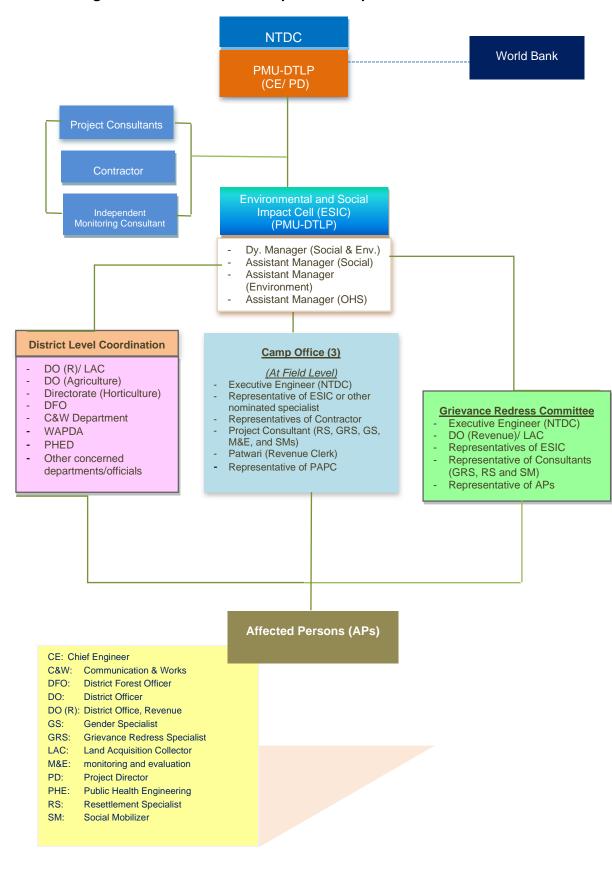
## 8.2.8 Grievance Redress Committee (GRC)

The GRC will be established for addressing conflicts and appeal procedures regarding eligibility and entitlements during RAP implementation. GRC will receive and facilitate the resolution of APs' concerns and grievances. It will ensure that the procedures are accessible by APs and are gender sensitive. The details are discussed in subsequent section of this RAP.

## 8.3 Organogram

An Organogram showing the institutional arrangements for the implementation of RAP is illustrated below.





#### Figure 8-1: Institutional set-up for the Implementation of RAP



## 8.4 Capacity Building and Safeguard Training

The ESIC staff, including those to be recruited from the market for project implementation under the PMU in Construction Camp Offices, will be provided with at least one-week training for social and resettlement capacity building prior to mobilizing to the field. The training will be conducted by reputed trainers and professionals with experience in resettlement implementation experience in Pakistan and internationally.

The Project will periodically organize study tours and exposure trips of ESIC/Project staff within and outside the country. As a start, the ESIC Team will be taken to the Dasu Hydropower Project for training and exposure to see, observe and learn hands-on how DHP has been managing the massive resettlement and social development programs and the implementation challenges. Post-training de-briefing sessions will be held in seminar form to discuss the learnings and application in the context of the DTL Project.

## 8.5 Implementation Schedule

The commencement of civil work will be subject to the satisfactory implementation of this RAP including payment of compensation of land taken, crops, and livelihood assistance and redress of community concerns. It is expected that the implementation of RAP (also including community support program under RAP for benefit sharing) of the DTL project will be completed by 2023. Being a linear project, compensation will be disbursed gradually with the progression of the project and will be completed before start of any works at site for all three (3) contract packages. Public consultation and disclosure of information will run intermittently throughout the whole project duration. RAP completion audit will be conducted after completion of RAP implementation.

The detailed time-schedule is presented in Figure 8-2.



#### National Transmission & Despatch Company

		2019		20	20			20	21			20	22			20	23	
Sr. No	Items	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
1	Draft RAP submitted to WB for comments																	
2	Submission of Final RAP to WB																	
3	Establishing of GRC																	
4	Public Consultation and information disclosure																	
5	RAP Disclosure																	
6	Hiring of Independent Consultant																	
7	Compensation disbursement Procedure																	
8	Payment of compensation including allowances																	
9	Internal Monitoring																	
10	External Monitoring																	
11	Possession of land																	
12	Implementation of community support program																	
13	Contractor mobilization/civil works																	

Figure 8-2: RAP Implementation Schedule



# 9. RESETTLEMENT BUDGET AND FINANCING

# 9.1 Budget Description and Sources

This section provides the indicative compensation cost for land needed for towers and resettlement for the DTL project. Efforts were made to work out realistic cost estimates/values that lead to fair compensation based on current market rate. For this purpose, concerned Government Departments i.e. Forest, Revenue and Agriculture were consulted; subsequently, market surveys were carried out in order to reach the market-based unit rates to be paid to the APs for affected land and crops. The rates obtained from the departments were escalated using the inflation rates. The RAP will cost **PKR 2,182.6 million (USD 13.64 million)**, which includes PKR 640.0 million (USD 4 million) for community support projects.

The entire budget for RAP will be financed by the Bank under the project loan. Therefore, funds for timely payments would be available. The Bank will review and supervise the use of the resettlement funds through the Bank's Financial Management System. Further, third party independent verification of the compensation payments will be carried out during the implementation.

# 9.2 **Provisions for Resettlement Budget**

The RAP, including cost of compensation and implementation, is considered an integral part of Project cost. RAP includes the (i) unit compensation rates for all affected items and allowances, (ii) methodology followed for the computation of unit compensation rates, and (iii) a cost table for all compensation expenses including administrative costs and contingencies. Costs for external monitoring tasks will also be allocated under the loan. NTDC will disburse the funds directly through the PMU office to the eligible persons. In case of delay in compensation, the compensation amount to be disbursed will be adjusted as per the current inflation rate.

# 9.3 Itemized Cost Summary

## 9.3.1 Crops and Trees

To determine the market rates for the replacement cost, the requisite data was collected from different departments including Agriculture, Forest, Revenue, Horticulture and Directorate of Economics and Marketing. The unit rates of crops and trees thus collected is given in Table 9.1 and Table 9.2.

Description	PKR	Remarks
Crop damage within RoW	18,073 per acre	

#### Table 9.1: Unit rates for crops



Description	PKR	Remarks
Crop damage due to constructing access road/track	18,073 per acre	In general, there is one crop in a year either during winter or summer, depending upon the rain fall. The dominant crop is wheat in the project area with an average yield of 1,374 kg/ha and the average price per kg is 52.50 making a total value as PKR 44,659 per ha (PKR 18,073 per acre)

#### Table 9.2: Unit rates for trees

Description	PKR	Remarks
Timber / Fuel Tree	5,700	The average girth of wood trees along the project alignment is between 2-5 feet, the unit price as per Forest Department is PKR 5,700 per tree.
Fruit Tree	7,100	The average unit price as per Forest Department is PKR 7,100 per tree.

## 9.3.2 Housing

The unit rates for the buildings and structures given below have been estimated based on the information obtained from the Communication and Works Department, Government of KP.

#### Table 9.3: Unit rates for housing

Category of affected Building / Structures	PKR per m <sup>2</sup>
Pacca Construction	11,222
Semi-Pacca Construction	8,535
Katcha Construction	6,380

## 9.4 Summary of Budget

The total requirement of funds for compensation payments, livelihood restoration and rehabilitation measures are given in Table 9.4.

#### Table 9.4: Summary of Costs

	Resettlement Activity	Unit	Quantity	Unit Rate (PKR)	Amount (million PKR)	Remarks
Α	Crops Compensati	ons				



	Resettlement Activity	Unit	Quantity	Unit Rate (PKR)	Amount (million PKR)	Remarks
i)	Crop damage within RoW	acres	2313	18,073	83.6	<ul> <li>See Impacts Matrix (Table 2.13) for crop damages in RoW;</li> <li>See Table 9.1 for unit rates for crops.</li> <li>Compensation estimated for two seasons.</li> </ul>
ii)	Crop damage on access tracks	acres	230	18,073	8.3	<ul> <li>See Impacts Matrix (Table 2.13) for crop damage on access roads</li> <li>See Table 9.1 for unit rates for crops.</li> <li>Compensation estimated for two seasons</li> </ul>
Α	Sub-Total (A)				91.9	
В	Compensation for					
i)	Private timber/ fuel trees	No	27,321	5,700	155.7	<ul> <li>See Impacts Matrix (Table 2.13) for number of private timber trees to be felled.</li> <li>See Table 9.2 for unit rates for trees.</li> </ul>
ii)	Private fruit trees	No	880	7,100	6.2	<ul> <li>See Impacts Matrix (Table 2.13) for number of private fruit trees to be felled.</li> <li>See Table 9.2 for unit rates for trees</li> </ul>
iii)	Government owned timber trees	No	1,528	5,700	8.7	<ul> <li>See Impacts Matrix (Table 2.13) for number of government owned trees to be felled.</li> <li>See Table 9.2 for unit rates for trees.</li> </ul>
В	Sub-Total (B)				170.7	
С	Commercial/ Resid	ential S	tructures			
i)	<i>Pacca</i> structures (17 structures)	m2	1,297.7	11,222	14.6	<ul> <li>See Impacts Matrix (Table 2.9) for structures to be affected</li> <li>See Table 9.3 for unit rates for <i>pacca</i> structures.</li> </ul>



	Resettlement Activity	Unit	Quantity	Unit Rate (PKR)	Amount (million PKR)	Remarks
ii)	Semi- <i>Pacca</i> (24 structures)	m2	1,897.8	8,535	16.2	<ul> <li>See Impacts Matrix (Table 2.9) for structures to be affected</li> <li>See Table 9.3 for unit rates for semi-<i>pacca</i> structures.</li> </ul>
iii)	Katcha (3 structures)	m2	141.45	6,380	0.9	<ul> <li>See Impacts Matrix (Table 2.9) for structures to be affected</li> <li>See Table 9.3 for unit rates for <i>katcha</i> structures.</li> </ul>
iv)	Boundary walls (4 structures)	m	99.9	3,604	0.36	See Impacts Matrix (Table 2.9) for structures to be affected.
v)	Gate (1 structure)	m	9	3,604	0.03	See <b>Impacts Matrix</b> (Table 2.9) for structures to be affected.
vi)	Poultry Farm (1 structure)	m2	160.7	8,535	1.4	See Impacts Matrix (Table 2.9) for structures to be affected - See Table 9.3 for unit rates for semi- <i>pacca</i> structures.
С	Sub-Total (C)				33.4	Siluciules.
D	Compensation for Towers/Allowances Restoration (Estim	s/ Liveli				
i)	Business interruption allowance.	No	1	60,903	0.06	<ul> <li>for 3 months at PKR 20,301 per month</li> </ul>
ii)	Relocation assistance (transport)	No	29	5,000	0.15	<ul> <li>See Impacts Matrix (Table 2.13) for relocated households</li> <li>PKR 5,000 for transport expenses</li> </ul>
iii)	Livelihood assistance for relocation.	No	29	60,903	1.8	<ul> <li>See Impacts Matrix (Table 2.13) for relocated households</li> <li>for 3 months at PKR 20,301 per month.</li> </ul>
iv)	Compensation for land taken for towers	No. of tower s	674	1,120,000	754.9	-



	Resettlement Activity	Unit	Quantity	Unit Rate (PKR)	Amount (million PKR)	Remarks
V)	Vulnerability allowance for poor and women- headed households	No	98	60,903	6.0	<ul> <li>See Impacts Matrix (Table 2.13) for vulnerable households</li> <li>cash allowance for 3 months at PKR 20,301 per month</li> </ul>
vi)	Community Support programs	Lump sum			640.0	<ul> <li>See entitlement matrix – Community Support Program</li> </ul>
D	Sub-Total (D)				1,402.8	
Е	RAP Implementation	on				
i)	RAP Implementation Consultants	Lump sum			85.0	-
ii)	Training and Capacity Building	Lump sum			10.0	-
iii)	Independent Monitoring Consultant	Lump sum			15.0	-
iv)	GRM Implementation	Lump sum			10.0	-
Е	Sub-Total (E)				120.0	-
F	Total (A to E):				1,818.8	-
G	Contingencies @ 20% of F				363.8	-
	Grand Total (m PK (F+G)	R)			2,182.6	-
	Grand Total (m US Dollars)				13.64	1 USD = PKR 160



# 10. MONITORING AND EVALUATION

## **10.1 RAP Monitoring Arrangements**

The RAP tasks will be monitored internally and externally. The NDTC will carry out internal monitoring of RAP by the PMU through ESIC with support from consultants. The external monitoring will be assigned to an Independent External Monitoring Consultant, hired by NTDC with the concurrence of WB for monitoring of RAP implementation. The Independent Monitoring Consultant will be mobilized prior to RAP implementation. The extent of monitoring activities, including their scope and timing, will be commensurate with the project risks and impacts. The ESIC is required to carry out the safeguard measures and implement relevant plans as provided in the legal agreements. Internal Monitoring Reports will be prepared monthly, quarterly and annually for the project mentioned in the RAP.

## **10.2 Monitoring Indicators**

The RAP implementation progress will be monitored by the following indicators:

- % of affected APs having received compensation for structures;
- % of affected APs having received compensation for crops;
- % of affected APs having received compensation for trees;
- % of vulnerable HH having received vulnerability allowance;
- Number of APs having received skills training by the Contractor;
- Number of APs having employed by the Contractor; and
- Number of vulnerable APs having employed.

# 10.3 Internal Monitoring

Internal monitoring will be carried out by the ESIC Team with support from consultants. Internal monitoring indicators will relate to process, outputs and results. Information will be collected directly from the field, and will be reported monthly to the PMU to assess the RAP implementation progress and adjust the work plan if necessary. Specific Internal monitoring benchmarks will be based on the approved RAP and cover the following:

- Information campaign and consultation with APs;
- Status of land taken for towers and compensation payments;
- Compensation for affected structures and other assets;
- Relocation of APs;



- Payments for loss of income;
- Selection and distribution of replacement land areas;
- Income restoration activities;
- Grievance redress status; and
- Ensure the gender mitigation measures in the RAP are adhered to during the internal monitoring and reporting process.

Gender disaggregated information will be collected by the PMU which will monitor the day-today resettlement activities of the project through the following instruments:

- Review of project information for all APs;
- Consultation and informal interviews with APs;
- Key informant interviews; and
- Community public meetings.

## **10.4** External Monitoring and Evaluation

NTDC will appoint an independent agency (Independent Monitoring Consultant, IMC) for external monitoring to ensure complete and objective information. The tasks of the IMC are to:

- Review and verify internal monitoring reports prepared by ESIC;
- Review of the socio-economic and census and inventory of losses baseline information of pre-displaced persons;
- Update the baseline data if required;
- Identification and selection of impact indicators;
- Impact assessment through formal and informal surveys with the APs;
- Consult APs, officials, community leaders for preparing review report;
- Assess the resettlement efficiency, effectiveness, impact and sustainability, drawing lessons for future resettlement policy formulation and planning;
- Ensure the gender mitigation measures in RAPs are adhered to during monitoring; and
- Assess, verifying and reporting of impacts and compensation measures provided to affected vulnerable groups such as, disabled/elderly, the landless and families below the poverty line.



The TOR for external monitoring and evaluation consultant is attached as Annex C. The following will be considered as the basis for indicators in monitoring and evaluation of the project:

- Socio-economic conditions of the APs in the post-resettlement period;
- Communications and reactions from APs on entitlements, compensation, options, alternative developments and relocation time tables etc.;
- Changes in housing and income levels;
- Rehabilitation of squatters, severely affected people, and different vulnerable groups;
- Valuation of property;
- Ability to replace lost assets;
- Disbursement of compensation and other entitlements;
- Level of satisfaction of APs in the post resettlement period;
- Quality and frequency of consultation and disclosure; and
- Grievance procedures.

Based on the IMC's report, if significant issues are identified, a corrective measurement plan will be prepared, reviewed and approved by World Bank and disclosed to project APs. Internal and external monitoring and reporting will continue until all resettlement activities have been completed.

# **10.5** Monitoring Database Management

The IMC will maintain computerized resettlement database that will be updated quarterly. It will contain files on each displaced household and will be updated based on the information collected on successive rounds of data collection. All monitoring database will be fully accessible to NTDC and the World Bank.

# 10.6 Reporting and Disclosure

The IMC will submit an external monitoring report to NTDC and directly to World Bank on quarterly basis. The report should summarize the findings of external monitor, including: (i) progress of resettlement plan updating and implementation; (ii) identification of problem issues and recommended solution so that implementing agencies are informed about the on-going situation and can resolve problems in a timely manner; (iii) identification of specific issues related to vulnerable households; and (iv) a report on progress of the follow-up of issues and problems identified in the previous report.



The monitoring reports will be discussed in a meeting between the IMC, the NTDC and PMU held after submission of the reports. Necessary remedial actions will be taken and documented.

All the monitoring reports will be translated and disclosed as per World Bank involuntary resettlement policy and monitoring reports will be publicly open and placed on the NTDC and WB websites.

# 10.7 Post-Project Audit and Evaluation

The Project will undertake a post-project RAP implementation audit and evaluation to assess the success of the RAP measures and to identify the lessons learned from the implementation of the DTL Project. The audit and evaluation shall contain a comprehensive review of the implementation processes, institutional capacity, manpower and costs. The report will further determine and highlight how the measures adopted have been successful in the restoration of livelihoods of the affected people and/or presented or minimized impoverization of those affected by the project as a learning exercise for future RAP management.